UNIVERSAL REGISTRATION DOCUMENT AND ANNUAL FINANCIAL REPORT 2022

This Universal Registration Document is a copy of the official version of the Universal Registration Document and annual financial report which has been prepared in XHTML format and is available on our website https://invest.bnpparibas.

BNP PARIBAS

The bank
for a changing
world

2022 Universal registration document and annual financial report

The universal registration document ("**Universal Registration Document**") has been filed on 15 June 2023, without prior approval, with the Financial Conduct Authority ("**FCA**"), as competent authority pursuant to Article 9 of Regulation (EU) 2017/1129 as it forms part of domestic law of the United Kingdom by virtue of the European Union (Withdrawal) Act 2018 (as amended "**EUWA**"), as amended and the regulations made thereunder (the "**UK Prospectus Regulation**").

The Universal Registration Document may be used for the purposes of an offer to the public of securities or admission of securities to trading on a regulated market in the United Kingdom if completed by amendments, if applicable, and a securities note and summary approved in accordance with the UK Prospectus Regulation.

The Universal Registration Document may form part of a prospectus of BNP Paribas (Legal identity identifier: R0MUWSFPU8MPRO8K5P83) consisting of separate documents within the meaning of the UK Prospectus Regulation.

The Universal Registration Document is available on the website of the issuer (https://rates-globalmarkets.bnpparibas.com/documents/legaldocs/resourceindex.htm).

1 PRESENTATION OF THE BNP PARIBAS GROUP

1.1 Group presentation

With its integrated and diversified model, BNP Paribas is a leader in banking and financial services in Europe. The Group leverages on strong customer franchises and business lines with solid positions in Europe and favourable positions internationally, strategically aligned to better serve customers and partners on a long-term basis.

It operates in 65 countries and has nearly 190,000 employees, including nearly 145,000 in Europe. The Group's activities are diversified and integrated within a distinctive model combining commercial & personal banking activities in Europe and abroad, specialised businesses (consumer finance, mobility and leasing services, and new digital business lines), Insurance, Wealth and Asset Management, and Corporate and Institutional Banking.

BNP Paribas' organisation is based on three operating divisions: Corporate & Institutional Banking (CIB), Commercial, Personal Banking & Services (CPBS) and Investment & Protection Services (IPS). These divisions include the following businesses:

- **Corporate and Institutional Banking (CIB) division** combines:
  - Global Banking,
  - Global Markets,
  - Securities Services;
- **Commercial, Personal Banking & Services division** covers:
  - Commercial & Personal Banking in the eurozone:
    - Commercial & Personal Banking in France (CPBF),
    - BNL banca commerciale (BNL bc), Italian Commercial & Personal Banking,
    - Commercial & Personal Banking in Belgium (CPBB),
    - Commercial & Personal Banking in Luxembourg (CPBL);
  - Commercial & Personal Banking outside the eurozone, organised around:
    - Europe-Mediterranean, covering Central and Eastern Europe and Türkiye,
    - BancWest[1] in the United States;
  - Specialised Businesses:
    - Arval,
    - BNP Paribas Leasing Solutions,
    - BNP Paribas Personal Finance,
    - BNP Paribas Personal Investors,
    - new digital businesses (Nickel, Floa, Lyf);
- **Investment & Protection Services division** combines:
  - Insurance (BNP Paribas Cardif),
  - Wealth and Asset Management (BNP Paribas Asset Management, BNP Paribas Wealth Management and BNP Paribas Real Estate), the management of the BNP Paribas Group's portfolio of unlisted and listed industrial and commercial investments (BNP Paribas Principal Investments).

BNP Paribas SA is the parent company of the BNP Paribas Group.

[1] *On 20 December 2021, the Group announced the sale of Bank of the West to BMO Financial Group. The sale of Bank of the West to BMO Financial Group was completed on 1 February 2023.*

1.2 Key figures

RESULTS

	2020	2021	2022
Revenues *(in millions of euros)*	44,275	46,235(***)	50,419(***)
Gross operating income *(in millions of euros)*	14,081	15,124(***)	16,717(***)
Net income Group share *(in millions of euros)*	7,067	9,488	10,196
Earnings per share *(in euros)*(*)	5.31	7.26	7.80
Return on tangible equity(**)	7.6%	10.0%	10.2%

(*) Based on net income Group share adjusted for interest on Undated Super Subordinated Notes deemed equivalent to preferred shares issued by BNP Paribas SA and treated as a dividend for accounting purposes.

(**) Return on tangible equity is calculated by dividing net income attributable to equity holders (adjusted for interest on Undated Super Subordinated Notes issued by BNP Paribas SA, treated as a dividend for accounting purposes and adjusted for the foreign exchange effect on redeemed Undated Super Subordinated Notes) by average tangible permanent shareholders' equity, not revalued, between the beginning of the year and the end of the year (shareholders' equity attributable to equity holders adjusted for changes in assets and liabilities recognised directly in equity, Undated Super Subordinated Notes, remuneration net of tax payable to holders of Undated Super Subordinated Notes and the distribution project, intangible assets and goodwill).

(***) Excluding the effect of the application of IFRS 5 relating to groups of assets and liabilities held for sale. See chapter 3.

CAPITALISATION

	31/12/2020	31/12/2021	31/12/2022
Market capitalisation *(in billions of euros)*	53.9	75.0	65.7
Source: Bloomberg.			

LONG-TERM AND SHORT-TERM RATINGS

	Long-term and short-term ratings as at 15 March 2022	Long-term and short-term ratings as at 15 March 2023	Outlook	Date of last review
Standard & Poor's	A+/A-1	A+/A-1	Stable	25 April 2022
Fitch	AA-/F1+	AA-/F1+	Stable	13 September 2022
Moody's	Aa3/Prime-1	Aa3/Prime-1	Stable	5 July 2022
DBRS	AA (low)/R-1 (middle)	AA (low)/R-1 (middle)	Stable	28 June 2022

On 25 April 2022, Standard & Poor's confirmed the long-term rating of BNP Paribas at A+, with a stable outlook.

On 13 September 2022, Fitch confirmed the long-term rating of BNP Paribas at AA-, and updated the outlook from negative to stable.

On 5 July 2022, Moody's confirmed the long-term rating of BNP Paribas at Aa3 with a stable outlook.

On 28 June 2022, DBRS confirmed the long-term rating of BNP Paribas at AA (low) with a stable outlook.

1.3 History

1966: Creation of BNP

The merger of BNCI and CNEP to form BNP represented the largest restructuring operation in the French banking sector since the end of the Second World War.

1968: Creation of Compagnie Financière de Paris et des Pays-Bas

1982: Nationalisation of BNP and Compagnie Financière de Paris et des Pays-Bas at the time of the nationalisation of all French banks

In the 1980s, deregulation of the banking sector and the growing tendency of borrowers to raise funds directly on the financial market transformed the banking business in France and worldwide.

1987: Privatisation of Compagnie Financière de Paribas

With 3.8 million individual shareholders, Compagnie Financière de Paribas had more shareholders than any other company in the world. Compagnie Financière de Paribas owned 48% of the capital of Compagnie Bancaire.

1993: Privatisation of BNP

BNP's return to the private sector represented a new start. The 1990s were marked by a change in the level of profitability of the Bank, which had the highest return on equity of any major French institution in 1998. This period was marked by the launch of new banking products and services, the development of activities on the financial markets, expansion in France and at the international level, and preparation for the advent of the euro.

1998: Creation of Paribas

On 12 May 1998, the merger between Compagnie Financière de Paribas, Banque Paribas and Compagnie Bancaire was approved.

1999: A momentous year for the Group

Following an unprecedented double tender offer and a stock market battle waged over six months, BNP was in a position to carry out a merger of equals with Paribas. For both groups, this was the most important event since their privatisation. It gave rise to a new Group with tremendous prospects. At a time of economic globalisation, the merger created a leading player in the European banking sector.

2000: Creation of BNP Paribas

BNP and Paribas merged on 23 May 2000.

The new Group derived its strength from the two major financial and banking lines from which it descends. It has two goals: to create value for shareholders, clients and employees by building the bank of the future, and to become a leading global player.

2006: Acquisition of BNL in Italy

BNP Paribas acquired BNL, Italy's 6th-largest bank. This acquisition transformed BNP Paribas, providing it with access to a second Domestic Market in Europe. In both Italy and France, all of the Group's business lines can now develop their activities by leveraging a nationwide banking network.

2009: Merger with the Fortis group

BNP Paribas took control of Fortis Bank and BGL (Banque Générale du Luxembourg).

2012: Launch of Hello bank!

2015: Acquisition of BGZ Polska in Poland, which will become BNP Paribas Bank Polska

2018: Acquisition of Nickel, which offers banking solutions that are accessible to all, directly online or at tobacconists, without conditions of resources

2020: Agreement with Deutsche Bank for the takeover of its Prime Brokerage business

2023: Closing of the sale of Bank of the West to BMO Financial Group

1.4 Presentation of operating divisions and business lines

CORPORATE & INSTITUTIONAL BANKING

With close to 38,000 people in 53 countries, BNP Paribas CIB serves two types of clients – Corporates and Institutionals (Banks, Insurance Companies, Asset Managers, *etc.*) – offering them tailored solutions in Capital Markets, Securities Services, Financing, Risk Management, Cash Management and Financial Advice.

Acting as a bridge between Corporate and Institutional clients, CIB aims to connect the financing needs of our Corporate clients with Institutional ones looking for investment opportunities. In 2022, 32% of BNP Paribas' revenues from operating divisions were generated by BNP Paribas CIB.

CIB's streamlined and efficient structure is designed to meet the needs of BNP Paribas' Corporate and Institutional clients. CIB is thus organised around three main businesses:

- Global Banking, with its own organisation in each region;
- Global Markets, grouping together all capital market activities; and
- Securities Services.

The regional approach is present in three main regions:

- EMEA (Europe, Middle East, Africa);
- Americas;
- APAC (Asia Pacific).

2022 Awards

- Euromoney Awards for Excellence 2022:
  - World's best bank for Corporates;
  - World's best bank for Markets;
  - World's best bank for Sustainable Finance;
  - World's best bank for ESG Data and Technology.
- The Banker 2022:
  - Investment Bank of the Year;
  - Investment Bank of the Year for Equity Derivatives;
  - Investment Bank of the Year for Syndicated Loans.

GLOBAL BANKING

Global Banking offers a full range of products and services to BNP Paribas' Corporate clients globally, including:

- debt financing solutions (traditional loans and specialised financing, including export, project, acquisition and leveraged finance);
- mergers and acquisitions (advisory mandates for acquisitions or disposals, strategic financial advice, privatisation advice, *etc.*);
- primary activity on the equity markets (IPOs, capital increases, convertible and exchangeable bond issues, *etc.*);
- transaction banking solutions (liquidity management, cash management, deposit collection, trade finance and supply chain management).

In 2021, the Low-Carbon Transition Group was created to support clients in their transition to a sustainable and low-carbon economy, mobilising a comprehensive range of relevant capabilities and a network of experts in sustainable transitions across the BNP Paribas integrated model.

To better anticipate the needs, the teams are structured by geographic area, thereby combining global expertise and local knowledge. In addition, tasked with developing and managing long-term client relationships, the Corporate Coverage teams provide access to the BNP Paribas' global product offerings and extensive international network.

Thanks to this set-up and the strong coordination between the regions, any client entering a business centre supported by the One Bank approach can have access to a Global Banking global platform and can benefit from the expertise of all other business centres for its activities.

In EMEA, Global Banking activities are present in 31 countries. This set-up reinforces the One Bank for Corporates approach developed in close cooperation with the Group's four Domestic Markets and includes a network of 78 trade centres in 2022. Global Banking EMEA combines financing activities (debt and equity), securitisation, syndication and distribution on the Capital Markets platform, a joint venture with Global Markets, with M&A capabilities and industry expertise, as well as transaction banking services (cash management, international trade, supply chain financing).

In Asia Pacific, Global Banking covers over 1,300 Asian Corporates plus 900 MNC clients and involves around 900 employees at end December 2022. Global Banking activities encompass the full suite of financing, capital raising (debt and equity capital markets), M&A advisory services, transaction banking (cash management, international trade, supply-chain financing) as well as related risk hedging services in conjunction with Global Markets. Global Banking offers clients comprehensive and integrated end-to-end banking facilities in major currencies as well as local currencies through BNP Paribas branches or subsidiaries in Asia-Pacific.

In the Americas, Global Banking serves over 770 corporates and 535 MNC clients across the United States, Canada and six countries in Latin America, supported by ~760 employees. The platform combines primary origination (debt and equity), financing, syndication, and securitisation that bridges with our Global Markets activities. M&A advisory services underpinned by deep industry expertise complement transaction banking services (trade finance, supply chain management, and liquidity solutions) offered to the Bank's corporate and institutional clients.

2022 awards

- **International Finance Review Awards 2021:**
  - EMEA Loan House of the Year;
  - Euro Bond House of the Year;
  - Europe Financial Bond House of the Year.
- **Global Capital Syndicated Loan and Leveraged Finance Awards 2021:**
  - Loan House of the Year;
  - Best Arranger of Western European Loans;
  - Best Arranger of Infrastructure and Renewables Loans.
- **Environmental Finance Bond Awards 2022:**
  - Loan Structurer/Arranger/Coordinator of the Year;
  - Lead Manager of the Year, Sustainability-linked bonds;
  - Lead Manager of the Year, Social bonds – Financial institution.
- **The Banker 2022:**
  - Investment Bank of the Year;
  - Investment Bank of the Year for Syndicated Loans.
- **Global Finance Magazine World's Best Bank 2022:**
  - Best Global Transaction Bank.

2022 Rankings

- No.1 in Overall Market Penetration with Large Corporates in Europe[1];
- No. 1 for all bonds issued in EMEA[2];
- No. 1 in syndicated loans in EMEA[(2)];
- No. 1 in European securitisation transactions[(2)];
- No. 1 in Global Green Bonds[3].

GLOBAL MARKETS

Global Markets (GM) serves a wide range of corporate and institutional customers (companies, institutions, private banks, distributors, *etc.*) with investment, hedging, financing, research and market intelligence products and services across all asset classes.

An industry leader with significant market share on global stock markets and regularly ranked as one of the leading providers, GM offers a wide range of financial products and services on the equity, interest rate, foreign exchange, local and credit markets. With over 4,000 employees, GM has global coverage, operating in over 30 markets worldwide including a number of large scale business centres, in particular in London, Paris, Brussels, New York, Hong Kong, Singapore and Tokyo.

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1 *Source: CoalitionGreenwich 2020, 2021, Preliminary data 2022 Europe Large Corporate Banking and Europe Large Corporate Cash Management Studies.*

2 *Source: Dealogic at 31 December 2022.*

3 *Source: Bloomberg's FY2022 Global Green Bond manager league table for Corporates & Government.*

The business comprises three global business lines, across two core activities:

- Fixed Income, Currencies & Commodities:
  - Global Macro: foreign exchange, Global Rates, Local Markets, Commodity Derivatives,
  - Global Credit: DCM Bonds, Credit, Securitisation;
- Equity & Prime Services:
  - Global Equities: Equity Derivatives, Cash Equities and Prime Services.

BNP Paribas is delivering on its strategy to become the leading European markets house at the global level. Through both investment and organic growth, the bank has built a comprehensive markets offering with the launch of three new business lines in 2022: Global Equities, Global Macro and Global Credit.

2022 has highlighted on the need for global institutional investors and corporates to have a strong and committed European partner. Global Markets profoundly strengthened its client relationships during the public health crisis, and reinforced them again through the market volatility experienced in 2022, through a focus on client needs, deep insight into the rapidly shifting situation, and continued innovation throughout.

Global Markets Sustainable Finance aims to facilitate the emergence of a carbon neutral economy and design a socially responsible world, innovating new ways to help clients integrate ESG into all their markets activities, and scaling up sustainable finance markets solutions.

2022 awards

- **Energy Risk Awards 2022** – Base Metals House of the Year;
- **Global Capital Derivatives Awards 2022** – Global Derivatives House of the Year, Derivatives House of the Year – Europe, Asia, Equity Derivatives House of the Year – Europe, Asia, Credit Derivatives House of the Year – Europe, Asia, Credit Derivatives House of the Year – US, FX Derivatives House of the Year – Europe, Asia, Best Bank for Commitment to Sustainability;
- **Risk Awards 2022** – Inflation Derivatives House of the Year, Credit Derivatives House of the Year, Derivatives Client Clearer House of the Year;
- **Euromoney Awards for Excellence (Global regional and country) 2022** – World’s Best Bank for Markets, World’s Best Bank for Sustainable Finance, World’s Best Bank for ESG Data and Technology, World’s Best Bank for Corporates, Western Europe’s Best Investment Bank, Western Europe’s Best Bank for Sustainable Finance, Western Europe’s Best Bank for Financing, Latin America’s Best Bank for Sustainable Finance, Best Investment Bank in France, Best Investment Bank in the Netherlands, Best Investment Bank in Belgium, Best Bank in Belgium;
- **Environmental Finance Bond Awards 2022** – Lead Manager of the Year, Social Bonds – FIG, Lead Manager of the Year, Sustainability Linked Bonds, Loan Structurer/Arranger/Coordinator of the Year;
- **The Banker Investment Banking Awards 2022** – Investment Bank of the Year for Equity Derivatives;
- **Institutional Investor Developed Europe Rankings 2022** – #1 for Industry Research in Europe;
- **FX Markets eFX Awards 2022** – Best Algo Provider, Best Liquidity Provider for NDFs;
- **FX Markets Best Bank Awards 2022** – Best Bank for EUR/USD, Best Bank for e-Trading, Best Bank for Regional/Domestic Banks;
- **Futures and Options World Awards 2022** – Bank of the Year;
- **SRP Europe Awards 2022** – Best House – Eastern Europe, Best Distributor – Europe, Best Distributor – Poland, Best Distributor -Yield Enhancement, Best Private Bank;
- **Global Capital Bond Awards 2022** – Most Impressive Bank for Corporate Bonds, Most Impressive Corporate Bond House in Euros, Most Impressive Bank for Corporate Hybrid Capital, Most Impressive Corporate MTN Dealer, Most Impressive Financial Institution MTN Issuer, Most Impressive FIG House in Euros, Most Impressive SSA House in Euros, Most Impressive Emerging Market Origination Banker, Most Impressive Corporate Bond Syndicate Banker;
- **The Trade 2022** – Algorithmic Trading Survey – Long Only;
- **IFR Awards 2021** – Derivatives House of the Year, Interest Rate Derivatives House of the Year, Euro Bond House of the Year, Europe Financial Bond House of the Year, EMEA Structured Finance House of the Year, EMEA Loan House of the Year.

2022 Rankings

- No. 1 for bond issues in EMEA in volume by book runner.
- No. 1 for Euro bond issues in volume by book runner.

SECURITIES SERVICES

Securities Services is one of the major global players in securities services with EUR 11,133 billion in assets under custody and EUR 2,303 billion in assets under administration. With a global reach covering more than 90 markets, Securities Services' custody network is one of the most extensive in the industry.

On 1 October 2022, BNP Paribas Securities Services SCA merged with its parent company, BNP Paribas SA. The intragroup merger underlines BNP Paribas Corporate & Institutional Banking division's unique integrated offering, from execution to custody, through its three business lines, Global Markets, Global Banking and Securities Services.

Securities Services offers solutions to all participants across the investment cycle:

- investment banks, broker-dealers, banks and market infrastructures (sell-side operators) are offered solutions in execution services, derivatives clearing, local and global clearing, settlement and custody for all asset classes worldwide. Outsourcing solutions for middle and back-office activities are also provided;
- institutional investors – asset managers, hedge funds, private equity funds, real estate and sovereign wealth funds, insurance companies, pension funds, fund distributors and promoters (buy-side operators) – enjoy a wide range of services: global custody, depositary bank and trustee services, transfer agent and fund distribution support, fund administration and middle-office outsourcing, investment, risk assessment and performance reporting;
- issuers (originators, arrangers and corporates) have access to a wide range of management services: securitisation and structured finance services, debt agency services;
- market and financing services are offered to all market participants: securities lending and borrowing, foreign exchange, credit and collateral management, triparty collateral management, trading service and financing.

2022 awards

- **European Custodian of the Year** (Funds Europe Awards 2022);
- **Global Custodian of the Year, European Custodian of the Year** (Asset Servicing Times Industry Excellence Awards 2022);
- **Best Sub-custodian Bank in Western Europe** (Global Finance Best Sub-custodian Bank Awards 2022);
- **Best Custodian – Overall** (The Asset Triple A Sustainable Investing Awards for Institutional Investors, ETFs, and Asset Servicing Providers 2022);
- **Asset Service Provider of the Year, Best Bank for Cross-border Custody** (Asian Investor Asset Management Awards 2022);
- **Specialised Lending Initiative** (Central Banking Awards 2022).

COMMERCIAL, PERSONAL BANKING & SERVICES

Commercial, Personal Banking & Services includes the Group's Commercial & Personal Banking networks and certain specialised businesses. Present in over 44 countries and employing more than 113,000 people, Commercial, Personal Banking & Services generated 54% of the revenue of BNP Paribas' operating divisions in 2022 (65% for Commercial & Personal Banking and 35% for Specialised Businesses).

Commercial, Personal Banking & Services includes BNP Paribas' Commercial & Personal Banking:

- in the eurozone countries including France (CPBF), Italy (BNL bc), Belgium (CPBB operating under the BNP Paribas Fortis brand) and Luxembourg (CPBL operating under the BGL BNP Paribas brand);
- in countries "outside the eurozone", including Europe-Mediterranean covering Central and Eastern Europe, Türkiye and some African and Asian countries, and Bank of the West in the United States[1].

The division also includes specialised business lines:

- Arval (mobility & car rental for corporate clients and individuals);
- BNP Paribas Leasing Solutions (professional equipment financing and leasing solutions);
- BNP Paribas Personal Finance (credit, savings and insurance offer for individuals and professionals);
- BNP Paribas Personal Investors (online savings and brokerage);
- New digital business lines such as Nickel (alternative banking services) that has opened nearly 3 million accounts in France since its creation and continues to grow in Europe, with a launch in Spain in 2021 and Belgium and Portugal in 2022, and a launch planned in Germany in 2023, or Floa (the French leader in Buy Now Pay Later that joined the BNP Paribas Group in February 2022 and has more than 4 million customers in Spain, Belgium, Italy, Portugal and France).

[1] *On 20 December 2021, BNP Paribas announced that it had entered into an agreement to sell Bank of the West to BMO Financial Group. The closing of the sale of Bank of the West to BMO Financial Group was completed on 1 February 2023.*

The Cash Management activities (No. 1 in Europe for large corporate clients), Trade Finance (No. 1 in Europe)[1] and Factoring, in synergy with the CIB division's Global Banking business complete the offer to the Commercial & Personal Banking corporate clients around the One Bank for Corporates approach.

The Wealth Management activity is developing its Private Banking model within Commercial & Personal Banking.

A cross-functional team, Partners in Action for Customer Experience (PACE), aims to help Commercial & Personal Banking activities offer a better customer experience.

Hello bank!, the Group's main digital bank in France, Belgium, Germany and Austria, had 3.3 million customers at the end of December 2022.

The Bank thus offers a full set of solutions adapted to the needs of its various customer bases (individuals, professionals, small businesses, corporates).

COMMERCIAL & PERSONAL BANKING IN FRANCE (CPBF)

With over 24,000 employees, Commercial & Personal Banking in France (CPBF) supports its customers in all their projects. CPBF offers innovative solutions in financing, payment, wealth & asset management, and insurance to 7.1 million individual customers, 705,000 professionals and very small enterprises, over 31,800 corporate clients (SMEs, mid-sized and large corporates) and 55,000 associations.

French Commercial & Personal Banking thus occupies leading positions in Private Banking and Corporate Banking (large corporations, SME/mid-caps) as well as strong positions in retail and professional banking. Combining the best in digital and human interaction, it provides its customers with broad interface capabilities, ranging from essential banking services, through a self-care solution, to customised guidance using dedicated teams and experts.

Commercial & Personal Banking in France is structured around 10 regions covering 144 territories, making it possible to provide all customer bases with the right level of proximity whilst maintaining synergies between business lines.

All customer bases have dedicated areas appropriate to their needs:

- for individual and professional customers: 1,650 branches and 4,215 ATMs operating under the BNP Paribas and BNP Paribas – Banque de Bretagne brands[2].

  CPBF also provides its customers with a full online relationship capability, based on:

  - a mabanque.bnpparibas website and a "My Accounts" mobile app offering services used by more than 4 million unique digital customers (who authenticated at least once on the site or app during the quarter), including 3.2 million customers *via* mobile[3],
  - Hello bank!, the BNP Paribas 100% digital bank, which provides over 760,000 customers with real-time banking offers, credit, savings and insurance solutions adapted to new uses and ways of working for individuals and, more recently, a range of services and support for the self-employed,
  - 9 customer service centres located in the regions, handling requests received by email, telephone, chat or secure messaging;
- for Private Banking customers, Private Banking centres located throughout France (for customers with more than EUR 250,000 in financial assets) and 14 Wealth Management offices (for customers with more than EUR 5 million in financial assets), making BNP Paribas Private Bank the leading private bank in France[4];
- for corporate clients, a sizeable organisation that brings together multiple skills and dedicated teams:
  - 38 business centres for SME, mid-cap and key account customers, including five specialised divisions (Innovation, Real Estate, Images & Media, Institutions, Non-profit Organisations & Foundations, Banking & Financial Services) and one skills centre dedicated to the energy transition sector, offer customised solutions that meet the specific needs of companies,
  - unique investment banking capabilities for our SME/mid-cap customers with a team of advisory bankers and synergies between the business lines and subsidiaries (M&A, Structured Finance, Private Equity, stock market and wealth optimisation),
  - 22 Trade Centres,
  - 6 trading rooms, a business support service (Client Service), a Cash Customer Service (CCS) and specific customer support centres,
  - 65 WAI hubs[5] supporting start-ups and innovative companies and two dedicated innovation hubs: WAI Paris and WAI Massy-Saclay, spaces for acceleration and connection. BNP Paribas, through the hundred or so WAI bankers across France, now supports 3,800 companies, including 85% of Next40 companies and 78% of FT120 companies[1]);

[1] *Source : CoalitionGreenwich Share Leader 2022 Europe Large Corporate Trade Finance, 2022 Europe Large Corporate Cash Management (preliminary data).*

[2] *At 31 December 2022.*

[3] *Source: Mabanque, BNP Paribas' Commercial & Personal Banking in France.*

[4] *According to Euromoney 2022 ranking, and the Assets under management criterion.*

[5] *WAI: We Are Innovation.*

- specialised subsidiaries: BNP Paribas Factor, one of the European leaders in factoring, which offers management solutions for trade receivables and suppliers; BNP Paribas Développement, a capital investment company and Portzamparc, which allows private customers and SME/mid-caps to invest or obtain financing on the stock market; Copartis, a company specialised in subcontracting of banking products, and Cofiloisirs, a major player in film and audiovisual financing whose main activity is the structuring of production loans;
- for customers in the French Overseas Departments and Collectivities, four regional subsidiaries, several teams and an economic interest group (GIE) in mainland France dedicated to individual, professional, Private Banking and Corporate customers (including a WAI division and a Green Desk);
- lastly, 52 production and sales support branches, back offices that handle all transaction and collection processing.

Digital excellence and innovation at the service of customers is at the heart of the model developed by BNP Paribas within French Commercial & Personal Banking.

The set-up was widely recognised in 2022:

- BNP Paribas and Hello bank! were recognised respectively as "European Champion network banker" and "European Champion digital banker" by the independent rating agency @D-Rating for the "Digital Awards 2022"[2]. BNP Paribas gained one place with an A- rating and Hello bank! retained its A- rating, making them the only banks in this rating category in France;
- BNP Paribas was ranked No. 1 network bank in France for its digital proposal by the D-Rating agency's 2022 survey. Hello bank! was also the No. 1 bank in digital customer relations for the third consecutive year according to the D-Rating agency. The analysis conducted on 80 banks in 10 countries praised the quality of the digital proposal on the criteria of journey, offer, satisfaction, performance and customer relationship;
- BNP Paribas was ranked second in the benchmark for page landings and acquisition paths on mobile devices carried out by Google and Challenges magazine awarded BNP Paribas the "Best Savings Advice" label;
- BNP Paribas was voted best private bank in France by Euromoney, PWM-The Banker (The Financial Times), The Digital Banker, Global Finance and World Finance in 2022;
- Hello bank! was voted best digital bank in the "Everyday advisor satisfaction" and "Project advisor satisfaction" categories at the 2023 Quality Bank Awards of Money Vox: info for your money.

BNL BANCA COMMERCIALE

BNL bc is Italy's 7th-largest Commercial and Personal bank in terms of total assets and 5th for customer loans[3].

With about 10.000[4] employees, BNL bc supports its customers in all their projects. It provides a comprehensive range of banking, financial and insurance products and services to roughly 2.4 million individual customers[5] 53,000 Private Banking clients[(7)], 125,000 small businesses[(6)], 9,000 medium and large corporates[(6)] and 3,300 local authorities and non-profit organisations[(7)]. It provides a comprehensive range of banking, financial and insurance products and services for a diversified customer base. Its range of products and services draw on the Group's extensive expertise and its integrated model by developing business line cooperation.

BNL bc has innovative and client-tailored offer models, leveraging on a multi-channel distribution network, organised in 5 regions ("direzioni territoriali") and 1 transversal direct banking area, integrating products and services for Retail Banking (including a network of more than 600 life bankers and 300 financial advisors), Private Banking and Corporate Banking. The new organisation, named Rete Unica, aims at extending and strengthening the cross-selling approach to the whole distribution network, which includes:

- for Individuals and professional customers, 659 branches, with Open BNL multi-channel branches (52) serving customers 24/7;
- for Private Banking customers, 25 Private Banking centres located throughout Italy;
- for Corporate clients and entrepreneurs, a diversified organisation:
  - 38 corporate and small business centres,
  - 8 centres for local authorities and public sector organisations,
  - 1 trade centre for clients' cross-border activities,
  - 2 Italian desks to assist Italian companies abroad and multinational companies with direct investments in Italy.

The distribution network is completed by:

- 2 specialised networks: Large Corporate network with 7 centres and Wealth Management network with 2 hubs;
- a sizeable number of ATMs (1,500) as well as by a growing range of digital, on-line and mobile banking solutions.

1 *Source: WAI, February 2023.*

2 *Rating established by the independent rating agency of the digital performance of banks in Europe, D-Rating, which analyses the digital maturity of more than a hundred banks in Europe.*

3 *Source: annual and periodic reports of BNL and its competitors.*

4 *Source: management accounting reports.*

5 *Source: customer DMS and other internal data.*

The customer-driven transformation of the network, including the establishment of the Client Service Centre to boost customer satisfaction and maximise cross-selling and to create efficiency, couples with the realisation of specific partnership in the back-office and IT areas, outsourcing transactional activities and optimising retained processes and skills in order to improve both efficiency and services quality.

As a result of this set-up, BNL bc has a significant position in lending to households, especially residential mortgages (market share of 6.6%[1]) and has a deposit base (3.6%[(1)] of household current accounts) above the market penetration rate (3.2%[2] in terms of number of branches).

BNL bc is also well established in the corporate markets (4.6%[(1)] of loans market share) and local authority, with a recognised expertise in cash management, cross-border payments, project finance, structured finance and factoring, *via* its subsidiary Ifitalia (ranked 3rd in Italy[3]).

COMMERCIAL & PERSONAL BANKING IN BELGIUM (CBB)

BNP Paribas Fortis is the No. 1 bank for retail customers[4] in Belgium and has a strong position in the corporate and small business sector, with 3.35 million customers[5]. BNP Paribas Fortis is also the leading Private Bank in Belgium.

BNP Paribas Fortis is also No. 1 in Belgium for Corporate Banking[6], and offers a full range of financial services to corporate clients, public sector entities and local authorities.

Retail & Private Banking serves individual customers, small businesses, and small and medium corporate clients through its different integrated networks, thus fitting into a hybrid banking strategy where the customer chooses between the branch network and digital channels:

- the commercial network comprises 342 branches (of which 153 are independent) and 16 centres of a dedicated structure, Banque des Entrepreneurs (the bank for small businesses). Its 342 branches are organised into 32 branch groups reporting to 9 regions. This set-up is supplemented by 206 franchises under the Fintro brand[7] and 657 points of sale of bpost bank (wholly owned) in partnership with bpost;
- Retail & Private Banking's digital platform manages online banking services (*Easy Banking*), and *mobile banking* (2.7 million total aggregate active users including Fintro) and a network of 878 ATMs (including Fintro);

  BNP Paribas Fortis also holds a 25% stake in Batopin, a joint venture with KBC, ING and Belfius, which each hold 25%. Batopin is setting up neutral CASH points throughout Belgium in places with high customer flows. The Batopin ATM network currently has 483 ATMs and is increasing every week;
- the bank is also available for customers thanks to the *Easy Banking Centre* which handles up to 70,000 calls per week.

The offer is supplemented by the Hello bank! digital bank which has more than 518,000 customers[8].

Private Banking services are aimed at individual customers with invested assets of more than EUR 250,000. The Wealth Management Department within Private Banking caters to customers with invested assets of more than EUR 5 million. Private Banking customers are served *via* 30 Private Banking centres, a *Private Banking Centre by James*[9] and 2 Wealth Management centres.

With a very sizeable client base of large and medium-sized companies, Corporate Banking Belgium is a market leader in these two segments and a preferred banking partner in the public and non-commercial markets. Medium-sized corporate clients are served by a network of 14 Business Centres throughout Belgium. Large corporate clients, whose annual revenue exceeds EUR 250 million, and public companies and institutional clients are served by centralised teams.

BNP Paribas Fortis continued its digital development and customer experience improvement, in particular with the development of remote banking services from *Easy Banking* with new features and improved performance. The customer service centre building on robotics and artificial intelligence is fully deployed, allowing optimised processing of an increasing number of questions from customers and employees.

BNP Paribas Fortis received several awards for its quality of service to its customers in 2022. The bank was voted "Best bank in Belgium" and "Best investment bank in Belgium" by Euromoney, "Best private bank in Belgium" by PWM-The Banker and "Best SME Bank in Belgium" by Global Finance.

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1 *Source: Bank of Italy, November 2022.*

2 *Source: Bank of Italy, data as at 31/12/2022.*

3 *Source: Assifact, ranking by turnover.*

4 *Source: Financial Market Data Monitor 2022 (Market survey on a representative sample of 2,000 households in December 2022).*

5 *Excluding the 600,000 active customers of bpost bank and Fintro customers.*

6 *Source: Greenwich 2021, in terms of market penetration.*

7 *In December 2022, Fintro had 206 branches, 922 employees and EUR 13.79 billion in assets under management (excluding insurance business) for 351,231 active clients.*

8 *Including 2,280 Hello Pro customers.*

9 *Private Banking centre providing remote services through digital channels.*

From 1 January 2023, BNP Paribas Fortis will implement a new commercial organisation that will focus on segmentation around three customer groups:

- Retail Banking, for individual and independent customers served by a multidisciplinary team;
- Affluent & Private Banking, for individual and independent customers with more than EUR 85,000 in assets with a dedicated relationship manager;
- Corporate Banking for corporate clients with a dedicated relationship manager (Enterprises for small and medium-sized enterprises, and Corporate Coverage for large companies and public and institutional customers).

In 2022, BNP Paribas Fortis became a 100% shareholder of bpost bank after the acquisition of the 50% stake held by bpost. An exclusive seven-year commercial agreement was also signed between bpost and BNP Paribas Fortis. As part of this agreement, bpost will offer BNP Paribas Fortis services and products in its network of post offices.

COMMERCIAL & PERSONAL BANKING IN LUXEMBOURG (CBL)

With a 16.5%[1] market share of the Retail Banking market and 24%[2] of the SME market, BGL BNP Paribas is the No. 2 commercial & personal bank in Luxembourg.

The three business lines: LRB (Luxembourg Retail Banking), BEL (Banque des Entreprises in Luxembourg) and PBL (Private Banking in Luxembourg) actively support the financing of the economy and adapt their strategy and network to changes in customer behaviour and new consumption patterns with a focus on digitisation.

With the expertise of their employees, they support their customers to bring their plan to fruition, with:

- a Retail Banking network supporting more than 180,000 customers on a daily basis, based on:
  - 31 branches throughout the country and 82 ATMs for individual and business customers,
  - a comprehensive and diverse range of products and services offered through an innovative multi-channel presence, encompassing a branch network as well as online, phone and mobile banking,
  - teams of savings and investment specialists assisting customers in the management of their portfolios, teams of mortgage specialists advising customers on loans for their acquisition and construction projects, as well as specialists for professionals and liberal professions;
- a Corporate Bank serving 4,600 groups, with dedicated business managers;
- a private bank organised around 5 centres serving nearly 3,700 customers and offering tailored financial and wealth management solutions.

INTERNATIONAL RETAIL BANKING (IRB)

Within the CPBS division, IRB includes Commercial & Personal Banking activities for individuals, professionals and corporate clients in 9 non-eurozone countries. It is structured around 2 regions:

- Bank of the West in the United States; a Commercial bank for which the sale to BMO Financial Group was completed on 1 February 2023;
- Europe-Mediterranean, covering Poland, Ukraine, Türkiye and Africa including Algeria, Morocco and Senegal (for which a disposal agreement was signed on 29 July 2022 with the SUNU Group[3]), Ivory Coast (for which a disposal agreement was signed on 30 September 2022[4]).

IRB also has a stake in China in Bank of Nanjing.

Founded on solid local knowledge, IRB uses the BNP Paribas integrated model and its platforms to support clients in their financial and non-financial services needs, beyond the domestic markets, with varied expertise.

IRB supports individual customers, small businesses and corporate clients in a sustainable and responsible manner through three business lines:

- Commercial & Personal Banking, whose multi-channel and local network serves more than 15.5 million individual and Small and Medium-sized Business customers through a network of over 2,000 branches;
- Private Banking relies on the deployment of global Wealth Management activities, within the integrated model, in conjunction with the corresponding Wealth Management franchise within the Group's Investment & Protection Services division;
- Corporate Banking, with a network of 70 business centres, 18 trade centres and 8 desks for multinational companies, providing local access to BNP Paribas offers and support in all countries, in cooperation with CIB.

1 *Source: TNS ILRES – Bank Survey December 2022.*

2 *Source: TNS ILRES – SME Bank Survey 2020.*

3 *BNP Paribas proposes to sell its 54.11% stake in the capital of the Senegalese bank Bicis, to the SUNU group | African markets (african-markets.com).*

4 *Acquisition of BICICI: the Consortium accelerates the signing of the acquisition – Financial Afrik.*

EUROPE-MEDITERRANEAN

With around 25,000 employees (including 226 based in France) and a network of nearly 1,500 branches, Europe-Mediterranean (EM) now serves close to 15 million customers across seven countries[1]. The entity includes TEB in Türkiye, BNP Paribas Bank Polska in Poland, UKRSIBBANK[2] in Ukraine, BMCI in Morocco, BNP Paribas El Djazaïr in Algeria, as well as a partnership in Asia (Bank of Nanjing in China).

It also includes BICIS in Senegal for which a disposal agreement was signed on 28 July 2022 with the SUNU Group[3] and BICICI in Côte d'Ivoire, for which a disposal agreement was signed on 30 September 2022 with the Ivorian consortium comprising Banque Nationale d'Investissement (BNI), Caisse Nationale de Prévoyance Sociale (CNPS), Caisse des Dépôts and Consignations de Côte d'Ivoire (CDC-CI) and the Institution de Prévoyance Sociale – Caisse Générale de Retraite des Agents de l'État (IPS-CGRAE)[4]. The definitive disposal of these two banks is scheduled for 2023, after obtaining the regulatory authorisations in force. These banks are developing an integrated model in their countries, in close cooperation with the Group's other business lines.

In 2022, IRB committed to its bank in Ukraine from the start of the military conflict. In this respect, BNP Paribas has set up reception arrangements for employees and their families with the support of BNP Paribas Bank Polska (more than 1,000 people hosted in Poland[5]). In addition, the Group opened the Rescue & Recover Fund for the benefit of the Red Cross and MSF[6].

IRB also continued to implement the Group's GTS strategy. TEB issued its first "Green Loan" with a loan to Bakioglu Holding to finance its energy transition efforts[7]. The Agronomist.pl platform at BNP Paribas Bank Polska has launched new functionalities, offering its farming customers tools to promote sustainable agriculture[8]. BMCI is fully committed to supporting SMEs and entrepreneurship in Morocco and participated in the creation of the Support Fund which aims to support SMEs in their development and projects[9]. In Algeria, in order to promote the inclusion of the general public and young people in new digital professions, BNP Paribas El Djazaïr launched the "Fabrikademy" in partnership with Simplon[10]. In addition, in 2022, the BNP Paribas Group partnered with the start-up Dreams in Sweden to develop Dreams Sustainable, a digital solution to encourage customers to save more and adopt a more environmentally-friendly way of consuming[11].

BANK OF THE WEST

The Commercial & Personal Banking business in the United States is conducted through Bank of the West, headquartered in San Francisco. On 20 December 2021, the Group announced the sale to BMO Financial Group of Bank of the West. The sale of Bank of the West to BMO Financial Group was completed on 1 February 2023.

BNP PARIBAS PERSONAL FINANCE

BNP Paribas Personal Finance is a major player in the financing of individuals in Europe, operating in around thirty countries, under several trademarks such as Cetelem, Findomestic, AlphaCredit, Cpay with almost 19,000 employees for 20 million customers. In 2023, Cetelem France will be celebrating its 70th anniversary.

BNP Paribas Personal Finance aims to be the daily financial partner for its customers, giving them the means to carry out their home and personal equipment, home renovation and mobility projects and supporting their budget management needs. The company also offers its wholesale, retail and mobility partners, looking for a financial partner, a wide range of services to ensure the promotion, sale and management of financing solutions.

Since 2020, BNP Paribas Personal Finance's purpose is to: "Promote access to more responsible and sustainable consumption to support our customers and our partners", demonstrating the willingness for the long-term transformation of the Company and its activities, and supporting the BNP Paribas Group's ambition to become the leader in sustainable finance.

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1 *Excluding China.*

2 *BNP Paribas holds 60% of the share capital of Ukrsibbank alongside the European Bank for Reconstruction and Development (40%).*

3 *BNP Paribas proposes to sell its 54.11% stake in the capital of the Senegalese bank Bicis, to the Sunu group | African markets (african-markets.com).*

4 *Acquisition of BICICI: the Consortium accelerates the signing of the acquisition – Financial Afrik.*

5 *The invasion in Ukraine: these companies that are committed | Les Échos.*

6 *BNP Paribas and its employees mobilise in support of the Ukrainian population – BNP Paribas (group.bnpparibas).*

7 *https://www.linkedin.com/posts/oya-da%C4%9Fl%C4%B1-9a470014_sustainability-activity-7021464944571232256-LqQB/?utm_source=share&utm_medium=member_desktop.*

8 *Check the water balance of your crop – the first water footprint calculator for agricultural producers in Polish – Agronomist.*

9 *BMCI fully committed to supporting SMEs and entrepreneurship – La Nouvelle Tribune (lnt.ma).*

10 *BNP Paribas El Djazaïr | FABRIKADEMY.*

11 *BNP Paribas and Dreams dream of climate finance (galitt.com).*

By positioning this purpose as the reference framework for its 2025 strategic plan, BNP Paribas Personal Finance expresses its ambition to integrate sustainable development as a key element of its performance in a sector particularly impacted by the transformation of lifestyles and consumption. BNP Paribas Personal Finance has set a target of EUR 20 billion in sustainable finance, with sustained efforts in four areas: financial inclusion, the energy transition of housing, sustainable mobility and the circular economy.

At the end of 2022, sustainable finance outstandings reached EUR 5.9 billion, *i.e*. 6.1% of total outstandings.

In France, the Cetelem Foundation for Inclusion through Digital Sharing has set itself the goal of helping French people in situations of economic precariousness appropriate online consumption.

BNP Paribas Personal Finance supports households while promoting the development of controlled consumption with systems to detect and support customers in vulnerable situations in all its regions. BNP Paribas Personal Finance is developing a smooth, instant and secure customer experience and inclusive financing products, along with payment methods adapted to the consumer expectations and new needs.

To meet all of these challenges, BNP Paribas Personal Finance is pursuing a collaborative and structured innovation approach, responding to new consumer requirements by inventing value-added solutions for its customers and partners.

ARVAL

Arval is a BNP Paribas Group company specialising in vehicle leasing and sustainable mobility. Arval offers corporate clients (from large multinationals to small and medium enterprises), its partners, their employees and also individuals, customised solutions to optimise their mobility.

Arval had almost 8,000 employees at the end of 2022, in the 30 countries where the company operates, and leased nearly 1.6 million vehicles (including 296,676 electrified vehicles) to its 300,000 customers. Arval is present in Europe, where it occupies a leading position, and is number one in France, Italy, Spain, Belgium and Poland[1]. Arval relies, in addition, on strategic partnerships, thanks to the Element-Arval Global Alliance, the world leader in the sector, with a total of more than 3 million vehicles in 53 countries. In 2022, acquisitions were made by Arval, notably BCR Fleet Management in Romania (3,500 vehicles) and Terberg Business Lease in the Netherlands and Belgium (38,000 vehicles).

With the aim of leasing 700,000 electrified vehicles by 2025 and offering sustainable mobility solutions in all of its entities worldwide, Arval is a leader in sustainable mobility and is driving the energy transition of its customers at the heart of its concerns.

BNP PARIBAS LEASING SOLUTIONS

BNP Paribas Leasing Solutions supports the development of its customers and industrial partners by offering them leasing and financing solutions with services to preserve their working capital.

At the heart of the financing of the real economy, BNP Paribas Leasing Solutions provides corporate clients with the flexibility they need to remain competitive and develop in a responsible and sustainable manner in their markets (agriculture, construction, IT, telecommunications, transport, medical, real estate, safety, food, handling, mobility infrastructure, *etc.*).

BNP Paribas Leasing Solutions also helps its partners (manufacturers, distributors or resellers) to develop profitable business models based on the concept of use or “as a service” and in particular on the sustainable mobility market with the financing of “Charging as a service” electrical charging terminals.

Its 3,500 employees support its customers’ and partners’ growth in 20 countries in Europe, but also in China, the United States and Canada.

BNP Paribas Leasing Solutions’ teams of experts support:

- equipment manufacturers and professional software publishers with comprehensive and exclusive solutions aimed at stimulating and supporting the sales of their distribution networks and/or resellers;
- distributors, dealers, resellers and integrators of professional equipment with sales support solutions as well as a wide range of financial products and services to meet the needs of their customers;
- corporate clients, local authorities, craftspeople and professionals, with solutions to finance their investments.

In 2022, BNP Paribas Leasing Solutions was named “European Lessor of the Year” and also received the “Best Energy Transition Financing Programme” award from Leasing Life, the leading leasing magazine in Europe.

In a world undergoing climate and environmental change, BNP Paribas Leasing Solutions is actively contributing to building a better future by supporting the environmental transition of its partners and customers, by financing equipment with a positive impact, as well as by cultivating a corporate culture that promotes diversity and inclusion.

[1] *Source: Frost & Sullivan, Full-Service Leasing Fleet at end-2021.*

BNP PARIBAS PERSONAL INVESTORS

BNP Paribas Personal Investors is a digital banking and investment services specialist. It offers a broad range of banking, credit, savings and short- to long-term investment services to 5.0 million customers (PI Germany has 1.99 million customers as of September 2022), on mobile applications, online, by phone or face-to-face. It provides decision-making tools, advice and analyses.

BNP Paribas Personal Investors also provides services and its IT platform to independent financial advisors, asset managers and fintechs. Services include market access, transactions, account management and custody services.

Covering Germany and India, BNP Paribas Personal Investors today has ~3,700 employees (PI Germany has ~1,140 employees)[1]:

- in Germany, BNP Paribas Personal Investors operates under three brand names: Consorsbank for individual customers, DAB BNP Paribas for B2B partners and BNP Paribas Wealth Management Private Banking for wealthy individual customers. Consorsbank is the 4th-largest full-service direct bank in the market by number of customers[2]. DAB BNP Paribas is one of the leading platforms for financial portfolio managers. BNP Paribas Wealth Management Private Banking is a digital asset manager for customers with an investment amount of EUR 250,000 or more who are served with three different advisory approaches. Personal Investors offers its services to nearly 2 million customers in Germany;
- in India, Sharekhan is one of the largest online brokers[3]. Its footprint extends to 541 across 28 states through a network of 153 branches and over 2,400 business partners, serving over 3 million customers;

In 2022, the post-Covid period led to a progressive normalisation of the brokerage activity after 2 very volatile years. In 2022, PI has implemented new offers on savings (*e.g.* mobile saving plans and cash-remunerated call money offers) based on an efficient technology platform to develop its position as digital trusted partner for affluent customers, progressing towards its 2025 ambitions.

NICKEL

With the acquisition of Nickel in 2017, BNP Paribas responded to customers' need to pay, and be paid, *via* a simple and handy service. With over 8,600 tobacconists and Nickel Points in Europe, Nickel has a strong position in its market as the second-largest distributor of current accounts in France.

Thanks to its digital model and a distribution method that is present throughout the country, Nickel maintained a sustained rate of customer acquisition throughout the year and even reached a record number of new accounts opening in France in September 2022 with more than 56,000 openings during the month. Nickel posted nearly 3 million accounts opened[4] as of 31 December 2022 in France alone. In Europe, Nickel is growing rapidly in Spain and launched its activity in Belgium and Portugal in 2022, always with the same model combining digital with physical point of sale networks.

FLOA

A pioneer in payment facilities, Floa offers split payment solutions, loans and bank cards. Floa is a partner of major e-retailers, key travel players and fintechs for which it develops adapted services. Floa's products and services stand out for their ease of use for customers and their speed of integration for partners. At end 2022, Floa has more than 4 million customers and finances more than EUR 2.5 billion in goods and services each year. Floa employs nearly 400 people based in France and Europe who work daily to offer innovative financial services with a successful cross-channel user experience, capitalising on new digital technologies and data. Floa places the customer experience at the heart of its strategy and was recognised by Google's "Finance UX Benchmark 2022" in 2022. Floa was also voted Customer Service of the Year for 2023, for the third consecutive year in the credit institution category and for the first year in the payment solution category. Leader in France, and present in Spain, Belgium, Italy and Portugal, Floa joined the BNP Paribas Group in February 2022.

INVESTMENT & PROTECTION SERVICES

The Investment & Protection Services (IPS) division brings together the Group's activities dedicated to protection, savings, investment and real estate services. It strives to design innovative and sustainable products to support individuals, professionals, corporate clients and institutions in their projects and in their desire to have a positive impact:

- BNP Paribas Cardif (nearly 8,000 employees, 34 countries, EUR 247 billion in assets under management) designs, develops and markets savings and protection offers with over 500 distributor partners to insure people, their projects and their property;

1 *As of December 2022 and excluding Integrated functions employees.*

2 *Kundenzahlen von Direktbanken und Online-Brokern (modern-banking.de); Advanzia Bank is ranked No. 4 but is specialised in credit cards and does not offer a full service.*

3 *Ranking based on data communicated by the National Stock Exchange in India.*

4 *Since its creation.*

- BNP Paribas Wealth Management (more than 6,800 employees, 19 countries, EUR 411 billion in assets under management) meets the wealth and financial needs of wealthy individual customers, family offices and entrepreneurs. BNP Paribas Wealth Management is the leading private bank in the eurozone (assets under management);
- BNP Paribas Asset Management (more than 2,000 employees, 34 countries, EUR 501 billion in assets under management) offers investment solutions to individual savers, corporate clients and institutional investors, with specific expertise: active conviction-based strategies, emerging markets, multi-asset investments, private debt and liquidity solutions;
- BNP Paribas Real Estate (more than 4,500 employees, 14 countries, EUR 30 billion in assets under management) supports its clients – institutional investors, owners, corporate clients, local authorities, individuals, *etc.* – during all stages of the property life cycle: development, transaction, consulting, expertise, Investment Management and Property Management;
- BNP Paribas Principal Investments is responsible for managing BNP Paribas' portfolio of unlisted and listed industrial and commercial investments. The private equity investment strategy was opened to our customers in 2021 with the creation of the BNP Paribas Agility Capital fund.

From January 2023, BNP Paribas has decided to combine the private asset activities of the IPS business lines from Principal Investments, BNP Paribas Cardif, BNP Asset Management within a dedicated business unit, "Private Assets", integrated into BNP Paribas Asset Management, to create a single centre of expertise in this asset class. The Group thus affirms its ambition to become a leading European player in the field of private assets.

Investment & Protection Services employs nearly 19,000 people in 49 countries and holds strong positions in the Group's key growth regions, Asia-Pacific and Latin America. By integrating environmental, social and governance criteria into all its operational processes, the IPS division aims to contribute to positioning BNP Paribas as one of the world leaders in sustainable finance.

BNP PARIBAS CARDIF

Operating in over 30 countries, BNP Paribas Cardif designs, develops and markets savings and protection offers to insure people, their projects and their assets.

BNP Paribas Cardif offers savings solutions to build and grow capital and prepare for the future, in particular through products adapted to customers' needs and projects.

BNP Paribas Cardif is a worldwide leader of the creditor protection insurance market[1]; BNP Paribas Cardif also offers non-life insurance, health insurance, budget insurance, income protection and means of payment insurance, protection against unforeseeable events (unemployment, injury, death) and personal data protection to meet consumers' changing needs.

Nearly 8,000 employees worldwide contributed to generating revenue of EUR 30 billion in 2022.

Through its unique partnership business model, BNP Paribas Cardif offers more than 500 distributors solutions matched to the needs of their customers. This network of partners spans multiple sectors, including banks, credit organisations, financial institutions, automotive sector companies, retailers, telecommunications companies, as well as financial advisors and brokers. The insurer supports its long-standing partners in their transformation by developing service ecosystems around insurance products (retirement for BNP Paribas customers in France, employability and home for Scotiabank customers in Latin America, automotive services for customers of Icare, BNP Paribas Cardif's subsidiary specialised in automotive guarantees and maintenance contracts, *etc.*).

Resolutely future-facing, the insurer continued to introduce technological innovations in 2022, deepening partnerships with digital platforms (digital players such as the fintech Neon in Brazil). BNP Paribas Cardif also continued its transformation, aligning its products with the new consumer needs and expectations (development of 100% digital products; more inclusive products that are simpler to understand and subscribe to, *etc.*).

Committed to both its employees, its partners and their customers, BNP Paribas Cardif wants to have a positive impact on society, notably through its core mission of making insurance more accessible. Aware of its environmental impact, BNP Paribas Cardif has strengthened its commitments for the climate. As an investor, BNP Paribas Cardif contributes to give meaning to its policyholders' investments and has set itself the target of investing EUR 1 billion per year on average by 2025 to positive impact investments. The insurer has committed to aligning its portfolios with a carbon neutrality trajectory by 2050 and has joined the Net-Zero Asset Owner Alliance.

BNP PARIBAS WEALTH MANAGEMENT

BNP Paribas Wealth Management develops its Private Banking model across 19 countries around the world, serving a client base of entrepreneurs, family offices and High Net Worth Individuals. With EUR 411 billion in assets under management in 2022, over 6,800 employees[2] and offices in Europe, Asia, the United States and the Middle East, BNP Paribas Wealth Management is a major global Private Bank and the leading Private Bank in the eurozone.

Anchored in BNP Paribas' integrated model, BNP Paribas Wealth Management deploys its network of private bankers and dedicated experts, as well as the Group's full range of expertise, in a large number of regions. In Europe, the Private Banking

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[1] *Source: Finacord 2022.*

[2] *Including Commercial & Personal Banking*

business is promoted by the commercial networks of BNP Paribas. In Asia, the Private Bank benefits from the Group's established presence in the markets and Corporate & Institutional Banking's expertise to cater to the most sophisticated needs of its clients. In 2021, BNP Paribas Wealth Management strengthened its offering to family offices and entrepreneurs to meet their specific personal and business needs through adapted and tailored solutions.

Well recognised globally in the financial industry for its experience and expertise, BNP Paribas Wealth Management offers clients a wide range of products and services: wealth planning, financial expertise (financial management, financial investments), tailor-made financing and specialised expertise (e.g. real estate, vineyards, philanthropy) as well as privileged access to all the BNP Paribas Group's expertise.

For many years, sustainable investment and responsible innovation have been at the heart of BNP Paribas Wealth Management's business culture. The Responsible Investment offering was launched in 2006 to respond to the emerging desire of investors to combine financial performance with a social and environmental dimension, and it is based on in-depth expertise and clients' personal convictions. To complete this offering of positive impact solutions, since 2008, BNP Paribas Wealth Management has also supported its clients in their philanthropic projects, from reflection to implementation, thanks to experts in individual philanthropy. BNP Paribas Wealth Management has also continued to develop responsible investment, by extending its range of sustainable products and services. Thanks to the myImpact digital tool, clients in a greater number of countries have the opportunity to define their priorities for sustainability and philanthropy. The year 2022 was also marked by the rollout of the "Clover Rating" to all asset classes, accompanying clients to identify and select sustainable investments that meet their search for positive impact across their portfolio.

Lastly, with a constant focus on innovation, BNP Paribas Wealth Management's range of digital solutions continues to expand in order to offer a unique client experience. Digital uses enabled BNP Paribas Wealth Management's teams to remain as close as possible to clients during the pandemic by ensuring the best quality of service. In 2022, BNP Paribas Wealth Management continued to improve the client experience, through, among others, the expansion of the digital offering and the creation of a new platform dedicated to private assets.

BNP Paribas Wealth Management won several awards in 2022:

- Best Private Bank in Europe[1], ranked No. 1 in France[2] for the 7th consecutive year and No. 1 in Belgium[(2)] ;
- Best Private Bank for training of Private Bankers in Italy[3];
- Best Private Bank for Entrepreneurs[4] ;
- Best Private Bank in Hong Kong for UHNWI[5] ;
- Best Bank Impact Offering[6] and sustainable investments[(6)], Excellence in philanthropic service[(4)] ;
- Best Private Bank in the world for its digital customer services[7].

BNP PARIBAS ASSET MANAGEMENT

BNP Paribas Asset Management (BNPP AM) is the BNP Paribas Group's dedicated asset management business, employing 2,074[8] people in 34 countries[(8)] with a significant commercial presence in Europe and the Asia-Pacific region. Through the BNP Paribas integrated model, BNP Paribas Asset Management serves a large international client base and has close relationships with the distribution networks within BNP Paribas' commercial banks. Ranked the 10th-largest asset manager in Europe[9], the company manages assets totalling EUR 501 billion[(8)] and employs 487 investment professionals[(8)].

BNPP AM offers investment solutions for individual investors (through internal distributors – private banks and Commercial & Personal Banking within BNP Paribas – and external distributors), corporates and institutional investors (insurance companies, pension funds, official institutions). The company develops specific expertise: active, conviction-based strategies, emerging markets, multi-asset investments, private assets and liquidity solutions.

BNPP AM's priority is to achieve long-term sustainable returns for its clients by placing sustainability at the heart of its investment strategy and philosophy. As a signatory of the Net-Zero Asset Managers initiative, BNPP AM has committed to supporting the objectives of reducing greenhouse gas emissions and aligning its investments with Net-Zero emissions by 2050. In 2022, BNPP AM outlined its "Net Zero" roadmap, which covers the progressive alignment of its portfolio investments with the objective of Net-Zero emissions by 2050, the associated stewardship activities and emissions reduction measures for its operations.

1 *Private Banker International London; Private Banker International Global Wealth Awards 2022 (wealthmanagement.bnpparibas).*

2 *Euromoney Private Banking Survey; Euromoney 2022 Private Banking & Wealth Management results.*

3 *PWM The Banker Private Banking awards PWM; The Banker Global Private Banking Awards 2022 (wealthmanagement.bnpparibas).*

4 *Global Private Banking Innovation; Awards Global Private Banking Innovation Awards 2022 (wealthmanagement.bnpparibas).*

5 *The Asset Triple A Private Capital; Awards Financial and ESG intelligence for decision makers | The Asset.*

6 *Wealthbriefing Wealth For Good; Awards Victories at the 2022 WealthBriefing Wealth For Good Awards (wealthmanagement.bnpparibas).*

7 *PWM The Banker Wealth; Tech 2022 PWM Wealth Tech Awards (wealthmanagement.bnpparibas).*

8 *Source: BNP Paribas and BNP Paribas Asset Management, as at 31 December 2022.*

9 *Source: IPE Top 500 Asset Managers 2022.*

With 89%(8) of assets under management of its European-based open-ended funds, classified Article 8 (promoting environmental and/or social characteristics) or Article 9 (having a sustainable investment objective) of the European SFDR[1] regulation – which identifies funds according to their sustainability potential – BNPP AM is an important sustainability player. This positioning is supported by its 161 labelled funds(8) in France and Belgium, representing EUR 121.9 billion in assets(8). In 2022, BNPP AM celebrated the 20th anniversary of the launch of its first fund integrating ESG criteria[2], demonstrating its long-term commitment and the strengthening of its labelled range.

The company also uses its ability to engage with companies and public authorities to advocate for a low-carbon, environmentally sustainable and inclusive economy.

BNPP AM also won the ESG Asset Management Company of the Year award in Asia for a fourth successive year.

BNP PARIBAS REAL ESTATE

With its extensive range of services, and its 4,553 employees, BNP Paribas Real Estate supports its customers across all stages of the property life cycle, from building design to everyday management:

- **Property Development** – 2,301 housing units delivered in France and 159,000 m^2 of offices delivered in France and Madrid in 2022;
- **Advisory** (Transaction, Consulting, Expertise):
  - 5.71 million m^2 invested in 2022 (3,000 deals),
  - EUR 24.65 billion in investments supported, and
  - 72,980 valuations carried out (157 million m^2 valued);
- **Investment Management** – EUR 28.3 billion in assets under management in Europe, mainly in France, Germany and Italy as at 31 December 2022. As of 31 December 2022, 85% of funds open for collection from investors were already compliant with Articles 8 and 9 of the SFDR Regulation;
- **Property Management** – 48.9 million m^2 in commercial real estate managed in Europe as of 31 December 2022, including many high-rise towers and complex buildings.

This multi-sector offering covers all asset classes: offices, homes, warehouses, logistics platforms, retail, hotels, serviced residences, land, *etc.*

It is proposed based on the needs of clients, whether they are institutional investors, owners, corporate clients (SMEs, large corporate groups), public entities, local authorities or individuals.

In commercial real estate, BNP Paribas Real Estate is present in 23 countries, with:

- **its direct offices in eleven European countries**, a continent where BNP Paribas Real Estate is one of the leaders and operates mainly in France, Germany and the United Kingdom. BNP Paribas Real Estate is also present in the following countries: Belgium, Spain, Ireland, Italy, Luxembourg, the Netherlands, Poland and Portugal;
- **its platforms** in Hong Kong (SAR China), Dubai and Singapore to support local investors in their real estate strategies in Europe;
- **its network of commercial Alliances** with local partners in nine other countries (Austria, Greece, Hungary, Jersey, Northern Ireland, Czech Republic, Romania, Switzerland and the United States).

In residential and office property development, BNP Paribas Real Estate mainly operates in the Paris region and in several major regional cities such as Bordeaux, Lyon, Marseille, Nice and Toulouse. Internationally, the Company has already completed office and housing programmes in London, Frankfurt, Madrid, Milan and Rome. It should soon carry out two major projects in Lisbon.

PRINCIPAL INVESTMENTS

Principal Investments manages BNP Paribas Group's portfolio of unlisted and listed industrial and commercial investments with a view to supporting the growth of European midcaps and creating value over the medium- and long-term.

The Private Equity Management unit specialises in providing support for transmission and development projects of unlisted companies by taking minority equity stakes or through private debt financings. It opened this strategy in 2020 to the Bank's clients with the launch of the BNP Paribas Agility Capital fund.

It also provides indirect financing support for the economy through commitments in private equity funds.

The Listed Investment Management unit acquires and manages minority interests in predominantly French listed companies.

As part of the commitment made by BNP Paribas at the COP 21 to support the financing of the energy transition, a budget of EUR 100 million was allocated by the Group at the end of 2015. The mission of Principal Investments is thus extended to the constitution and management of a portfolio of minority stakes in innovative companies (start-ups) linked to the ecological

1 SFDR: Sustainable Finance Dislosure Regulation.

2 ESG: Environment, Social, Governance.

transition. This strategy was also recently opened to the Bank's clients through the launch of the BNP Paribas Solar Impulse Venture Fund, in partnership with the Solar Impulse Foundation.

With the Group's CSR Department, the team also co-manages a budget of EUR 200 million invested in its own account to promote local development and the climate, social and solidarity actions as well as natural capital.

OTHER ACTIVITIES

PERSONAL FINANCE'S MORTGAGE BUSINESS

In the context of the Group's 2014-2016 business development plan, Personal Finance's Mortgage Business, a significant portion of which is managed in run-off, was transferred to "Other Activities" as at 1 January 2014.

1.5 BNP Paribas and its shareholders

SHARE CAPITAL

At 31 December 2021, BNP Paribas SA's share capital stood at EUR 2,468,663,292 divided into 1,234,331,646 shares. Details of historical changes in share capital are provided in chapter 6, note 6a *Transactions in share capital.*

In 2022, there were no transactions on the share capital: at 31 December 2022, the share capital of BNP Paribas still amounted to EUR 2,468,663,292, consisting of 1,234,331,646 shares with a par value of EUR 2 each.

The shares are all fully paid-up and are held in registered or bearer form at the choice of their holders, subject to compliance with the relevant legal provisions. **None of the Bank's shares entitles their holders to an increased dividend or double voting rights or limit the exercise of voting rights.**

CHANGES IN SHARE OWNERSHIP

CHANGES IN THE BANK'S OWNERSHIP STRUCTURE OVER THE LAST TWO YEARS

Dates	31/12/2020			31/12/2021			31/12/2022		
Shareholders	Number of shares *(in millions)*	% of share capital	% of voting rights	Number of shares *(in millions)*	% of share capital	% of voting rights	Number of shares *(in millions)*	% of share capital	% of voting rights
SFPI(1)	**96.55(2)**	**7.7%**	**7.7%**	**96.55(2)**	**7.8%**	**7.8%**	**96.55(2)**	**7.8%**	**7.8%**
Amundi				**74.48(6)**	**6.0%**	**6.0%**	**74.00(7)**	**6.0%**	**6.0%**
BlackRock Inc.	**74.78(3)**	**6.0%**	**6.0%**	**74.96(4)**	**6.1%**	**6.1%**	**74.46(5)**	**6.0%**	**6.0%**
Grand Duchy of Luxembourg	**12.87**	**1.0%**	**1.0%**	**12.87**	**1.0%**	**1.0%**	**12.87**	**1.0%**	**1.0%**
Employees	**54.91**	**4.4%**	**4.4%**	**51.32**	**4.2%**	**4.2%**	**52.73**	**4.3%**	**4.3%**
▪ of which Group FCPE(8)	41.41	3.3%	3.3%	39.18	3.2%	3.2%	40.78	3.3%	3.3%
▪ of which directly held	13.50	1.1(*)	1.1(*)	12.14	1.0(**)	1.0(**)	11.95	1.0(**)	1.0(**)
Corporate officers	**0.25**	**NS**	**NS**	**0.30**	**NS**	**NS**	**0.30**	**NS**	**NS**
Treasury shares(9)	**1.26**	**0.1%**	**-**	**1.28**	**0.1%**	**-**	**1.40**	**0.1%**	**-**
Retail shareholders(10)	**52.08**	**4.2%**	**4.2%**	**48.75**	**4.0%**	**4.0%**	**68.60**	**5.6%**	**5.6%**
Institutional investors(10)	**918.45**	**73.5%**	**73.6%**	**836.26**	**67.8%**	**67.9%**	**853.42**	**69.2%**	**69.3%**
▪ European	543.17	43.5%	43.5%	437.14	35.4%	35.5%	464.59	37.7%	37.7%
▪ Non-European	375.28	30.0%	30.1%	399.12	32.4%	32.4%	388.83	31.5%	31.6%
Other and unidentified(10)	**38.65**	**3.1%**	**3.1%**	**37.56**	**3.0%**	**3.0%**	**-**	**-**	**-**
TOTAL	**1,249.80**	**100%**	**100%**	**1,234.33**	**100%**	**100%**	**1,234.33**	**100%**	**100%**

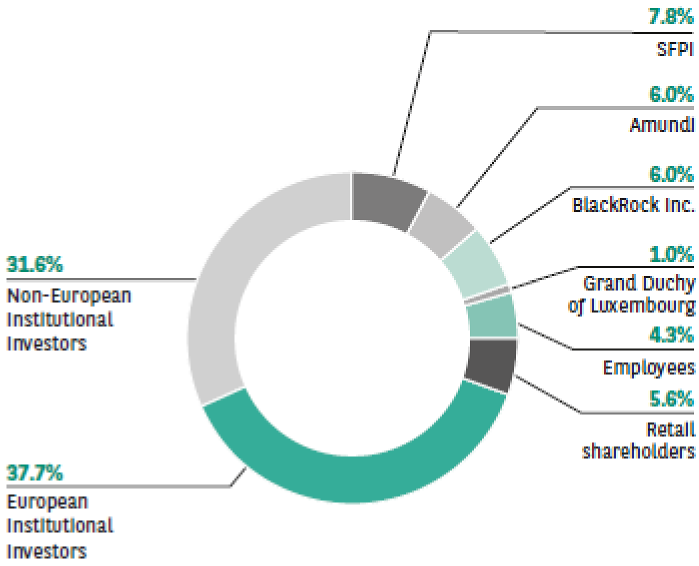
(1) Société Fédérale de Participations et d'Investissement: a public-interest limited company (société anonyme) acting on behalf of the Belgian State.
(2) According to the statement by SFPI, AMF Document No. 217C1156 dated 6 June 2017.
(3) According to the statement by BlackRock dated 4 January 2021 (NB: may change from the position at 31 December).
(4) According to the statement by BlackRock dated 30 November 2021 (NB: may change from the position at 31 December).
(5) According to the statement by BlackRock dated 13 September 2022 (NB: may change from the position at 31 December).
(6) According to the statement by Amundi, AMF Document No. 222C0046 dated 6 January 2022 (NB: may change from the position at 31 December).
(7) According to the statement by Amundi dated 16 November 2022 (NB: may change from the position at 31 December).
(8) The voting rights of the FCPE (profit-sharing scheme) are exercised, after the decision is taken by the Supervisory Board, by its Chairman.
(9) Excluding trading desks' inventory positions.

(10) Based on analyses based on the TPI surveys in 2020 and 2021 and SRD2 survey in 2022 - Institutional investors excluding BlackRock (in 2020, 2021 and 2022) and Amundi (in 2021 and 2022).

(*) Of which 0.5% for the shares referred to in article L.225-102 of the French Commercial Code to determine the threshold above which the appointment of a director representing employee shareholders must be proposed.

(**) Of which 0.4% for the shares referred to in article L.225-102 of the French Commercial Code to determine the threshold above which the appointment of a director representing employee shareholders must be proposed.

BNP PARIBAS SHAREHOLDING STRUCTURE AT 31 DECEMBER 2022 (IN % OF VOTING RIGHTS)



To the Company's knowledge, there are no shareholders, other than SFPI, Amundi and BlackRock Inc., who held more than 5% of the share capital or voting rights as at 31 December 2022.

The Société Fédérale de Participations et d'Investissement (SFPI) became a shareholder of BNP Paribas on the occasion of the merger with the Fortis group, which took place in 2009; during the same financial year, it made two declarations of threshold crossing to the Autorité des Marchés Financiers (AMF):

- on 19 May 2009 (AMF Disclosure No. 209C0702), SFPI disclosed that its interest in BNP Paribas' capital and voting rights had risen above the 5% and 10% disclosure thresholds following its transfer of a 74.94% stake in Fortis Bank SA/NV in return for the issue of 121,218,054 BNP Paribas shares, which at the time represented 9.83% of BNP Paribas' share capital and 11.59% of its voting rights. The disclosure stated in particular that neither the Belgian government nor SFPI were considering taking control of BNP Paribas.

  At the same time, BNP Paribas notified the AMF (AMF Disclosure No. 209C0724) that an agreement had been reached between the Belgian government, SFPI and Fortis SA/NV (renamed Ageas SA/NV at end-April 2010), giving Fortis SA/NV an option to buy the 121,218,054 BNP Paribas shares issued as consideration for SFPI's transfer of its shares in Fortis Bank, with BNP Paribas having a right of subrogation regarding the shares concerned;
- on 4 December 2009 (AMF Disclosure No. 209C1459), SFPI disclosed that it owned 10.8% of BNP Paribas' share capital and voting rights. This change resulted mainly from:
  - BNP Paribas' capital increase through the issuance of ordinary shares in 2009,
  - the capital decrease by the Bank through the cancellation, on 26 November 2009, of preferred shares issued on 31 March 2009 to Société de Prise de Participation de l'État.

On 27 April 2013, the Belgian government announced the buy-back *via* SFPI of the purchase option that had been granted to Ageas.

On 6 June 2017 (AMF Disclosure No. 217C1156), SFPI disclosed that it owned 7.74% of the share capital and voting rights of BNP Paribas; this drop below the 10% capital and voting rights thresholds resulted from the sale of shares on the market.

Since then, BNP Paribas has received no threshold crossing disclosures from SFPI.

On 9 May 2017 (AMF Disclosure No. 217C0939), BlackRock Inc. disclosed that its interest in BNP Paribas' capital and voting rights had risen, as at 8 May 2017 above the 5% disclosure thresholds. On this date, BlackRock Inc. held 63,223,149 BNP Paribas shares on behalf of its clients and the funds it manages.

On 18 June 2019 (AMF Disclosure No. 219C0988 dated 19 June), BlackRock Inc. stated that it held 62,764,366 BNP Paribas shares. Since that date, BlackRock Inc. has disclosed statutory threshold crossings without crossing legal thresholds.

On 6 January 2022 (AMF Disclosure No. 222C0046), Amundi, acting on behalf of the funds it manages, disclosed that its interest in BNP Paribas' capital and voting rights had risen above the 5% legal thresholds on 31 December 2021 and that it held 74,482,498 BNP Paribas shares. Since that date, Amundi has disclosed statutory threshold crossings without crossing legal thresholds.

LISTING INFORMATION

When the shareholders of BNP and Paribas approved the merger between the two banks at the Shareholders' Combined General Meeting of 23 May 2000, BNP shares became BNP Paribas shares. The Euroclear-France code for BNP Paribas is the same as the previous BNP code (13110). Since 30 June 2003, BNP Paribas shares have been registered under ISIN code FR0000131104. To help increase the number of shares held by individual shareholders, BNP Paribas carried out a two-for-one share split on 20 February 2002, reducing the par value of the shares to EUR 2.

BNP shares were first listed on the Cash Settlement Market of the Paris Stock Exchange on 18 October 1993, following privatisation, before being transferred to the Monthly Settlement Market on 25 October of that year. When the monthly settlement system was discontinued on 25 September 2000, BNP Paribas shares became eligible for Euronext's Deferred Settlement Service (SRD).

Since privatisation, a Level 1 144A ADR (American Depositary Receipt) programme has been active in the United States, where JP Morgan Chase is the depositary bank (two ADRs correspond to one BNP Paribas share).

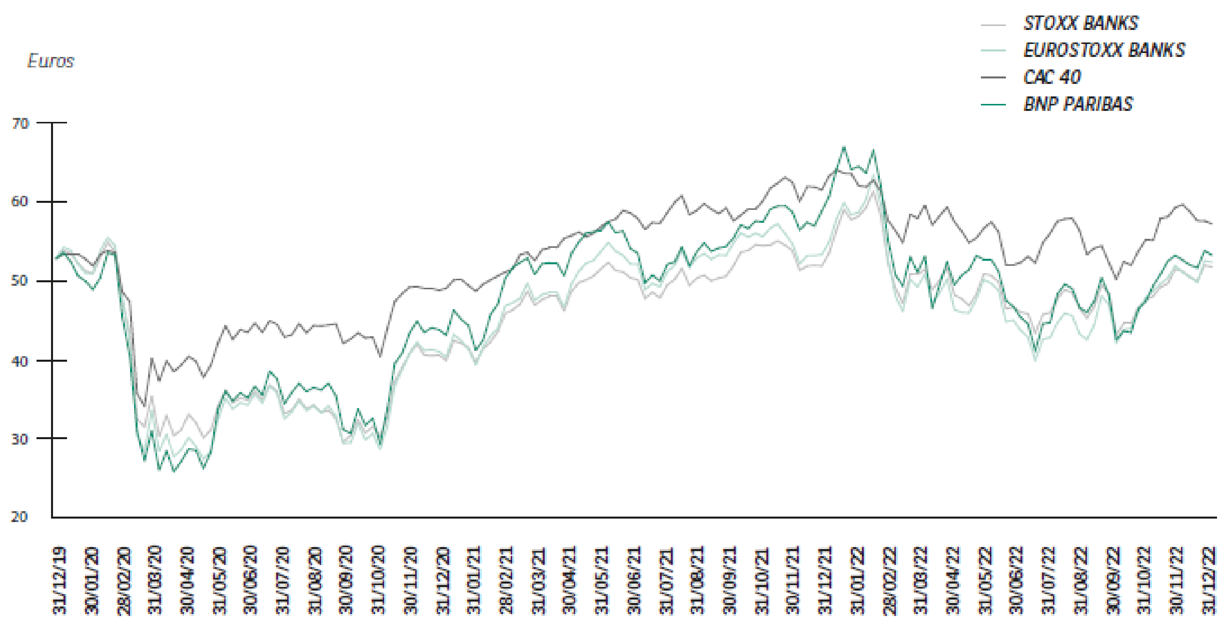
The ADRs have been traded on OTCQX International Premier since 14 July 2010 in order to provide better liquidity and visibility to US investors.

BNP Paribas has been part of the CAC 40 index since 17 November 1993 and became part of the EURO STOXX 50 index on 1 November 1999. Since 18 September 2000, it has been part of the STOXX 50 index. BNP Paribas also joined the DJ Banks Titans 30 Index, an index comprising the 30 largest banks worldwide. It is also included in the EURO Stoxx Banks and STOXX Banks indices. BNP Paribas shares are also included in the main Sustainable Development benchmarks (see chapter 7), including Vigeo Euronext indices (World 120, Europe 120 and France 20), FTSE4Good Index Series, Dow Jones Sustainability World & Europe Indices and STOXX Global ESG Leaders Index.

All of these elements foster liquidity and share price appreciation, as the BNP Paribas share is necessarily a component of every portfolio and fund that tracks the performance of these indexes.

BNP PARIBAS SHARE PRICE PERFORMANCE BETWEEN 31 DECEMBER 2019 AND 31 DECEMBER 2022

Comparison with the EURO STOXX Banks, STOXX Banks and CAC 40 indexes (rebased on share price)

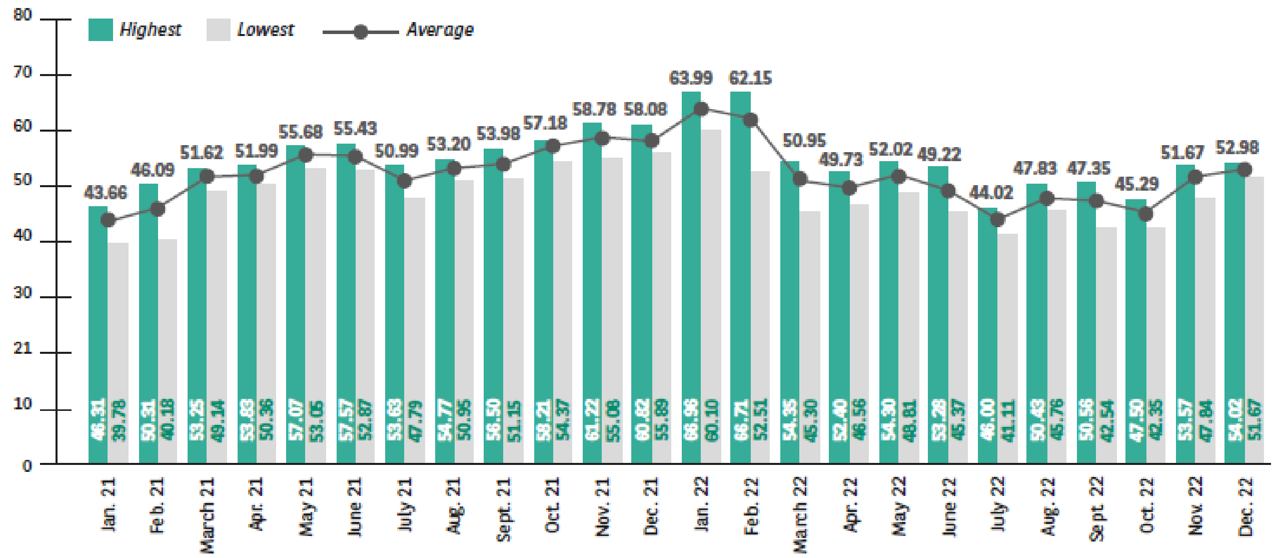


Source: Bloomberg.

In the three-year period from 31 December 2019 to 31 December 2022, BNP Paribas' share price increased by 0.8% from EUR 52.83 to EUR 53.25, outperforming eurozone banks (Eurostoxx Banks: -0.9%) and European banks (Stoxx Banks: -2.0%), but underperforming the CAC 40 (+8.3%).

Over this period, European banking stocks were impacted by the economic consequences of the Covid-19 health crisis and by the recommendation to suspend the payment of dividends by the European Central Bank (ECB); they were then supported by the good performance of banking institutions, the lifting of ECB restrictions and the outlook for economic recovery supported by the progress in vaccination. This momentum was halted from the end of February 2022 by the consequences of the outbreak of the Ukrainian crisis, which severely impacted the share prices of banks in the eurozone.

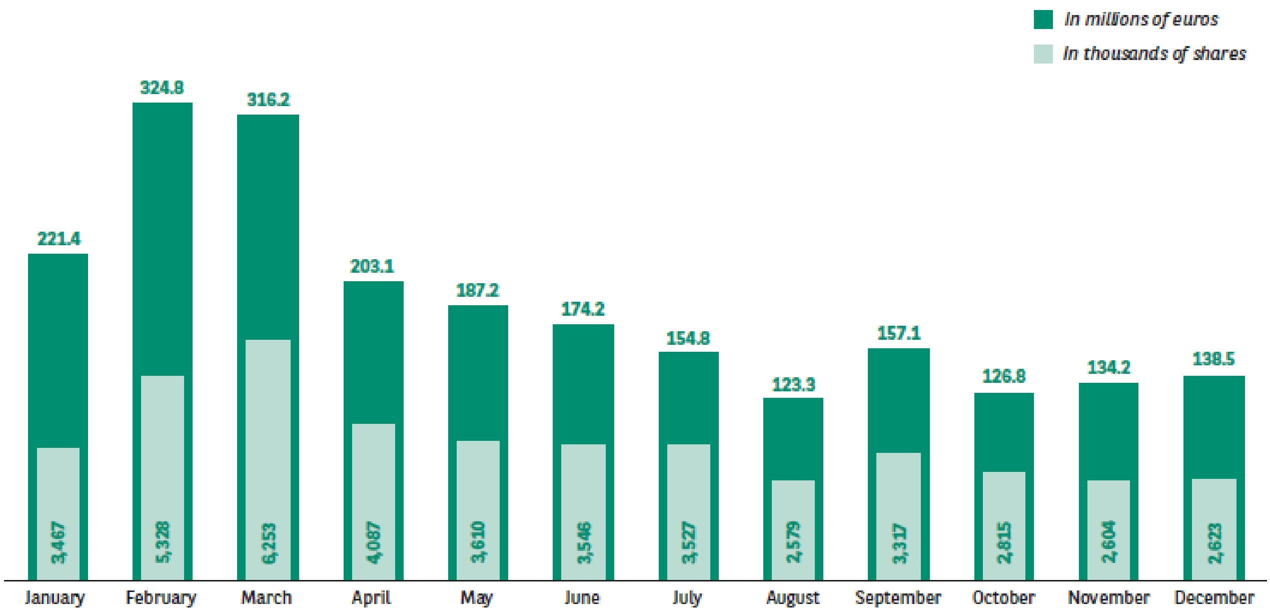
BNP PARIBAS MONTHLY AVERAGES AND HIGH AND LOW MONTHLY CLOSING PRICES SINCE JANUARY 2021



Source: Bloomberg.

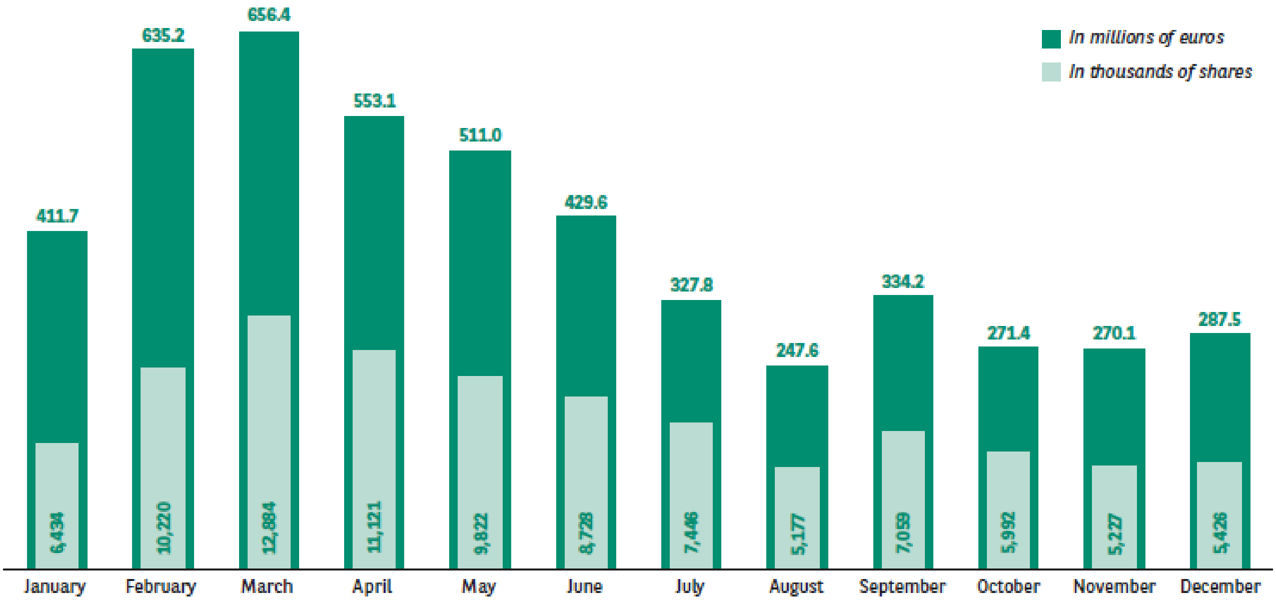
- At 31 December 2022, BNP Paribas' market capitalisation was EUR 65.73 billion, ranking it 10th among CAC 40 stocks; BNP Paribas' free float also put the bank in 8th place on the Paris market index and in 16th place in the EURO STOXX 50 index;
- Daily trading volume on Euronext Paris averaged 3,642,664 shares in 2022, up 9.2% from the previous year (3,336,768 shares per trading session in 2021). Including the volumes traded on multilateral trading facilities (MTFs), daily trading volume in 2022 averaged 7,961,426 shares, up 20.66% (6,598,243 shares traded daily in 2021).

TRADING VOLUME ON EURONEXT PARIS IN 2022 (DAILY AVERAGE)



Source: Euronext.

TOTAL TRADING VOLUME ON EURONEXT AND MTFS IN 2022 (DAILY AVERAGE)



Source: Bloomberg Composite EU Quote BNPP.

SHAREHOLDER DASHBOARD

In euros	**2018**	**2019**	**2020**	**2021**	**2022**
Earnings per share(1)	5.73	6.21	5.31	7.26	7.80
Net book value per share(2)	74.7 (*)	79.0	82.3	88.0	89.0
Net dividend per share	3.02	0.0(3)	2.66(4)	3.67(6)	3.90 (7)
Cash Pay-out ratio *(%)*(8)	52.72	0.0(3)	50.00(5)	50.00(6)	50.00 (7)
Share price					
Highest(9)	68.66	53.81	54.22	62.55	68.07
Lowest(9)	38.18	38.14	24.51	39.71	40.67
Year-end	39.475	52.83	43.105	60.77	53.25
CAC 40 index on 31 December	4,730.69	5,978.06	5,551.41	7,153.03	6,473.76

(1) Based on the average number of shares outstanding during the year.
(2) Before distribution. Revalued net book value based on the number of shares outstanding at year-end.
(3) Following ECB/2020/19 recommendation of the European Central Bank of 27 March 2020 on dividend distribution policies during the Covid-19 pandemic, the distribution of EUR 3.10 per share initially proposed to the Annual General Meeting of 19 May 2020, was appropriated to "Other reserves".
(4) EUR 1.11 distributed following the approval of the Shareholders' Combined General Meeting of 18 May 2021, plus EUR 1.55 distributed following the approval of the Ordinary Annual General Meeting of 24 September 2021; taking into account only the distribution of the 2020 dividend.
(5) Taking into account only the distribution of the 2020 dividend.
(6) Taking into account only the distribution of the 2021 dividend and not taking into account the EUR 900 million share buyback programme, executed between 1st November 2021 and 6 December 2021.
(7) Subject to approval by the Annual General Meeting of 16 May 2023 and taking into account only the distribution of the 2022 dividend and not taking into account the planned EUR 962 million share buyback programme related to the ordinary distribution.
(8) Cash dividend distribution recommended at the Annual General Meeting expressed as a percentage of distributable net income attributable to shareholders.
(9) Recorded during the meeting.
(*) Impact of the first application of IFRS 9 on shareholders' equity at 1 January 2018 - EUR 2.5 billion, ie EUR 2 per share.

CREATING VALUE FOR SHAREHOLDERS

TOTAL SHAREHOLDER RETURN (TSR)

Calculation parameters

- Dividends are reinvested in BNP shares then in BNP Paribas shares; 50% tax credit was included until this system was abolished at the beginning of 2005.
- Exercise of preferential subscription rights during the rights issues of March 2006 and October 2009.
- Returns stated are gross, *i.e.* before any tax payments or brokerage fees.

Calculation results

The following table indicates, for various periods ending on 31 December 2022, the total return on a BNP share, then on a BNP Paribas share, as well as the effective annual rate of return.

Holding period	Investment date	Share price at the investment date *(in EUR)*	Number of shares at the end of the calculation period	Initial investment multiplied by	Effective annual rate of return
Since privatisation of BNP	18/10/1993	36.59	6.3789	9.2834	7.92%
25 years	02/01/1998	48.86	5.2527	5.7246	7.23%
Since the creation of BNP Paribas	01/09/1999	72.70	5.0050	3.6660	5.72%
20 years	02/01/2003	39.41	2.2795	3.0801	5.78%
15 years	02/01/2008	74.06	1.8774	1.3499	2.02%
10 years	02/01/2013	43.93	1.5211	1.8437	6.31%
7 years	04/01/2016	51.75	1.3934	1.4338	5.29%
6 years	02/01/2017	60.12	1.3278	1.1761	2.74%
5 years	02/01/2018	62.68	1.2739	1.0823	1.59%
4 years	02/01/2019	38.73	1.2073	1.6599	13.52%
3 years	02/01/2020	53.20	1.1237	1.1247	4.00%
2 years	04/01/2021	43.86	1.1237	1.3642	16.90%
1 year	03/01/2022	61.11	1.0706	0.9329	-6.76%

COMMUNICATION WITH SHAREHOLDERS

BNP Paribas endeavours to provide all shareholders with clear, consistent, high-quality information at regular intervals, in accordance with best market practice and the recommendations of stock market authorities.

The Investor Relations team informs institutional investors and financial analysts about the Group's strategy, major events concerning the Group's business and the Group's quarterly results.

In 2023, the timetable is as follows[1]:

- 7 February 2023: publication of 2022 full year results;
- 3 May 2023: publication of the first quarter 2023 results;
- 27 July 2023: publication of the second quarter and first half 2023 results;
- 26 October 2023: publication of the third quarter and the first nine months 2023 results.

Informative briefings are organised several times a year for all market participants, in particular when the annual and half-year results are released, or on specific topics, providing General Management with an opportunity to present the BNP Paribas Group and its strategy. More specifically, an Investor Relations Officer is responsible for liaising with managers of ethical and socially responsible funds.

The Shareholder Relations team provides information and deals with queries from the Bank's 377,500 retail shareholders (internal sources and TPI Survey at 31 December 2022). Twice a year, shareholders receive a financial newsletter outlining the Group's main developments, and the minutes of the Annual General Meeting are sent in early July. During the year, shareholders are invited to meetings in various French cities where the Company's achievements and strategy are presented by Executive Management (in 2022, for example, in Rennes on 21 June and Strasbourg on 11 October).

The members of the ***Cercle des actionnaires de BNP Paribas*** (BNP Paribas shareholders' Club), set up in 1995, are the 46,400 retail shareholders holding at least 200 shares. They receive the financial newsletters each half-year and the minutes of the Annual General Meeting. They also receive regular e-mails informing them of new events on the Cercle des actionnaires (shareholders' Club) website (www.cercle-actionnaires.bnpparibas), which also features all the available propositions. Each Club member has a personal and secure access to manage his/her registrations and retrieve his/her invitations.

In 2022, the Club offered more than 300 face-to-face events – guided tours, concerts, performing arts shows, film screenings, *etc.* – and videoconferences, podcasts (interviews with historians, speakers, artists, *etc.*). In addition, the site's Magazine pages contain articles related to the programming and BNP Paribas Group's commitments.

A **French toll-free phone number** has also been made available, **0800 600 700**; it provides the market price and allows members to leave a voice message for the Club team. Messages can also be sent by email to **cercle.actionnaires@bnpparibas.com**.

The **BNP Paribas website (www.invest.bnpparibas.com/en)**, available in French and English, offers users access to all information on the BNP Paribas Group (including press releases, key figures, coverage of the main events, *etc.*). All documents such as integrated reports and reference documents or universal registration documents, can also be viewed and downloaded. The financial calendar gives the dates of important forthcoming events, such as the Annual General Meeting, results announcements and shareholder seminars. The website also features the latest share performance data and comparisons with major indexes, as well as a tool for calculating performance.

Reports and presentations relating to BNP Paribas' business and strategy aimed at all audiences (institutional investors, asset managers and financial analysts) are also available. The **Individual Shareholder section** shows information and features specifically designed for retail shareholders, in particular, access to information such as proposed events.

A section dedicated to **Social and Environmental Responsibility** describes the Bank's goals, the policy followed and the main achievements in this area.

In addition, there is a specific section dedicated to the **Annual General Meeting** which includes information regarding attendance at the meeting, ways to vote and practical matters, as well as a presentation of the resolutions and the complete text of all speeches made by corporate officers. Webcasts of the Annual General Meeting can be viewed on the Bank's website. In response to the expectations of individual shareholders and investors, and to meet strict transparency and regulatory disclosure requirements, BNP Paribas regularly adds sections to its website and improves existing sections with enhanced content and new functions.

[1] *Subject to change at a later date.*

SHAREHOLDER LIAISON COMMITTEE

After its formation in 2000, BNP Paribas decided to create a Shareholder Liaison Committee to help the Group improve communications with its retail shareholders. At the Annual General Meeting that approved the merger between BNP and Paribas, the Chairman of BNP Paribas initiated the process of appointing members to this committee, which was fully established in late 2000.

Chaired by Jean Lemierre, it includes ten shareholders who are both geographically and socio-professionally representative of the retail shareholder population, along with two employees or former employees. Each member serves a three-year term. When their terms expire, announcements are published in the Group's various financial publications; any shareholder may apply.

At end 2022, the Liaison Committee was composed of:

- Mr. Jean Lemierre, Chairman;
- Mr. Jean-Louis Busière, residing in the Moselle department;
- Mr. Michel Cassou, residing in the Tarn department;
- Mr. Jean-Marc Cornier, residing in Meudon;
- Mr. Patrick Cunin, residing in the Essonne department;
- Ms. Catherine Drolc, residing in Montpellier;
- Ms. Anne Doris Dupuy, residing in the Gironde department;
- Mr. Jean-Marie Lapoirie, residing in the Rhône department;
- Mr. Jacques Martin, residing in the Alpes-Maritimes department;
- Ms. Françoise Rey, residing in Paris;
- Mr. Jean-Jacques Richard, residing in Toulon;
- Mr. Ugo Cuccagna, BNP Paribas employee;
- Ms. Christine Valence, BNP Paribas employee.

In accordance with the provisions of the charter, to which all participants subscribed and which serves as the Internal Rules, the Committee members met twice in 2022, on 1 April and 23 September, and also participated in the Annual General Meeting of 17 May.

The main topics of discussion in 2022 included:

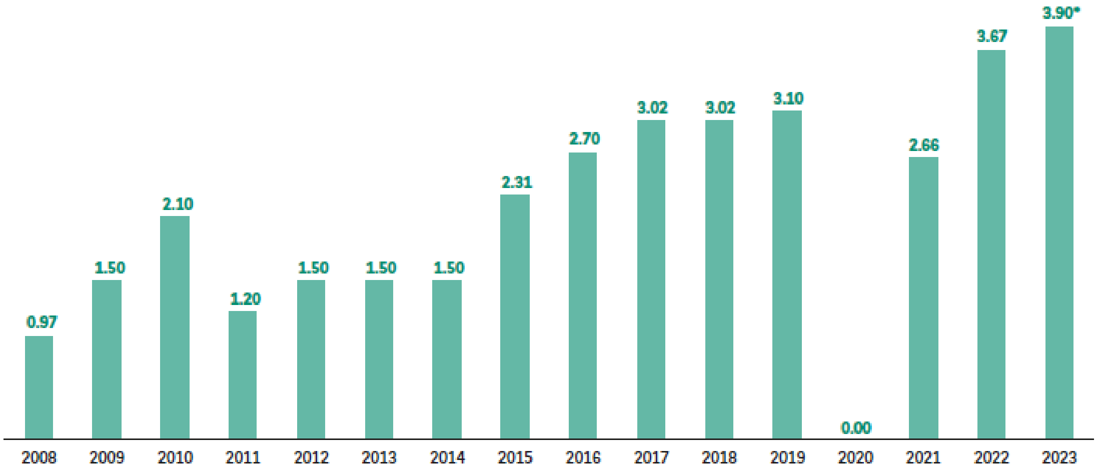
- BNP Paribas' capital structure and changes therein, particularly among "retail shareholders";
- the draft 2021 universal registration document, and specifically, the chapters on Shareholder Relations, Corporate Governance and Social and Environmental Responsibility;
- the Integrated report;
- the quarterly, half-yearly and annual results;
- the initiatives taken in preparation for the Annual General Meeting, including its organisation;
- proposals for resolutions at the AGM;
- the presentation of the economic outlook and environment;
- the geo-political situation;
- the presentation of the activities of French Private Banking;
- the Group Human Resources approach and their adaptation to the new paradigm (remote working, digitisation, *etc.*).

DIVIDEND

At the Annual General Meeting of 16 May 2023, the Board of directors will propose a dividend of EUR 3.90 per share (up by 6.3% compared to a EUR 3.67 amount distributed in 2022). The ex-dividend date and the payment of the coupon would then take place on 22 May and 24 May 2023 respectively in the event of a positive vote by the AGM.

The total amount of the proposed cash distribution amounts to EUR 4,814 million, compared to a total of EUR 4,530 million in cash distributed in 2022.

CHANGE IN DIVIDEND *(in euros per share)*



(*) Subject to approval at the Annual General Meeting of 16 May 2023.

The 2008 dividend has been adjusted for the capital increase with preferential subscription rights, completed between 30 September and 13 October 2009.

Limitation period for dividends: any dividend unclaimed five years after its due date is forfeited, as provided by law. Dividends for which payment has not been sought are paid to the Public Treasury.

BNP PARIBAS REGISTERED SHARES

At 31 December 2022, 24,022 shareholders held BNP Paribas registered shares.

REGISTERED SHARES HELD DIRECTLY WITH BNP PARIBAS

Shareholders who hold registered shares directly with BNP Paribas:

- automatically receive all documents regarding the Bank that are sent to shareholders;
- can call a **French toll-free phone number: 0800 600 700** to place buy and sell orders[1] and to obtain any information;
- benefit from preferential brokerage rates;
- have access to "PlanetShares" **(https://planetshares.bnpparibas.com)**, a fully secure dedicated web server, allowing them to view their BNP Paribas registered share accounts and account movements, as well as place and track orders[(1)]; this server is also available on tablets and smartphones;
- are automatically invited to Annual General Meetings without the need for an ownership certificate;
- may receive notice of Annual General Meetings online;
- pay no custody fees.

Registered shares held directly with BNP Paribas cannot be registered in a PEA (Share Savings Plan), given the regulations and procedures applicable to this vehicle. Investors whose shares are held in a PEA and who want to hold them in "registered" form can opt to hold them in an administered account (see below).

[1] *Subject to prior signature of a "brokerage services agreement" (free of charge).*

REGISTERED SHARES HELD IN AN ADMINISTERED ACCOUNT

BNP Paribas is also extending its administered share account services to institutional shareholders. For institutional shareholders, this type of account combines the main benefits of holding shares in bearer form with those of holding registered shares directly with BNP Paribas:

- shares can be traded at any time, through the shareholder's usual broker;
- the shareholder can have a single share account, combined with a cash account;
- the shareholder is automatically invited to attend and vote at Annual General Meetings, without the invitation being sent through a third party;
- shareholders may receive notice of meetings and vote at Annual General Meetings online.

SHAREHOLDERS' ANNUAL GENERAL MEETING

The procedures for BNP Paribas' Annual General Meetings are defined in article 18 of the Bank's Articles of association.

The Board of directors calls an Ordinary General Meeting at least once a year to vote on the agenda set by the Board.

The Board may call Extraordinary General Meeting for the purpose of amending the Articles of association, and especially to increase the Bank's share capital. Resolutions are adopted by a two-third majority of shareholders present or represented.

The Shareholders' Combined General Meeting may be called in a single notice of meeting and held on the same date.

The Bank's last Shareholders' Combined General Meeting took place on 17 May 2022 on first notice. The text of the resolutions and the video of the meeting can be viewed on the BNP Paribas website, where the original live webcast was shown. The composition of the quorum and the results of the votes cast on resolutions were posted online the day after the meeting. A specific letter to shareholders included the minutes of this meeting.

The quorum broke down as follows:

BREAKDOWN OF QUORUM

	Number of shareholders	(%)	Equities	(%)
Present	851	4.91%	13,358,987	1.67%
Appointment of proxy	360	2.08%	78,595	0.01%
Proxy given to Chairman	7,213	41.65%	3,060,427	0.38%
Postal votes	8,893	51.35%	785,344,958	97.94%
TOTAL	**17,317**	**100.00%**	**801 842 967**	**100.00%**
of which online	*14,782*	*85.36%*	*573,782,609*	*71.56%*
				Quorum
Number of ordinary shares (excluding treasury stock)			**1,232,973,813**	**65.03%**

Of the 14,782 shareholders who took part in our last Shareholders' Combined General Meeting online:

- 327 had requested an admission card;
- 6,180 had given the Chairman a proxy;
- 353 had given a proxy to a third party (who legally must also be a shareholder);
- 7,922 had voted by post.

All resolutions proposed to the shareholders were approved.

SHAREHOLDERS' COMBINED GENERAL MEETING OF 17 MAY 2022

Results	Rate of approval
ORDINARY MEETING	
First resolution: approval of the parent company financial statements for 2021	99.79%
Second resolution: approval of the consolidated financial statements for 2021	99.85%
Third resolution: appropriation of net income for the 2021 financial year and distribution of dividends	99.82%
Fourth resolution: agreements and commitments referred to in articles L.225-38 *et seq.* of the French Commercial Code	99.98%
Fifth resolution: authorisation for BNP Paribas to buy back its own shares	98.29%
Sixth resolution: renewal of the term of office of Mr. Jean-Laurent Bonnafé as a director	99.76%
Seventh resolution: renewal of the term of office of Ms. Marion Guillou as a director	99.76%
Eighth resolution: renewal of the term of office of Mr. Michel Tilmant as a director	98.62%
Ninth resolution: appointment of Ms. Lieve Logghe as a director	99.88%
Tenth resolution: vote on the components of the compensation policy attributable to directors	99.40%
Eleventh resolution: vote on the components of the compensation policy attributable to the Chairman of the Board of directors	94.85%
Twelfth resolution: vote on the components of the compensation policy attributable to the Chief Executive Officer and to the Chief Operating Officers	87.63%
Thirteenth resolution: vote on disclosures relating to compensation paid in 2021 or awarded in respect of the 2021 financial year to all directors and corporate officers	97.15%
Fourteenth resolution: vote on the components of the compensation paid or granted in respect of 2021 to Mr. Jean Lemierre, Chairman of the Board of directors	94.88%
Fifteenth resolution: vote on the components of the compensation paid or granted in respect of 2021 to Mr. Jean-Laurent Bonnafé, Chief Executive Officer	93.50%
Sixteenth resolution: vote on the components of the compensation paid in 2021 or granted in respect of 2021 to Mr. Philippe Bordenave, Chief Operating Officer until 18 May 2021	92.67%
Seventeenth resolution: vote on the components of the compensation paid in 2021 or granted in respect of 2021 to Mr. Yann Gérardin, Chief Operating Officer from 18 May 2021	93.62%
Eighteenth resolution: vote on the components of compensation paid in 2021 or granted in respect of 2021 to Mr. Thierry Laborde, Chief Operating Officer from 18 May 2021	95.31%
Nineteenth resolution: advisory vote on the overall amount of compensation of any kind paid during 2021 to Executive Officers and certain categories of staff	99.29%
Twentieth resolution: setting the annual amount of compensation allocated to the members of the Board of directors	99.52%
EXTRAORDINARY MEETING	
Twenty-first resolution: capital increase with preferential subscription rights	94.03%
Twenty-second resolution: capital increase with cancellation of preferential subscription rights	93.22%
Twenty-third resolution: capital increase without preferential subscription rights to remunerate contributions of securities up to a limit of 10% of the share capital	95.69%
Twenty-fourth resolution: overall limit on authorisations to issue shares with cancellation or without preferential subscription rights for existing shareholders	99.67%
Twenty-fifth resolution: capital increase by capitalising reserves, retained earnings, additional paid-in capital or contribution premium.	99.61%
Twenty-sixth resolution: overall limit on authorisations to issue shares with, with cancellation or without preferential subscription rights for existing shareholders	96.29%

Twenty-seventh resolution: transactions reserved for members of the BNP Paribas Group Company Savings Plan, with cancellation of preferential subscription rights	96.80%
Twenty-eighth resolution: authorisation to reduce the share capital by cancelling shares	99.98%
Twenty-ninth resolution: powers for formalities	99.99%

NOTICES OF MEETING

BNP Paribas will hold its next Shareholders' Combined General Meeting on 16 May 2023[1].

The meeting notices and invitations are available on the invest.bnpparibas.com website in French and English from the time of their publication in the French Bulletin of Compulsory Legal Announcements (BALO). Staff at all BNP Paribas branches are specifically trained to provide the necessary assistance and carry out the required formalities.

Holders of registered shares are automatically notified, regardless of the number of shares held, with a complete notice of meeting containing in particular the agenda, the draft resolutions and a voting form. A significant and fast-growing proportion (19.6% for the AGM of 17 May 2022, compared to 14.9% for the AGM of 2019, then the last "face-to-face" AGM before the Covid-19 pandemic) of notices of meeting to registered shareholders were sent *via* the internet after the shareholders concerned had given their prior agreement to this information procedure.

BNP Paribas informs holders of bearer shares *via* the internet regardless of the number of shares held, subject to their custodians being part of the market system known as Votaccess. Shareholders notified of the Annual General Meeting may take part quickly and easily. The Bank also provides custodians with notices of meetings and printed postal voting forms, which can then be sent to those shareholders who request them.

ATTENDANCE AT MEETINGS

Holders of shares may gain admittance to a General Meeting provided these shares are recorded in their accounts two trading days before the Meeting. Holders of bearer shares must also present an entry card or certificate proving their ownership of the shares.

VOTING

Using the internet voting platform gives shareholders access to the notice of the Annual General Meeting. They can then either vote or appoint a proxy, or print their admission card if they wish to attend the Annual General Meeting in person.

More than 85% of shareholders who took part in the vote, in May 2022 used the platform set up, a proportion that has risen sharply compared to the nearly 74% recorded in 2019.

Shareholders not using the online platform return the printed form enclosed with the notice of meeting to BNP Paribas. Before the Annual General Meeting, this document may be used to:

- request an admission card;
- vote by post;
- give proxy to another individual or legal entity; or
- give proxy to the Chairman of the meeting.

DISCLOSURE THRESHOLDS

In addition to the legal thresholds, and in accordance with article 5 of the Articles of association, any shareholder, whether acting alone or in concert, who owns or may hold directly or indirectly at least 0.5% of the capital or voting rights of BNP Paribas, or any multiple of that percentage up to 5%, is required to notify BNP Paribas by registered letter with return receipt.

Once the 5% threshold is reached, shareholders are required to disclose any increase in their interest representing a multiple of 1% of the share capital or voting rights of BNP Paribas.

The disclosures described in the previous two paragraphs shall also apply when the shareholding falls below the above-mentioned thresholds.

In the case of failure to comply with these disclosure requirements, either legal or statutory, the undisclosed shares will be stripped of voting rights at the request of one or more shareholders who hold a combined interest of at least 2% of the share capital or voting rights of BNP Paribas.

[1] *Subject to change at a later date.*

2 CORPORATE GOVERNANCE AND INTERNAL CONTROL

2.1 Corporate Governance report

This Corporate Governance report was prepared by the Board of directors in accordance with the last paragraph of article L.225-37 of the French Commercial Code.

The information contained herein notably takes into account annex I of the Commission Delegated Regulation (EU) 2019/980 of 14 March 2019, AMF Recommendation No. 2012-02[1] amended on 5 January 2022, the 2022 AMF report[2] and the November 2022 Annual Report of the High Committee for Corporate Governance (*Haut Comité de Gouvernement d'Entreprise* – HCGE).

1 AMF recommendation No. 2012-02 – Corporate Governance and executive compensation in companies referring to the Corporate Governance Code of Listed Companies (Afep-MEDEF Code) – Consolidated presentation of the recommendations contained in the Annual Reports of the AMF.

2 2022 AMF report on Corporate Governance and executive compensation of listed companies (December 2022).

2.1.1 PRESENTATION OF DIRECTORS AND CORPORATE OFFICERS

MEMBERSHIP OF THE BOARD OF DIRECTORS AT 31 DECEMBER 2022

Jean LEMIERRE
Principal function: Chairman of the Board of directors of BNP Paribas

Date of birth: 6 June 1950
Nationality: French
Term start and end dates: 19 May 2020 – 2023 AGM
Date first appointed to the Board of directors: 1 December 2014 ratified by the Annual General Meeting of 13 May 2015

Number of BNP Paribas shares held(1): 41,345(2)
Business address: 3, rue d'Antin
75002 PARIS
FRANCE

Education
Graduate of the Institut d'Études Politiques de Paris
Graduate of the École Nationale d'Administration
Law degree

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), Chairman of the Board of directors
TEB Holding AS, director

Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
TotalEnergies(*), director

Participation(1) in specialised committees of French or foreign companies
TotalEnergies, member of the Corporate Governance and Ethics Committee and member of the Strategy & CSR Committee

Others(1)
Centre d'Études Prospectives et d'Informations Internationales (CEPII), Chairman
Paris Europlace, Vice-Chairman
Association française des entreprises privées (Afep), member of the Board of directors
Institut de la Finance durable (IFD), member of the Board of directors
Institute of International Finance (IIF), member
International Advisory Council of China Development Bank (CDB), member
International Advisory Council of China Investment Corporation (CIC), member
International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS), member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:
Chairman of the Board of directors: BNP Paribas
Director: TEB Holding AS, TotalEnergies SA
Chairman: Centre d'Études Prospectives et d'Informations Internationales (CEPII)
Vice-Chairman: Paris Europlace
Member: Board of directors of the Association française des entreprises privées (Afep), Institute of International Finance (IIF), Orange International Advisory Board, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)

2020:
Chairman of the Board of directors: BNP Paribas
Director: TEB Holding AS, Total SA
Chairman: Centre d'Études Prospectives et d'Informations Internationales (CEPII)
Vice-Chairman: Paris Europlace
Member: Board of directors of the Association française des entreprises privées (Afep), Institute of International Finance (IIF), Orange International Advisory Board, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)

2019:
Chairman of the Board of directors: BNP Paribas
Director: TEB Holding AS, Total SA
Chairman: Centre d'Études Prospectives et d'Informations Internationales (CEPII)
Vice-Chairman: Paris Europlace
Member: Board of directors of the Association française des entreprises privées (Afep), Institute of International Finance (IIF), Orange International Advisory Board, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)

2018:
Chairman of the Board of directors: BNP Paribas
Director: TEB Holding AS, Total SA
Chairman: Centre d'Études Prospectives et d'Informations Internationales (CEPII)
Vice-Chairman: Paris Europlace
Member: Board of directors of the Association française des entreprises privées (Afep), Institute of International Finance (IIF), Orange International Advisory Board, International Advisory Council of China Development Bank (CDB), International Advisory Council of China Investment Corporation (CIC), International Advisory Panel (IAP) of the Monetary Authority of Singapore (MAS)

(1) At 31 December 2022.

(2) Including 1,419 BNP Paribas shares held under the Company Savings Plan.
(*) Listed company.

Jean-Laurent BONNAFÉ
Principal function: Director and Chief Executive Officer of BNP Paribas

Date of birth: 14 July 1961
Nationality: French
Term start and end dates: 17 May 2022 – 2025 AGM
Date first appointed to the Board of directors: 12 May 2010

Number of BNP Paribas shares held(1)*:* 109,674(2)
Business address: 3, rue d'Antin
75002 PARIS
FRANCE

Education
Graduate of the École Polytechnique
Ingénieur en chef des Mines

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), Director and Chief Executive Officer

Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Pierre Fabre Group:
Pierre Fabre SA, director
Pierre Fabre Participations, director

Participation(1) in specialised committees of French or foreign companies
Pierre Fabre SA, member of the Strategic Committee

Others(1)
Association Française des Banques (AFB), Chairman
Fédération Bancaire Française (FBF), member of the Executive Committee
Bank Policy Institute, member of the Board of directors
Association pour le Rayonnement de l'Opéra de Paris, Chairman
La France s'engage foundation, director

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Director and Chief Executive Officer: BNP Paribas **Chairman:** Association pour le Rayonnement de l'Opéra de Paris, Entreprise pour l'Environnement **Director:** La France s'engage, Pierre Fabre SA **Vice-Chairman of the Executive Committee:** Fédération Bancaire Française (FBF)	**Director and Chief Executive Officer:** BNP Paribas **Chairman:** Association pour le Rayonnement de l'Opéra de Paris, Entreprise pour l'Environnement **Director:** La France s'engage, Pierre Fabre SA **Member of the Executive Committee:** Fédération Bancaire Française (FBF)	**Director and Chief Executive Officer:** BNP Paribas **Chairman:** Association pour le Rayonnement de l'Opéra de Paris, Entreprise pour l'Environnement **Director:** Carrefour, La France s'engage, Pierre Fabre SA **Member of the Executive Committee:** Fédération Bancaire Française (FBF)	**Director and Chief Executive Officer:** BNP Paribas **Chairman:** Association pour le Rayonnement de l'Opéra de Paris **Vice-Chairman:** Entreprises pour l'Environnement **Director:** Carrefour **Member of the Executive Committee:** Fédération Bancaire Française (FBF)

(1) At 31 December 2022.
(2) Includes 28,299 BNP Paribas shares held as units in the shareholders' fund under the Company Savings Plan.
(*) Listed company.

Jacques ASCHENBROICH
Principal function: Chairman of Orange

Date of birth: 3 June 1954
Nationality: French
Term start and end dates: 19 May 2020 – 2023 AGM
Date first appointed to the Board of directors: 23 May 2017

Number of BNP Paribas shares held(1)*:* 1,000
Business address: 111, quai du President-Roosevelt
92130 ISSY-LES-MOULINEAUX
FRANCE

Education
Graduate of the École des Mines
Corps des Mines

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Offices(1) held under the principal function
Orange(*), Chairman of the Board of directors
Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
TotalEnergies(*), director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, Chairman of the Corporate Governance, Ethics, Nominations and CSR Committee and member of the Financial Statements Committee
TotalEnergies, member of the Corporate Governance and Ethics Committee and of the Remuneration Committee.
Others(1)
École Nationale Supérieure Mines ParisTech, Chairman
Club d'affaires franco-japonais, Co-Chairman
Association française des entreprises privées (Afep), member of the Board of directors
Institut de la Finance durable (IFD), member of the Board of directors

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Chairman and Chief Executive Officer: Valeo Group **Director:** BNP Paribas, TotalEnergies **Member:** Board of directors of the Association française des entreprises privées (Afep) **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires franco-japonais	**Chairman and Chief Executive Officer:** Valeo Group **Director:** BNP Paribas, Veolia Environnement **Member:** Board of directors of the Association française des entreprises privées (Afep) **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires franco-japonais	**Chairman and Chief Executive Officer:** Valeo Group **Director:** BNP Paribas, Véolia Environnement **Member:** Board of directors of the Association française des entreprises privées (Afep) **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires franco-japonais	**Chairman and Chief Executive Officer:** Valeo Group **Director:** BNP Paribas, Veolia Environnement **Chairman:** École Nationale Supérieure Mines ParisTech **Co-Chairman:** Club d'affaires franco-japonais

(1) At 31 December 2022.
(*) Listed company.

Juliette BRISAC
Principal function: Chief Operating Officer of BNP Paribas Group Company Engagement Department

Date of birth: 22 May 1964
Nationality: French
Term start and end dates: 18 May 2021 – 2024 AGM
Date first appointed to the Board of directors: 18 May 2021

Number of BNP Paribas shares held[1]*:* 10,128[2]
Business address: Millénaire 4
35, rue de la Gare
75019 PARIS
FRANCE

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas[*], director representing employee shareholders
Supervisory Board of the FCPE Actionnariat Monde of BNP Paribas, Chairwoman
Participation[1] in specialised committees of French or foreign companies
BNP Paribas, member of the Financial Statements Committee

Education
Master's degree in Economics and DESS in Banking & Finance from the University of Paris I Panthéon Sorbonne
Graduate of the Institut français des Administrateurs
Certified auditor of the Cycle des hautes études pour le développement économique (CHEDE)

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:
Director: BNP Paribas
Chairwoman: Supervisory Board of the FCPE Actionnariat Monde of BNP Paribas

(1) At 31 December 2022.
(2) Including 4,576 BNP Paribas shares held under the Company Savings Plan.
(*) Listed company.

Pierre André de CHALENDAR
Principal function: Chairman of Compagnie de Saint-Gobain

Date of birth: 12 April 1958
Nationality: French
Term start and end dates: 18 May 2021 – 2024 AGM
Date first appointed to the Board of directors: 23 May 2012

Number of BNP Paribas shares held[1]*:* 7,000
Business address: Tour Saint-Gobain
12 place de l'Iris
92096 LA DÉFENSE CEDEX
FRANCE

Education
Graduate of École Supérieure des Sciences Économiques et Commerciales (ESSEC)
Graduate of the École Nationale d'Administration

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas[*], director
Offices[1] held under the principal function
Compagnie de Saint-Gobain[*], Chairman of the Board of directors
Saint-Gobain Corporation, director
Other offices[1] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Veolia Environnement[*], director
Participation[1] in specialised committees of French or foreign companies
BNP Paribas, Chairman of the Remuneration Committee and member of the Corporate Governance, Ethics, Nominations and CSR Committee
Veolia Environnement, member of the Nominations Committee
Others[1]
Conseil de surveillance de l'Essec, Chairman
La Fabrique de l'Industrie, Co-Chairman
Association française des entreprises privées (Afep), member of the Board of directors

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Chairman: Compagnie de Saint-Gobain **Director:** BNP Paribas, Veolia Environnement **Member:** Board of directors of the Association française des	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas **Member:** Board of directors of the Association française	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas **Member:** Board of directors of	**Chairman and Chief Executive Officer:** Compagnie de Saint-Gobain **Director:** BNP Paribas

entreprises privées (Afep) **Chairman:** La Fabrique de l'Industrie, Conseil de surveillance de l'Essec	des entreprises privées (Afep) **Chairman:** La Fabrique de l'Industrie, Conseil de surveillance de l'Essec	the Association française des entreprises privées (Afep) **Chairman:** La Fabrique de l'Industrie, Conseil de surveillance de l'Essec	

(1) At 31 December 2022.
(*) Listed company.

Monique COHEN
Principal function: Senior Advisor of Apax Partners

Date of birth: 28 January 1956
Nationality: French
Term start and end dates: 19 May 2020 – 2023 AGM
Date first appointed to the Board of directors: 12 February 2014, ratified by the Annual General Meeting of 14 May 2014

Number of BNP Paribas shares held: 9,620
Business address: 1, rue Paul-Cézanne
75008 PARIS
FRANCE

Education
Graduate of the École Polytechnique
Master's degree in Mathematics
Master's degree in Business Law

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Offices(1) held under the principal function
Proxima Investments SA, Chairwoman of the Board of directors
Fides Holdings, Chairwoman of the Board of directors
Fides Acquisitions, member of the Supervisory Board
Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Hermès(*), Vice-Chairwoman of the Supervisory Board
Safran(*), lead independent director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, Chairwoman of the Internal Control, Risk Management and Compliance Committee and member of the Corporate Governance, Ethics, Nominations and CSR Committee
Hermès, Chairwoman of the Audit and Risks Committee
Safran, Chairwoman of the Nominations and Remuneration Committee

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Chairwoman of the Board of directors: Proxima Investments SA, Fides Holdings **Vice-Chairwoman of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran **Member of the Supervisory Board:** Fides Acquisitions	**Chairwoman of the Board of directors:** Proxima Investments SA, Fides Holdings **Vice-Chairwoman of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran **Member of the Supervisory Board:** Fides Acquisitions	**Chairwoman of the Board of directors:** Proxima Investments SA, Fides Holdings **Vice-Chairwoman of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners SAS **Member of the Supervisory Board:** Fides Acquisitions	**Chairwoman of the Board of directors:** Proxima Investments SA, Fides Holdings **Vice-Chairwoman of the Supervisory Board:** Hermès **Director:** BNP Paribas, Safran, Apax Partners SAS **Member of the Supervisory Board:** Fides Acquisitions

(1) At 31 December 2022.
(*) Listed company.

Wouter DE PLOEY (until 17 May 2022)
Principal function: Chief Executive Officer of ZNA (hospital group in Antwerp, Belgium)

Date of birth: 5 April 1965
Nationality: Belgian
Term start and end dates: 23 May 2019 – 2022 AGM
Date first appointed to the Board of directors: 26 May 2016

Number of BNP Paribas shares held(1)*:* 1,000
Business address: Leopoldstraat 26
2000 ANTWERP
BELGIUM

Education
Master's degree and Doctorate in Economics from the University of Michigan, Ann Arbor (United States of America)
Master's degree in Economics (Magna cum Laude) and Philosophy, University of Leuven (Belgium)

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director

Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Vanbreda Risk & Benefits NV, director
Unibreda NV, director

Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Financial Statements Committee

Others(1)
Gasthuiszusters Antwerpen, director
Regroupement GZA-ZNA, director
BlueHealth Innovation Center, director
Chamber of Commerce bureau, VOKA Antwerp – Waasland, Vice-Chairman

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Director: BNP Paribas, Vanbreda Risk & Benefits NV, Unibreda NV, BlueHealth Innovation Center, Gasthuiszusters Antwerpen, Regroupement GZA-ZNA **Vice-Chairman:** Chamber of Commerce bureau, VOKA Antwerp – Waasland	**Director:** BNP Paribas, Vanbreda Risk & Benefits NV, Unibreda NV, BlueHealth Innovation Center, Gasthuiszusters Antwerpen, Regroupement GZA-ZNA **Vice-Chairman:** Chamber of Commerce bureau, VOKA Antwerp – Waasland	**Director:** BNP Paribas, Vanbreda Risk & Benefits NV, Unibreda NV, BlueHealth Innovation Center, Gasthuiszusters Antwerpen, Regroupement GZA-ZNA **Vice-Chairman:** Chamber of Commerce bureau, VOKA Antwerp – Waasland	**Director:** BNP Paribas, Vanbreda Risk & Benefits NV, Unibreda NV, BlueHealth Innovation Center, Gasthuiszusters Antwerpen, Regroupement GZA-ZNA **Vice-Chairman:** Chamber of Commerce bureau, VOKA Antwerp – Waasland

(1) At 17 May 2022.
(*) Listed company.

Hugues EPAILLARD
Principal function: Real estate business manager

Date of birth: 22 June 1966
Nationality: French
Term start and end dates: elected by BNP Paribas executive employees for three years from 16 February 2021 – 15 February 2024
Date first elected to the Board of directors: 16 February 2018

Number of BNP Paribas shares held(1)*:* 526(2)
Business address: 83, La Canebière
13001 MARSEILLE
FRANCE

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director

Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Internal Control, Risk Management and Compliance Committee and of the Remuneration Committee

Others(1)
Action Logement Services, director and Chairman of the Risk Committee
Judge at the Marseille Employment Tribunal, Management section
Commission Paritaire de la Banque (AFB – Recourse Commission), member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Director: BNP Paribas	**Director:** BNP Paribas	**Director:** BNP Paribas	**Director:** BNP Paribas

(1) At 31 December 2022.
(2) Including 497 BNP Paribas shares held under the Company Savings Plan.
(*) Listed company.

Rajna GIBSON-BRANDON
Principal function: Professor in Finance at the University of Geneva

Date of birth: 20 December 1962
Nationality: Swiss
Term start and end dates: 18 May 2021 – 2024 AGM
Date first appointed to the Board of directors: 28 November 2018

Number of BNP Paribas shares held(1)*:* 1,000
Business address: 40, Boulevard Pont d'Arve
CH-1211 GENEVA 4
SWITZERLAND

Education
Doctorate in Social & Economic Sciences (Specialisation in Finance), University of Geneva

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Swiss National Bank, member of the Bank Council
Swisox, director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Internal Control, Risk Management and Compliance Committee
Others(1)
Geneva Finance Research Institute, Deputy director
Geneva Institute for Wealth Management Foundation, director and Chairwoman
Strategic Committee and Sustainable Finance Supervisory Committee in Geneva, member
RepRisk, member of the academic advisory board

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Director: BNP Paribas **Chairwoman:** Bülach Investment Professionals' Scientific and Training Board **Director and Chairwoman:** Geneva Institute for Wealth Management Foundation **Deputy Director:** Geneva Finance Research Institute **Member:** Strategic Committee and Sustainable Finance Supervisory Committee in Geneva, RepRisk academic advisory board	**Director:** BNP Paribas **Chairwoman:** Bülach Investment Professionals' Scientific and Training Board **Director:** Geneva Institute for Wealth Management Foundation **Deputy Director:** Geneva Finance Research Institute **Member:** Strategic Committee and Sustainable Finance Supervisory Committee in Geneva	**Director:** BNP Paribas, Applic8 SA **Chairwoman:** Bülach Investment Professionals' Scientific and Training Board **Director:** Geneva Institute for Wealth Management Foundation **Deputy Director:** Geneva Finance Research Institute **Member:** Strategic Committee and Sustainable Finance Supervisory Committee in Geneva	**Director:** BNP Paribas, Applic8 SA **Chairwoman:** Bülach Investment Professionals' Scientific and Training Board **Director:** Geneva Institute for Wealth Management Foundation **Deputy Director:** Geneva Finance Research Institute **Member:** Strategic Committee and Sustainable Finance Supervisory Committee in Geneva

(1) At 31 December 2022.
(*) Listed company.

Marion GUILLOU
Principal function: Director of companies

Date of birth: 17 September 1954
Nationality: French
Term start and end dates: 17 May 2022 – 2025 AGM
Date first appointed to the Board of directors: 15 May 2013

Number of BNP Paribas shares held(1)*:* 1,000
Business address: 42, rue Scheffer
75116 PARIS
FRANCE

Education
Graduate of the École Polytechnique
Graduate of the École Nationale du Génie Rural, des Eaux et des Forêts
Doctor of Food Sciences
Graduate of the Institut français des Administrateurs

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Veolia Environnement(*), director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Corporate Governance, Ethics, Nominations and CSR Committee and of the Remuneration Committee
Veolia Environnement, member of the Research, Innovation and Sustainable Development Committee and the Remuneration Committee
Others(1)
Fonds de préservation de la biodiversité des plantes cultivées et de leurs apparentées sauvages, Chairwoman
Care – France (NGO), Vice-Chairwoman
Bioversity International, member of the Board of directors
International Centre for Tropical Agriculture (CIAT), member of the Board of directors
Bioversity International - CIAT Alliance, member of the Board of directors
Institut français des relations internationales (IFRI), member of the Board of directors
Haut conseil pour le Climat, member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:
Director: BNP Paribas, Veolia Environnement
Chairwoman: Fonds de dotation pour la préservation de la biodiversité des espèces cultivées et de leurs apparentées sauvages
Member: Board of directors of Care – France (NGO), Board of directors of Bioversity International, Board of directors of the International Centre for Tropical Agriculture (CIAT), Board of directors of Bioversity - CIAT Alliance, Board of directors of IFRI, Haut conseil pour le climat

2020:
Director: BNP Paribas, Veolia Environnement
Member: Board of directors of Care – France (NGO), Board of directors of Bioversity International, Board of directors of the International Centre for Tropical Agriculture (CIAT), Board of directors of Bioversity - CIAT Alliance, Board of directors of IFRI

2019:
Director: BNP Paribas, Imerys, Veolia Environnement
Member: Board of directors of Universcience, Board of directors of Care - France (NGO), Board of directors of Bioversity International, Board of directors of the International Centre for Tropical Agriculture (CIAT), Board of directors of Bioversity - CIAT Alliance, Board of directors of IFRI

2018:
Chairwoman of the Board of directors: IAVFF-Agreenium (public institution)
Director: BNP Paribas, Imerys, Veolia Environnement
Member: Board of directors of Universcience, Board of directors of Care - France (NGO), Board of directors of Bioversity International, Board of directors of the International Centre for Tropical Agriculture (CIAT), Board of directors of IFRI

(1) At 31 December 2022.
(*) Listed company.

Lieve LOGGHE (since 17 May 2022)
Principal function: Chief Financial Officer of the Euronav Group

Date of birth: 11 July 1968
Nationality: Belgian
Term start and end dates: 17 May 2022 - 2025 AGM
Date first appointed to the Board of directors: 17 May 2022

Number of BNP Paribas shares held(1)*:* 1,000
Business address: 20 De Gerlachekaai
2000 ANTWERP
BELGIUM

Education
Master's degree in economics from the University of Brussels,
Master's degree in accounting from the Vlerick School for Management
Master's degree in taxation from the EHSAL Management School

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
TINCC BV, director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Financial Statements Committee
Others(1)
ODISEE, director and member of the Audit Committee

(1) At 31 December 2022.
(*) Listed company.

Christian NOYER
Principal function: Honorary Governor of Banque de France

Date of birth: 6 October 1950
Nationality: French
Term start and end dates: 18 May 2021 - 2024 AGM
Date first appointed to the Board of directors: 18 May 2021
(Mr. Christian Noyer served as non-voting director (*censeur*) of BNP Paribas from 1 May 2019 to 17 May 2021)

Number of BNP Paribas shares held(1)*:* 2,000
Business address: 9, rue de Valois
75001 PARIS
FRANCE

Education
Graduate of École Nationale d'Administration
Graduate of the Institut d'Études Politiques de Paris
Masters in Law from the University of Paris
Law degree from the University of Rennes

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Power Corporation Canada(*), director
Setl Ltd, director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, Chairman of the Financial Statements Committee
Power Corporation Canada, member of the Governance and Nominating Committee and the Related Party and Conduct Review Committee
Others(1)
Institut pour l'Education Financière du Public (IEFP), Chairman IFRI Foundation, director
Group of Thirty (G30), member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021 :	2020 :	2019 :
Director: Power Corporation Canada, Groupe NSIA Banque, Setl Ltd	**Director:** Power Corporation Canada, Groupe NSIA Banque, Lloyd's of London, Setl Ltd	**Director:** Power Corporation Canada, Groupe NSIA Banque, Lloyd's of London, Setl Ltd

(1) At 31 December 2022.
(*) Listed company.

Daniela SCHWARZER
Principal function: Director of the Open Society Foundation for Europe and Eurasia

Date of birth: 19 July 1973
Nationality: German
Term start and end dates: 19 May 2020 – 2023 AGM
Date first appointed to the Board of directors: 14 May 2014

Number of BNP Paribas shares held[(1)]*:* 1,000
Business address: Jägerstraße 54
10117 BERLIN
GERMANY

Education
Doctorate in Economics from the Free University of Berlin
Master's degree in Political Science and in Linguistics, University of Tübingen

Offices[(1)] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas[(*)], director
Offices[(1)] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Covivio[(*)], director
Participation[(1)] in specialised committees of French or foreign companies
BNP Paribas, member of the Corporate Governance, Ethics, Nominations and CSR Committee
Others[(1)]
Jacques-Delors Institute, member of the Board of directors
United Europe Foundation, member of the Board of directors
Deutsche Gesellschaft für Auswärtige Politik, member of the Board of directors
Fondation Jean Monnet, member of the Board of directors

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Director: BNP Paribas **Member:** Board of directors of the Jacques-Delors Institute, Board of directors of the United Europe Foundation, Open Society Foundation, Advisory Committee Board of directors of Deutsche Gesellschaft für Auswärtige Politik, Board of directors of the Fondation Jean Monnet **Special advisor** to the Vice-President of the European Commission	**Director:** BNP Paribas **Member:** Board of directors of the Jacques-Delors Institute, Board of directors of the United Europe Foundation, Open Society Foundation, Advisory Committee, Federal Security Academy, Advisory Committee **Research Professor** at Johns-Hopkins University, Department of European and Eurasian Studies **Special advisor** to the Vice-President of the European Commission	**Director:** BNP Paribas **Member:** Board of directors of the Jacques-Delors Institute, Board of directors of the United Europe Foundation, Open Society Foundation, Advisory Committee, Federal Security Academy, Advisory Committee **Research Professor** at Johns-Hopkins University, Department of European and Eurasian Studies	**Director:** BNP Paribas **Member:** Board of directors of the Jacques-Delors Institute, Board of directors of the United Europe Foundation, Open Society Foundation, Advisory Committee **Research Professor** at Johns-Hopkins University, Department of European and Eurasian Studies

(1) At 31 December 2022.
(*) Listed company.

Michel TILMANT
Principal function: Director of companies

Date of birth: 21 July 1952
Nationality: Belgian
Term start and end dates: 17 May 2022 – 2025 AGM
Date first appointed to the Board of directors: 12 May 2010
(Mr. Michel Tilmant served as non-voting director (*censeur*) of BNP Paribas from 4 November 2009 to 11 May 2010)

Number of BNP Paribas shares held(1)*:* 1,000
Business address: Rue du Moulin
10 B-1310 LA HULPE
BELGIUM

Education
Graduate of the University of Louvain

Offices(1) held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas(*), director
Offices(1) held under the principal function
Strafin sprl, manager
Other offices(1) held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
Groupe Lhoist SA, director
Foyer Group:
CapitalatWork Foyer Group SA, Chairman
Foyer SA, director
Foyer Finance SA, director
Participation(1) in specialised committees of French or foreign companies
BNP Paribas, member of the Internal Control, Risk Management and Compliance Committee
Groupe Lhoist SA, Chairman of the Audit Committee
Foyer SA, member of the Nomination and Remuneration Committee
Others(1)
Royal Automobile Club of Belgium, member of the Board of directors
Zoute Automobile Club, member of the Board of directors

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Chairman: CapitalatWork Foyer Group SA **Director:** BNP Paribas Foyer SA, Foyer Finance SA, Groupe Lhoist SA, Sofina SA **Manager:** Strafin sprl **Member:** Board of directors of Royal Automobile Club of Belgium, Board of directors of Zoute Automobile Club	**Chairman:** CapitalatWork Foyer Group SA **Director:** BNP Paribas Foyer SA, Foyer Finance SA, Groupe Lhoist SA, Sofina SA **Manager:** Strafin sprl **Member:** Board of directors of Royal Automobile Club of Belgium, Board of directors of the Zoute Automobile Club, Board of directors of Université Catholique de Louvain	**Chairman:** CapitalatWork Foyer Group SA **Director:** BNP Paribas Foyer SA, Foyer Finance SA, Groupe Lhoist SA, Sofina SA **Manager:** Strafin sprl **Member:** Board of directors of Royal Automobile Club of Belgium, Board of directors of the Zoute Automobile Club, Board of directors of Université Catholique de Louvain **Senior advisor:** Cinven Ltd	**Chairman:** CapitalatWork Foyer Group SA **Director:** BNP Paribas Foyer SA, Foyer Finance SA, Groupe Lhoist SA, Sofina SA **Manager:** Strafin sprl **Member:** Board of directors of Royal Automobile Club of Belgium, Board of directors of Université Catholique de Louvain **Senior advisor:** Cinven Ltd

(1) At 31 December 2022.
(*) Listed company.

Sandrine VERRIER
Principal function: Production and sales support assistant

Date of birth: 9 April 1979
Nationality: French
Term start and end dates: elected by BNP Paribas technician employees for three years from 16 February 2021 – 15 February 2024
Date first elected to the Board of directors: 16 February 2015

Number of BNP Paribas shares held[1]*:* 20
Business address: 150, rue du Faubourg-Poissonnière
75010 PARIS FRANCE

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas[*], director
Participation[1] in specialised committees of French or foreign companies
BNP Paribas, member of the Financial Statements Committee
Others[1]
Regional Economic, Social and Environmental Council of Ile de France, member

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Director: BNP Paribas	**Director:** BNP Paribas	**Director:** BNP Paribas	**Director:** BNP Paribas

(1) 31 December 2022.
(*) Listed company.

Fields WICKER-MIURIN
Principal function: Director of companies

Date of birth: 30 July 1958
Nationalities: British and American
Term start and end dates: 19 May 2020 – 2023 AGM
Date first appointed to the Board of directors: 11 May 2011

Number of BNP Paribas shares held[1]*:* 1,000
Business address: 63 Queen Victoria Street
LONDON EC4N 4UA
UNITED KINGDOM

Education
Graduate of the Institut d'Études Politiques de Paris
Master's degree from the School of Advanced International Studies, Johns Hopkins University
BA, University of Virginia

Offices[1] held in listed or unlisted companies of the BNP Paribas Group, in France or abroad
BNP Paribas[*], director
Offices[1] held in listed or unlisted companies outside the BNP Paribas Group, in France or abroad
SCOR SE[*], director
Acquis Exchange Plc[*], director
Participation[1] in specialised committees of French or foreign companies
BNP Paribas, member of the Financial Statements Committee, the Remuneration Committee and the Internal Control, Risk Management and Compliance Committee
SCOR SE, member of the Strategic Committee, member of the Risk Committee, member of the Nominations Committee, member of the Crisis Management Committee, member of the Sustainable Development Committee and Chairwoman of the Remuneration Committee
Aquis Exchange Plc, Chairwoman of the Nomination and Remuneration Committee
Others[1]
Leaders' Quest, Co-founder and Partner
Board of the Royal College of Art, Vice-Chairwoman and Chair of the Planning and Resources Committee

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:	2020:	2019:	2018:
Director: BNP Paribas, SCOR SE, Prudential Plc **Co-founder and Partner:** Leaders' Quest **Vice-Chairwoman:** Board of the Royal College of Art	**Director:** BNP Paribas, Prudential Plc, SCOR SE **Co-founder and Partner:** Leaders' Quest	**Director:** BNP Paribas, Prudential Plc, SCOR SE **Co-founder and Partner:** Leaders' Quest **Independent member of the Ministry Council and Chairwoman of the Audit and Risks Committee:** UK Department of Digital, Culture, Media and Sports	**Director:** BNP Paribas, Prudential Plc, SCOR SE **Co-founder and Partner:** Leaders' Quest **Independent member of the Ministry Council and Chairwoman of the Audit and Risks Committee:** UK Department of Digital, Culture, Media and Sports

(1) At 31 December 2022.
(*) Listed company.

SCHEDULE OF THE TERMS OF THE DIRECTORSHIPS OF COMPANY DIRECTORS

On the Board's proposal, the Shareholders' Annual General Meeting of 23 May 2000 decided to limit the term of office of new directors to three years.

Directors	2023 (AGM called to approve the 2022 financial statements)	2024 (AGM called to approve the 2023 financial statements)	2025 (AGM called to approve the 2024 financial statements)
J. Lemierre	✓		
J.-L. Bonnafé			✓
J. Aschenbroich	✓		
J. Brisac		✓ (i)	
P.A. de Chalendar		✓	
M. Cohen	✓		
H. Epaillard		✓ (ii)	
R. Gibson-Brandon		✓	
M. Guillou			✓
L. Logghe			✓
C. Noyer		✓	
D. Schwarzer	✓		
M. Tilmant			✓
S. Verrier		✓ (iii)	
F. Wicker-Miurin	✓		

(i) Director representing employee shareholders.
(ii) Director elected by executive employees – Start and end dates of previous term: 16 February 2018 – 15 February 2021. Re-elected by executive employees in the first round of voting on 20 November 2020 (took office on 16 February 2021).
(iii) Director elected by technician employees – Start and end dates of previous term: 16 February 2018 – 15 February 2021. Re-elected by technician employees in the first round of voting on 20 November 2020 (took office on 16 February 2021).

OTHER DIRECTORS AND CORPORATE OFFICERS

Yann GÉRARDIN

Principal function: Director and Chief Operating Officer of BNP Paribas

Date of birth: 11 November 1961
Nationality: French
Number of BNP Paribas shares held[(1)]*:* 162,396[(2)]
Business address: 3, rue d'Antin
75002 PARIS
FRANCE

Education
Degree in Economic Science
Institut d'Études Politiques de Paris
HEC Paris

Offices[(1)] held under the principal function
BNP Paribas[(*)], Chief Operating Officer, Head of Corporate and Institutional Banking

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:
Chief Operating Officer:
BNP Paribas

(1) At 31 December 2022.
(2) Includes 28,796 BNP Paribas shares held as units in the shareholders' fund under the Company Savings Plan.
(*) Listed company.

Thierry LABORDE

Principal function: Director and Chief Operating Officer of BNP Paribas

Date of birth: 17 December 1960
Nationality: French
Number of BNP Paribas shares held[(1)]: 20,001[(2)]
Business address: 3, rue d'Antin
75002 PARIS
FRANCE

Education
Master's degree in Economic Science

Offices[(1)] held under the principal function
BNP Paribas[(*)], Chief Operating Officer, Head of Commercial, Personal Banking & Services
BNP Paribas Personal Finance, Chairman
BNL SpA, director
Arval Service Lease, director
BNP Paribas Leasing Solutions, director
BNP Paribas Lease Group, director
Others[(1)]
European Payments Initiative, director

Offices held at 31 December in previous financial years
(the companies mentioned are the parent companies of the groups in which the functions were carried out)

2021:
Chief Operating Officer:
BNP Paribas
Chairman: BNP Paribas Personal Finance
Director: BNL SpA, Arval Service Lease, BNP Paribas Leasing Solutions, BNP Paribas Lease Group, European Payments Initiative

(1) At 31 December 2022.
(2) Includes 2,185 BNP Paribas shares held as units in the shareholders' fund under the Company Savings Plan.
(*) Listed company.

2.1.2 BNP PARIBAS CORPORATE GOVERNANCE

The Corporate Governance Code that BNP Paribas refers to on a voluntary basis in this report is the Corporate Governance Code of Listed Companies, published by the French employers' organisations, *Association Française des Entreprises Privées* (Afep) and the *Mouvement des Entreprises de France* (MEDEF). BNP Paribas declares that it complies with all of the recommendations of this Code, hereinafter referred to as the Corporate Governance Code or Afep-MEDEF Code, which can be viewed on the BNP Paribas website (http://invest.bnpparibas.com/en), the Afep website (http://www.afep.com/en) and the MEDEF website (http://www.MEDEF.com/en).

The detailed rules on the participation of shareholders at the Shareholders' Annual General Meeting are laid out in article 18, Title V "Shareholders' Meetings", of BNP Paribas' Articles of association published in the Universal Registration Document in the section entitled "Founding documents and Articles of association". Moreover, a summary of these rules and a report on the organisation and running of the Shareholders' Combined General Meeting of 17 May 2022 are provided in the section entitled "BNP Paribas and its shareholders" of said document.

In addition to the above, BNP Paribas is governed in accordance with French and European banking regulations, and the guidelines issued by the European Banking Authority (EBA) and is subject to permanent supervision of the European Central Bank (ECB) pursuant to the Single Supervisory Mechanism (SSM).

1. PRINCIPLES OF GOVERNANCE

The Internal Rules adopted by the Board of directors define the duties of the Board and of its specialised committees. They are updated periodically to comply with current laws, regulations and market guidelines, and to keep pace with best practice in the area of corporate governance.

The Internal Rules were extensively revised in 2015 to reflect the provisions of Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (hereinafter "CRD 5") then amended on various occasions to take into account changes in regulations. In respect of these changes, two procedures were added to the Internal Rules: a Policy on the suitability of Members of the management body and Key function holders, hereinafter referred to as the "Suitability policy", and the "Implementation procedure for conflicts of interest in respect to loans and other transactions granted to the Members of the management body and their related parties".

The Group Code of conduct, approved by the Board of directors, was introduced in 2016. The latter as well as the addendum on anti-corruption were the subject of an update in December 2021 approved by the Board of directors.

Code of conduct (article 1.2 of the Internal Rules)

The Code of conduct is the result of BNP Paribas' Board of directors and Executive Management's shared conviction that the success of the Bank depends on the behaviour of each employee. The Code of conduct "sets out the rules to uphold our values and perform the Bank's missions. This Code, which shall be integrated by each business line and each employee, governs the actions of each employee, and guides the decisions at every level of the organisation. For this purpose, the Board ensures the Executive Management implements this Code into business lines, countries and regions".

Note that the Internal Rules emphasise the collegial nature of the Board of directors, which jointly represents all shareholders and must act in the Company's best interest at all times. It details the Board responsibilities (article 1).

The Board of directors is backed by four specialised committees (the Financial Statements Committee, the Internal Control, Risk Management and Compliance Committee, the Corporate Governance, Ethics, Nominations and CSR Committee, the Remuneration Committee) as well as any *ad hoc* committees. The Internal Rules detail each committee's missions, in line with the provisions of the CRD 5 and EBA Guidelines. They provide for joint meetings between the Financial Statements Committee and the Internal Control, Risk and Compliance Committee whenever required.

Neither the members of the Executive Management nor the Chairman of the Board of directors have been members of any committee since 1997.

As far as the Board is aware, no agreement has been entered into directly, or through an intermediary, between on the one hand, one of BNP Paribas' directors and corporate officers and, on the other, another company in which BNP Paribas owns, directly or indirectly, over half of the share capital (articles L.22-10-10 and L.225-37-4 paragraph two of the French Commercial Code), without prejudice to any agreements relating to current operations concluded under normal conditions.

The Internal Rules and Suitability policy mentioned above have been adopted by the Board of directors and are included in this report.

The Board of directors (on 31 December 2022)

Chairman: Jean Lemierre

Missions and controls in the following areas:

- Orientations and strategic operations
- Promotion of CSR
- Governance, internal control and financial statements
- Risk management oversight
- Financial communication
- Remuneration
- Preventive recovery plan
- Monitoring the application of the Code of conduct

Financial Statements Committee (CdC)

Members

Christian Noyer (C) (i)
Jacques Aschenbroich (i)
Juliette Brisac (iii)
Lieve Logghe (i)
Sandrine Verrier (ii)
Fields Wicker-Miurin (i)

Missions

- Monitoring the preparation of the financial information
- Monitoring of the efficiency of the internal control systems and of risk management systems concerning accounting and financial matters
- Monitoring of the statutory auditing of the annual financial statements and of the consolidated financial statements by the Statutory Auditors as well as of the independence of the Statutory Auditors

Internal Control, Risk Management and Compliance Committee (CCIRC)

Members

Monique Cohen (C) (i)
Hugues Epaillard (ii)
Rajna Gibson-Brandon (i)
Michel Tilmant
Fields Wicker-Miurin (i)

Missions

- Reviewing the global strategy concerning risks
- Monitoring the remuneration principles in relation to risks
- Reviewing issues relating to internal control and compliance
- Reviewing the prices of products and services in relation to the risk strategy

Corporate Governance, Ethics, Nominations and CSR Committee (CGEN)

Members

Jacques Aschenbroich (C) (i)
Pierre André de Chalendar (i)
Monique Cohen (i)
Marion Guillou (i)
Daniela Schwarzer (i)

Missions

- Oversight and monitoring of the compliance of governance principles with changes in regulations and best practice in the area of corporate governance
- Identification of, selection of, and succession plan for directors and committee members
- Assessment of the Board of directors
- Periodic review of the selection of, appointment of and succession process for corporate officers
- Monitoring the implementation by the Executive Management of the Suitability policy for Key function holders provided by EBA guidelines
- Assessment of corporate officers
- Appraising the independence of the directors
- Maintaining the general balance of the Board of directors
- Regular monitoring of updates to the Code of conduct
- Monitoring CSR issues (Group's contribution to economic, sustainable, and responsible development) and inclusion of the CSR aspect in carrying out its missions

Remuneration Committee (CR)

Members

Pierre André de Chalendar (C) (i)
Hugues Epaillard (ii)
Marion Guillou (i)
Fields Wicker-Miurin (i)

Missions

- Annual review of the principles that underpin the Group's remuneration policy
- Annual review of the remuneration, allowances and benefits in kind granted to the directors and corporate officers of the Company and of the Group's major French subsidiaries
- Annual review of the remuneration of the Group's regulated staff categories
- Control of the remuneration of the Head of the risk management function and Head of Compliance

Joint sessions of the CdC and CCIRC

Chairman: Christian Noyer (i)

Missions

- Examining the mission plan of the General Inspection and the audit plan of the Statutory Auditors and preparing the work of the Board on the assessment of the risk policies and risk management measures.
- Dealing with the common issues relating to the risk policies and their financial impacts.

(C) Chairperson
(i) Independent director according to the provisions of the Afep-MEDEF Code
(ii) Director elected by employees
(iii) Director representing employee shareholders

Each committee is composed of members with expertise in the relevant areas and complies with the provisions of the French Monetary and Financial Code and the recommendations of the Afep-MEDEF Code. Thus,

- most of the members of the Financial Statements Committee have qualifications and experience in corporate financial management, accounting and financial information. In consideration of his financial skills reinforced by his professional career, notably as Governor of the Banque de France, Mr. Christian Noyer is Chairman of the committee;
- most of the members of the Internal Control, Risk and Compliance Committee have particular expertise in financial matters and in the area of risk through their training or experience. Its Chairwoman brings to the committee her experience in financial regulation and supervision acquired as a former member of the Board of the French Financial Markets Authority (*Autorité des Marchés Financiers* - AMF). One of its members has international experience in banking management and another has in-depth experience in financial risks. In addition, a member of the Internal Control, Risk Management and Compliance Committee is also a member of the Financial Statements Committee in order to promote the work of the committees on the appropriateness of the risks and provisions recorded by the Bank;
- the members of the Corporate Governance, Ethics, Nominations and CSR Committee are independent directors who have expertise in Corporate Governance and in putting together management teams in international companies and in CSR. It is chaired by the Chairman of the Board of directors of a major telecommunications group that has made social and environmental commitments. One of its members is also a member of the *Haut Comité pour le Climat* since its creation in 2018, another is the Chairman of an international group involved in energy renovation and finally, another member manages a leading foundation that promotes democracy and the defence of Human rights;
- the Remuneration Committee is made up of independent members who have experience of remuneration systems and market practices in this area and a director elected by employees. Two members of the Remuneration Committee are also members of the Internal Control, Risk Management and Compliance Committee. This composition facilitates the Board of directors' work on the appropriateness of BNP Paribas' remuneration principles with the risk policy.

The Chairman of the Board of directors attends the meetings of the committees but is not a member of any of them and may add any subject he considers relevant to the agenda.

European and French regulations applicable to BNP Paribas require members of the Board of directors and executive corporate officers to have integrity at all times, and to have the knowledge skills, experience and time needed to perform their duties. The ECB is notified of their appointment or re-appointment so that it can assess them on the basis of these criteria. To date, BNP Paribas has not received any notification from the ECB that these criteria have not been met.

In addition, the ECB did not issue any objections as regards the composition of the Board of directors or its specialised committees.

1.a Separation of the functions of Chairman and Chief Executive Officer

As of 11 June 2003, BNP Paribas has dissociated the offices of Chairman of the Board and Chief Executive Officer. This decision is in line with the obligations imposed on credit institutions since 2014 by the French law transposing Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.

The duties of the Chairman

They are described in article 3.1 of the Internal Rules.

The Chairman is responsible for ensuring that the quality of the relationship with shareholders is maintained, coordinating closely with any steps taken by Executive Management in this area. In this connection, the Chairman chairs the Shareholder Liaison Committee, whose task is to assist the Bank in its communications with individual shareholders; several times a year, he invites the shareholders to meetings where the Company's strategy is explained. He reports on his duties to the Board of directors.

The Chairman maintains a close and trusting relationship with Executive Management and provides the team with assistance and advice while respecting its executive responsibilities. The Chairman organises his activities so as to ensure his availability and put his experience to the Group's service. His duties are contributory in nature and do not confer any executive power on him. They do not in any way restrict the powers of the Chief Executive Officer, who has sole operational responsibility for the Group.

Coordinating closely with Executive Management, the Chairman can represent the Group in its high-level relationships, particularly with major clients, public authorities and institutions, at national, European and international levels. He plays an active part in discussions concerning regulatory developments and public policies affecting BNP Paribas, and, more generally, the financial services sector.

The Chairman contributes to promoting the values and image of BNP Paribas, both within the Group and externally. He expresses his views on the principles of action governing BNP Paribas, in particular in the field of professional ethics. He contributes to enhancing the Group's image through the responsibilities he exercises personally in national or international public bodies.

At the request of the Chief Executive Officer, he can take part in any internal meeting on subjects relating to strategy, organisation, investment or disinvestment projects, risks and financial information. He expresses his opinions without prejudice to the remit of the Board of directors; he provides support to the teams responsible for covering major companies and international financial institutions; he also contributes to the development of BNP Paribas' advisory activities, particularly by assisting in the completion of major corporate finance transactions.

He ensures that principles of Corporate Governance are defined and implemented.

The Chairman is the custodian of the proper functioning of the Board of directors of BNP Paribas. As such:

- with the support of the Corporate Governance, Ethics, Nominations and CSR Committee, with the approval of the Board of directors and of the Shareholders' Annual General Meeting, where appropriate, he endeavours to build an efficient and balanced Board, and to manage, both in the short- and long-term, the replacement and succession processes related to the Board of directors and nominations which will acknowledge the Company's strategic ambitions;
- on the basis of the dissociation of the functions of Chairman and Chief Executive Officer, his role is to ensure directors' independence and freedom of speech;
- he ensures that the directors have the documentation and information necessary to carry out their duties in a timely manner and in a clear and appropriate form.

The powers of the Chief Executive Officer

The Chief Executive Officer has the broadest powers to act in all circumstances on behalf of BNP Paribas, and to represent the Bank in its relation with third parties. He is responsible for the organisation of internal control procedures and for all the information required by regulations in that regard.

He exercises his powers within the limitations of the corporate object, and subject to any powers expressly attributed by law to the Shareholders' Annual General Meeting and Board of directors.

The Internal Rules of the Board of directors provide that the Chief Executive Officer shall request its prior approval for all investment or disinvestment decisions (other than portfolio transactions) in excess of EUR 250 million, and for any proposal to acquire or dispose of shareholdings in excess of that threshold (other than portfolio transactions) (article 1.1). The Chief Executive Officer must also ask the Board's Financial Statements Committee for prior approval of any non-audit related assignment involving fees in an amount of over EUR 1 million (excluding taxes) (article 7.1.3).

1.b Composition of the Board – Independence of directors

Composition of the Board of directors: a collegial body with collective competence

On the proposal of the Board of directors, the Shareholders' Annual General Meeting of 17 May 2022 renewed the terms of office as directors of Mr. Jean-Laurent Bonnafé, Mr. Michel Tilmant and Ms. Marion Guillou for a period of three years and appointed Ms. Lieve Logghe to replace Mr. Wouter De Ploey, whose term of office expired at the end of the Annual General Meeting.

Following the end of the Annual General Meeting of 17 May 2022 and as of 31 December 2022:

Number of Board members	Of which Director elected by employees	Of which Director representing employee shareholders	Nationalities	Percentage of women(1)	Independence
15	2	1	5	50%	> 50%

Independence of directors (as of 31 December 2022)

The table below shows the position of each director with regard to the independence criteria provided by the Afep-MEDEF Code to define an independent director:

Criteria	Jean LEMIERRE	Jean-Laurent BONNAFE	Jacques ASCHENBROICH	Juliette BRISAC	Pierre André de CHALENDAR	Monique COHEN	Hugues EPAILLARD	Rajna GIBSON-BRANDON	Marion GUILLOU	Lieve LOGGHE	Christian NOYER	Daniela SCHWARZER	Michel TILMANT	Sandrine VERRIER	Fields WICKER-MIURIN
1 Not be, or have been, in the last five years (i) an employee or corporate officer of the Company or of a consolidated subsidiary of the Company; (ii) a director of a consolidated subsidiary	0	0	✓	0	✓	✓	0	✓	✓	✓	✓	✓	✓	0	✓
2 Whether or not corporate offices are held in another company	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3 Whether or not significant business relationships exist	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4 Whether or not there are close family ties to a corporate officer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5 Not have been a Statutory Auditor of the Company in the previous five years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6 Not a director of the Company for more than twelve years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7 No variable remuneration for non-executive corporate officers	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8 Major shareholder status	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ *represents compliance with an independence criterion defined in the Afep-MEDEF Code.*
o *represents non-compliance with an independence criterion defined in the Afep-MEDEF Code.*

- The following directors meet the independence criteria contained in the Corporate Governance Code and reviewed by the Board of directors: Mses. Monique Cohen, Rajna Gibson-Brandon, Marion Guillou, Lieve Logghe, Daniela Schwarzer, Fields Wicker-Miurin, Messrs Jacques Aschenbroich, Pierre André de Chalendar, Christian Noyer. As far as the Board is aware, there are no potential conflicts of interests between BNP Paribas and any of the directors.
- The two directors elected by the employees, Ms. Sandrine Verrier and Mr. Hugues Epaillard, as well as the director representing employee shareholders, Ms. Juliette Brisac are not taken into account for the calculation of independence according to the criteria of the Afep-MEDEF Code despite their status and their method of election, which guarantee their independence.
- Three directors appointed by the shareholders – the Chairman of the Board of directors, Mr. Jean Lemierre, the Chief Executive Officer, Mr. Jean-Laurent Bonnafé, and Mr. Michel Tilmant – do not fulfil the independence criteria laid down by the Corporate Governance Code of Listed Companies.

Over half of the directors of BNP Paribas are therefore independent in terms of the criteria for independence contained in the Afep-MEDEF Code and the Board of directors' assessment.

Directors' knowledge, skills and experience – Diversity and complementarity

When the Corporate Governance, Ethics, Nominations and CSR Committee (CGEN) reviews the skills and experience of potential directors, it is careful to maintain the diversity and collective skills of the Board of directors in light of changes to the Bank's strategy and in accordance with the Suitability policy. Thus, the Board brings together expertise in banking and financial matters, risk management, international digital transformation, banking regulation and compliance, particularly as regards anti-money laundering and combating the financing of terrorism (AML/CFT) and in CSR as well as experience in Executive Management of large corporate groups.

These candidates are identified and recommended by the Committee on the basis of criteria that combine personal and collective skills, according to the procedures in the Internal Rules (article 4.2.1) and by the Suitability policy (section II Identification of selection of and succession plan for Members of the management body and Key function holders), which ensure their independence of mind; these include:

- competence, based on experience and the ability to understand the issues and risks, enabling the directors to make informed and effective decisions;
- courage, in particular to express opinions and make judgements, enabling the directors to remain objective;
- availability and assiduity, which allow for the necessary detachment and promote the directors' commitment and sense of responsibility regarding the exercise of their office;
- loyalty, which fosters directors' commitment to the Company and to their duties within the Board, which collectively represents the shareholders;
- directors' proper understanding of the Company's culture and ethics.

Directors all have a range of skills and experience that they have acquired during their professional careers. The table below aims to reflect this diversity within the Board of directors and lists more specific contributions made by each of the directors.

Director	**Age(1)**	**Gender**	**Nationality**	**Areas of expertise**	**End of term of office**
Jean LEMIERRE (Chairman)	72	M	French	Banking/Finance Risks/Regulation monitoring International business operations AML/CFT	2023
Jean-Laurent BONNAFÉ (Director and Chief Executive Officer)	61	M	French	Banking/Finance International business operations CSR AML/CFT	2025
Jacques ASCHENBROICH	68	M	French	Industrial International business operations Transformation CSR Digital	2023
Juliette BRISAC	58	F	French	Employee shareholder representation	2024
Pierre André de CHALENDAR	64	M	French	Industrial International business operations CSR	2024
Monique COHEN	66	F	French	Banking/Finance International business operations CSR AML/CFT	2023
Lieve LOGGHE	54	F	Belgian	Banking/Finance International business operations Transformation	2025
Hugues EPAILLARD (Director elected by employees)	56	M	French	Organisation representing employees	2024
Rajna GIBSON-BRANDON	60	F	Swiss	Financial markets Risks/Regulation monitoring CSR	2024
Marion GUILLOU	68	F	French	Risks/Regulation monitoring CSR Technology	2025
Christian NOYER	72	M	French	Banking/Finance International business operations Risks/Regulation monitoring AML/CFT	2024
Daniela SCHWARZER	49	F	German	Money markets Geopolitics CSR	2023

Michel TILMANT	70	M	Belgian	Banking/Finance Risks/Regulation monitoring International business operations AML/CFT	2025
Sandrine VERRIER (Director elected by employees)	43	F	French	Organisation representing employees	2024
Fields WICKER-MIURIN	64	F	British/ American	Banking/Finance Financial markets International business operations	2023

(1) At 31 December 2022.

In addition, the additional information referred to in article L.22-10-10° of the French Commercial Code relating to employees is shown in sections 7.3 *Outstanding actions in the area of professional equality* and 7.7 *The system concerning the Group's employees* of this document[1].

1.c Directors' ethical conduct

As far as the Board is aware, there are no potential conflicts of interests between BNP Paribas and any of the directors in respect of their duties to BNP Paribas and their private interests and/or other duties. The Suitability policy requires directors to report any situation likely to constitute a conflict of interest to the Chairman, the Board of directors may then ask the director in question to refrain from taking part in voting on the relevant issues.

As far as the Board is aware, none of the Board members has been found guilty of fraud or been associated, as member of an administrative, management or supervisory body, or as Chief Executive Officer, with any insolvency, receivership or liquidation proceedings during at least the last five years.

As far as the Board is aware, no member of the Board of directors is subject to any official public accusation and/or penalty. No director has been prohibited from acting in an official capacity during at least the last five years.

There are no arrangements or agreements with key shareholders, customers, suppliers or other persons that involve the selection of any member of the Board of directors.

The directors must carry out their duties in a responsible manner, particularly as regards the regulations relating to insider dealing. They are notably required to comply with legal requirements relating to being in possession of insider information. Under the terms of the Internal Rules, they must also refrain from carrying out any transactions in BNP Paribas shares that could be regarded as speculative (article 4.3.1 of the Internal Rules). They are informed of the periods during which they may, except in special circumstances, carry out any transactions in BNP Paribas shares (article 4.3.1 of the Internal Rules).

1.d Directors' training and information

Pursuant to the Internal Rules, every director can ask the Chairman or the Chief Executive Officer to provide them with all the documents and information required to enable them to carry out their duties, to participate effectively in the meetings of the Board of directors and to make informed decisions, provided that such documents are necessary to the decisions to be taken and connected with the Board's powers (article 3.4.1 of the Internal Rules).

The directors have unrestricted and continuous access to the minutes of meetings of the Board's specialised committees and the minutes of Board meetings using a special digital tool. This system also provides directors with a range of useful information in a secure and timely manner to facilitate them in their work. Since 2017, it has been possible to use this system to deliver e-learning training modules to directors.

Committee meetings provide an opportunity to update the directors on the topical issues on the agenda. In addition, the Board is kept informed of changes in the banking regulations and reference texts concerning governance and can be trained on such occasions.

During three training days (March, June and September 2022), the directors received training on (i) operational risks, (ii) model risks, (iii) risk on exposures in the form of equities outside the trading book, (iv) leveraged finance, (v) digital assets and blockchain and (vi) sustainable finance (regulatory overview). It was also the opportunity for directors to meet with the relevant managers in the Group.

The new director benefited from an individual training programme with operational managers and in particular a session dedicated to Fit and Proper provided by banking regulations.

In respect of 2022, one director elected by employees continued his training leading to a diploma at the Institut Technique de Banque for a total of 29 days, while the second director elected by employees attended training provided by an external organisation. related to the completion of Basel III (new capital requirements) for a total of 8 hours. The directors elected by the

[1] *This information supplements the description of the diversity policy applied to members of the Board of directors.*

employees and the director representing employee shareholders also benefit, like any other directors, from trainings provided by BNP Paribas as described above, in addition to their training hours provided by external organisations.

1.e Directors' attendance at Board and Committee meetings in 2022

Director	Board of directors	Specialised committees	Individual attendance rates
J. LEMIERRE	100%		100%
J.-L. BONNAFÉ	100%		100%
J. ASCHENBROICH	100%	100%	100%
J. BRISAC	100%	100%	100%
P. A. de CHALENDAR	91%	100%	96%
M. COHEN	91%	100%	97%
W. DE PLOEY(1)	100%	100%	100%
H. EPAILLARD	100%	94%	96%
R. GIBSON-BRANDON	91%	75%	83%
M. GUILLOU	100%	100%	100%
L. LOGGHE(2)	100%	100%	100%
C. NOYER	100%	100%	100%
D. SCHWARZER	100%	100%	100%
M. TILMANT	91%	92%	91%
S. VERRIER	100%	100%	100%
F. WICKER-MIURIN	100%	100%	100%
Average	**97%**	**97%**	

(1) The term of office of Mr. Wouter De Ploey ended at the Shareholders' Annual General Meeting of 17 May 2022.
(2) The term of office of Ms. Lieve Logghe started at the Shareholders' Annual General Meeting of 17 May 2022.

2. THE WORK OF THE BOARD AND COMMITTEES IN 2022

2.a The work of the Board in 2022

Meetings	Including extraordinary meetings	Average attendance rate	Strategy seminar	Executive sessions
11	1	98%	1	5

The Board of directors, which determines BNP Paribas' strategy and overall business objectives based on proposals submitted by Executive Management and with the aim of promoting long-term value creation in the light of social and environmental issues:

- monitored the Group's results for the first nine months of 2022, which demonstrate both the strength of its diversified and integrated model and the growth potential of BNP Paribas, which continues to record significant market share gains. The cost of risk is back to its level of 2019. The capital adequacy ratios are higher than the supervisors' requirements and enable to prepare the Basel III reform;
- proposed, for the 2021 financial year, the payment of a cash dividend of EUR 3.67 to the Annual General Meeting of 17 May 2022, corresponding to a pay-out ratio of 60% of net income;
- reviewed and approved the objectives of the new "Growth, Technology & Sustainability 2025" strategic plan for the Commercial, Personal Banking & Services, Corporate and Institutional Banking and Investment and Protection Services divisions, based on the economic assumptions developed for the 2022-2025 period;

- as part of the GTS 2025 Plan, reviewed the objectives and challenges of CPBF, an inventory of the Group's system in Germany and in the APAC region, as well as several of the Plan's five cross-functional initiatives;
- approved the management report for the 2021 financial year;
- reviewed the Group's budget for the 2023 financial year;
- reviewed the preliminary results of the Supervisory Review and Evaluation Process (SREP) carried out by the ECB;
- monitored the situation of the Group's subsidiaries in Ukraine and Russia and ensured the safety of employees and their families in Ukraine;
- acknowledged the Bank's achievements in 2021 and the Bank's CSR policy outlook for 2022, under the aegis of the United Nations' 17 Sustainable Development Goals;
- as part of the sale of Bank of the West, approved the subscription to a reserved capital increase in BMO Financial Group;
- approved the sale of a stake in Euroclear;
- approved the equity investment by BNP Paribas in a consumer credit joint venture in China;
- approved the merger of BNP Paribas Securities Services into BNP Paribas SA and was informed of the operational impacts;
- reviewed the Group's draft response to the Dear CEO Letter from the ECB on leveraged transactions;
- monitored the implementation of the Bank's IT and information systems strategy;
- reviewed the Bank's relative performance in 2022 compared with its competitors;
- monitored changes in the shareholding structure and share price;
- reviewed the reaction of analysts and investors to the 2021 annual results and the results of the first half-year 2022;
- acknowledged the feedback received from investors during roadshows;
- reviewed the opinion of the Central Social and Economic Committee on the Bank's strategic guidelines and responded to the comments made;
- was informed of the results of targeted surveys of employees measuring their satisfaction at work;
- reviewed the issuance amounts of debt securities in the form of senior and subordinated debt;
- understood the Executive Management's comments on the net margin generated on new lending in 2021 and in the first half of 2022;
- authorised the delegations of authority for the issuance of debt securities, particularly for bonds and similar securities;
- reviewed the related-party agreements entered into and authorised in previous years but still in force in the past year;
- renewed the delegation of responsibility for the internal control of regulated subsidiaries so requesting and received a report from the subsidiaries in question;
- reviewed and approved the answers to written questions submitted by shareholders at the Annual General Meeting of 17 May 2022.

As in previous years, SSM representatives from the ECB and representatives of the French *Autorité de contrôle prudentiel et de résolution* (ACPR) attended the Board of directors' meeting of 22 February 2022. They outlined their priorities for banking supervision for 2022, which were followed by an exchange of views with the members of the Board.

As in previous years, the Board of directors met on 15 December 2022 for a strategic seminar devoted, among other things, to the execution of the 2025 strategic plan and the challenges of the business lines within Commercial, Personal Banking & Services, Corporate and Institutional Banking and Investment and Protection Services.

Executive sessions

In addition to the evaluation of the performance and compensation of the executive corporate officers, which were discussed without their presence, five meetings of directors were held in the form of "executive sessions" on the Group's challenges and operations out of which three as a follow-up to the training sessions provided during the year. During these three sessions, the directors had the opportunity to interact with the operational managers concerned.

Finally, the Chairman and the non-executive directors had discussions both on strategy and on the perception of interactions between the Board of directors and the Group's Executive Management.

2.b Work performed by the Financial Statements Committee and work approved by the Board of directors in 2022

Number of members	Meetings	Attendance rate
6	5	100%

Examination of the financial statements and financial information

The Financial Statements Committee:

- conducted quarterly reviews of the financial statements based on the documents and information provided by Executive Management and the work carried out by the Statutory Auditors;
- each quarter, analysed summary reports of the consolidated results and annualised return on equity, as well as results and profitability by business area;
- each quarter, reviewed the Group's consolidated balance sheet and changes to said balance sheet; on that occasion, it was given an update on off-balance sheet commitments;
- each quarter, reviewed the report on internal audit control points flagged by Group entities in the context of the certification of their financial statements. It analysed the change in the risk level observed for each of the thirty major accounting controls;
- each quarter, reviewed the work to make models used to calculate credit risk provisions more reliable under IFRS 9;
- reviewed changes in equity and the capital adequacy ratio with regard to the new prudential solvency regulations and new requirements imposed by the regulator;
- reviewed trends in revenues and the cost/income ratio by business for each quarter;
- kept track of the changes in prudential requirements and reviewed changes in risk-weighted assets;
- reviewed the provisions for litigation on a regular basis;
- reviewed goodwill;
- conducted a detailed analysis of the composition of the Group's balance sheet;
- acknowledged, each quarter, the adjustments made to the Credit Valuation Adjustment (CVA), the Debt Valuation Adjustment (DVA) and the Funding Valuation Adjustment (FVA);
- was informed of the consequences of the new IFRS 17 standard, applicable from 1 January 2023.

Each quarter, when reviewing the results, it:

- heard the Bank's Chief Financial Officer, his deputy and the person responsible for accounting and financial reporting;
- interviewed the Bank's Chief Financial Officer, without the presence of Executive Management;
- heard the Statutory Auditors' comments and conclusions on the quarterly and annual financial statements, where applicable;
- asked the Statutory Auditors the questions it considered necessary, without the presence of the Executive Management or the Chief Financial Officer;
- reviewed the accounting certification mechanisms as part of the internal control procedures.

It reviewed the section of the management report concerning the internal control procedures relating to the preparation and processing of accounting and financial information in respect of the 2021 financial year; it recommended approval by the Board of directors.

The Board:

- was informed of all the work of the Financial Statements Committee and the findings of the Statutory Auditors at the end of each reporting period;
- reviewed and approved the results of the fourth quarter of 2021, full-year 2021 and the first three quarters of 2022;
- reviewed and approved draft press releases at each meeting held to discuss the financial statements;
- acknowledged the report of the discussions held by the Financial Statements Committee with the Statutory Auditors and the Chief Financial Officer, without the presence of the Executive Management;
- approved the section of the management report on the preparation and processing of accounting and financial information in respect of 2021.

Relations with the Statutory Auditors

The Financial Statements Committee received a written certificate of independence from each of the Statutory Auditors.

It was informed of the amount of fees paid to the Statutory Auditors and reviewed the summary report on assignments not directly related to the statutory audit, without the presence of the Statutory Auditors.

The Committee regularly monitored the call for tenders procedure for the renewal of the Statutory Auditors for the 2024-2029 term of office and issued recommendations to the Board of directors relating to their appointment.

> The Board followed the recommendations of the Financial Statements Committee and decided on the composition of the Statutory Auditors for the 2024-2029 term of office, which will be submitted to the vote of the Shareholders' Annual General Meeting in 2024.

2.c Work performed by the Financial Statements Committee and the Internal Control, Risk Management and Compliance Committee in their joint meetings, and work approved by the Board of directors in 2022

Number of members	Meetings	Attendance rate
6	5	100%

The committees:

- acknowledged the Internal Capital Adequacy Assessment Process (ICAAP) report. They reviewed the Bank's risk assessment and ensured that it has the necessary capital to deal with its risks, even in a stressed scenario;
- acknowledged the Statutory Auditors' audit plan for the financial year 2022;
- discussed whether the prices of the products and services proposed to customers are compatible with the risk strategy (in accordance with the provisions of CRD 4);
- reviewed the main ongoing legal disputes and proceedings for which provisions have been, or may be, made;
- reviewed the economic assumptions used to prepare the budget for 2023;
- reviewed the ACPR letter notifying the Group's Global Systemically Important Bank score;
- were informed of the action plan to adapt the Group's IFRS 9 system following the missions carried out by the ECB in 2021.

> The Board was informed of all the work performed by the Financial Statements Committee and the Internal Control, Risk Management and Compliance Committee.

2.d Work performed by the Internal Control, Risk Management and Compliance Committee and work approved by the Board of directors in 2022

Number of members	Meetings	Attendance rate
5	9	93%

Since 19 May 2020, the Internal Control, Risk Management and Compliance Committee and the Financial Statements Committee have a joint member to support the work of the committees on the appropriateness of the risks and provisions recognised by the Bank.

Risks and liquidity

The Internal Control, Risk Management and Compliance Committee:

- reviewed the Risk Appetite Statement (RAS), the overall risk limits and those applicable by division due to the Group's new organisation as well as the proposals for the introduction of new indicators, in particular related to the commitment to achieve carbon neutrality in 2050 as part of the signature of the Net-Zero Banking Alliance, the management of risks related to leveraged transactions, outsourcing, information and communication technologies and compliance;
- acknowledged the Internal Liquidity Adequacy Assessment Process (ILAAP) report and reviewed the tolerance threshold above which it may be deemed that the liquidity position complies with the Bank's risk tolerance;
- reviewed the annual internal control report for the 2021 financial year in its operational risk and permanent control component, including the assessment by the RISK Function of the management of the operational risk related in particular

to subcontracted service providers (Third Party Risk Management), Information and Communication Technologies and fraud;

- monitored the deployment of the cybersecurity program within the Group, its action plan, the priority topics and the related budget. The Committee was informed of the achievements of the year and the objectives for the following financial years. It reviewed the consequences of the Russian invasion of Ukraine in terms of cyber risk;
- reviewed the dashboard presented quarterly by the Head of RISK and reviewed trends in market, counterparty, credit and operational risk as well as liquidity risk. It regularly analysed the impacts of the health crisis, the invasion of Ukraine by Russia and geopolitical tensions on commodity markets, financial markets, supply chains and the economic outlook;
- was informed of any risk indicator limits that had been exceeded and, where applicable, any action plans decided by Executive Management;
- reviewed the renewal of risk limits for specific sectors and activities;
- decided whether the Group's remuneration policy was compatible with its risk profile.

The Board:

- was informed of all the committee's work on the Group's risks and liquidity;
- approved changes to the Group's RAS;
- approved the liquidity risk tolerance level and the policies, procedures and internal systems relating to liquidity risk;
- approved the forwarding to the ACPR of the operational risk, permanent control and business continuity components of the internal control report;
- approved the renewal and withdrawal of sector budgets.

Ad hoc work

The Internal Control, Risk Management and Compliance Committee:

- was informed, during each of its meetings, of the risks related to current events, in particular the consequences of the invasion of Ukraine by Russia for the Bank and its subsidiaries and the situation of employees and their families in Ukraine;
- was informed of the impact of energy price volatility on energy market players;
- acknowledged the letters sent by the ECB concerning its expectations regarding leveraged transactions, in terms of the design and operation of risk appetite frameworks;
- acknowledged the follow-up letter and the Bank's response to an on-site mission by the ECB to identify risks and assess and monitor market risk and other trading-related risks in Global Markets credit activities (Primary & Credit Market).

The Internal Control, Risk Management and Compliance Committee and the Corporate Governance, Ethics, Nominations and CSR Committee, held a joint meeting to review the main achievements made in terms of methodology, analysis and management of ESG risk factors.

The Board was informed of all the *ad-hoc* work of the Committee on risks and liquidity.

Compliance, internal control, litigation and periodic control

The Internal Control, Risk Management and Compliance Committee:

- reviewed the section of the management report on internal control and submitted it for the approval of the Board;
- reviewed the annual internal control report on the 2021 financial year in its compliance and permanent control component, including the assessment by the Compliance Function of the risks of non-compliance and significant events, main risk areas and corrective actions in the Group's various business lines and geographical areas;
- reviewed the annual periodic control report on the 2021 financial year;
- reviewed reports on the organisation of internal control systems on anti-money laundering and terrorism financing, as well as on freezing assets of the Bank in accordance with the provisions of the Decree of 21 December 2018;
- reviewed the classification of the Group's risks in terms of anti-money laundering and combating the financing of terrorism in accordance with the order of 6 January 2021 relating to the system and internal control on anti-money laundering and combatting the financing of terrorism, the freezing of assets, ban on the provision or use of funds or economic resources;
- acknowledged the overview and the measures in progress concerning the implementation of the MiFID II regulation that entered into force in 2018 and the results of the controls carried out in 2021;

- reviewed the Annual Report on conflicts of interest relating to the system put in place under MiFID II to prevent and manage conflicts of interest that may arise in the provision of an investment or related service, regarding transactional and non-transactional conflicts of interest;
- reviewed the report prepared for 2021 on the assessment and monitoring of risks, in accordance with the provisions of the order of 3 November 2014 on the internal control of companies in the banking, payment services and investment services sectors subject to the control of the ACPR. It assessed the effectiveness of the policies and provisions implemented;
- reviewed the annual update of the recovery plan and was informed of any requests for additional modifications made by supervisors to the recovery plan; it proposed that the Board approve the recovery plan;
- reviewed the European regulatory developments in terms of resolution and was informed of the Minimum Requirement for own funds and Eligible Liabilities (MREL) of the Group to be reached by 1 January 2024 set by the Single Resolution Board;
- reviewed a revised version of the Group's outsourcing policy;
- reviewed, at each of its meetings, the list of ongoing legal disputes and proceedings, as well as the developments in each of the cases;
- reviewed the completeness and evolution of the results of the periodic control in 2021;
- reviewed the General Inspection's half-year report;
- analysed the Compliance Function's half-year report;
- continued to monitor the implementation of the remediation plan initiated in 2014 at the US authorities' request (commitments made by BNP Paribas to control activities carried out in US dollars);
- continued to monitor the outcome of the General Inspection review of remediation;
- regularly reviewed the fines imposed on the Bank by supervisors;
- reviewed the new corruption risk mapping methodology proposed following the mission of the French Anti-Corruption Agency;
- was informed of the results of the study carried out on the understanding of issues relating to the fight against money laundering and the financing of terrorism by the boards of directors of the Group's subsidiaries;
- acknowledged the legal risks related to extra-financial commitments made in terms of ESG.

The Board:

- was informed of all the committee's work on internal control, risks and compliance;
- approved the section of the management report on 2021 internal control;
- approved the forwarding to the ACPR of the annual internal control report in its compliance and permanent control component;
- approved the forwarding to the ACPR and the ECB of the annual periodic control report;
- approved the forwarding to the ACPR of reports on the organisation of internal control systems on anti-money laundering and combating the financing of terrorism, as well as on asset freezing;
- heard the results of the work done based on a report drawn up for the assessment and monitoring of risks in 2021; confirmed that the report on the assessment and monitoring of risks had been forwarded to the ACPR;
- approved the recovery plan, the updated version of which was submitted to the ECB;
- approved the revised version of the Group's outsourcing policy.

The Committee interviewed the heads of the RISK, Compliance, General Inspection and LEGAL Functions, without the presence of Executive Management.

The Board heard the reports of the interviews.

2.e Work performed by the Corporate Governance, Ethics, Nominations and CSR Committee and work approved by the Board of directors in 2022

Number of members	Meetings	Attendance rate
5	9	100%

Changes in the membership of the Board and its specialised committees

The Corporate Governance, Ethics, Nominations and CSR Committee:

- reviewed the expiry dates of the directors' terms of office and proposed that the Board submit to the vote of the Shareholders' Annual General Meeting the renewal of the terms of office expiring in 2022, namely those of Mr. Jean-Laurent Bonnafé, Ms. Marion Guillou and Mr. Michel Tilmant;
- proposed to the Board the appointment of Ms. Lieve Logghe as a director after ensuring that she fulfilled the criteria defined in the Suitability policy; she succeeds Mr. Wouter De Ploey, whose term of office expired in May 2022;
- reviewed the position of each of the directors and proposed to the Board to appoint:
  - Ms. Monique Cohen as Chairwoman of the Internal Control, Risk Management and Compliance Committee as of the Shareholders' Annual General Meeting of 17 May 2022, replacing Mr. Michel Tilmant, who is no longer considered independent, as from and subject to the renewal of her term of office as director,
  - Mr. Jacques Aschenbroich as Chairman of the Corporate Governance, Ethics, Nominations and CSR Committee as of the Shareholders' Annual General Meeting of 17 May 2022, replacing Ms. Monique Cohen,
  - Ms. Lieve Logghe as a member of the Financial Statements Committee, subject to her appointment as director at the Annual General Meeting of 17 May 2022;
- reviewed the situation of directors asked to take up corporate offices outside the Group, as provided for in the Suitability policy.

The Board:

- proposed that the Shareholders' Annual General Meeting renews the terms of office of the directors in question;
- proposed to the Shareholders' Annual General Meeting the appointment of Ms. Lieve Logghe as a director;
- appointed with immediate effect after the Annual General Meeting of 17 May 2022, Ms. Monique Cohen as Chairwoman of the Internal Control, Risk Management and Compliance Committee, Mr. Jacques Aschenbroich as Chairman of the Corporate Governance, Ethics, Nominations and CSR Committee, and Ms. Lieve Logghe as a member of the Financial Statements Committee.

Governance

The Corporate Governance, Ethics, Nominations and CSR Committee:

- reviewed the updated pool of potential directors;
- proposed that the Board extend the term of office of Mr. Jean Lemierre as Chairman of the Board of directors for one year, *i.e.* until the Annual General Meeting called to approve the 2023 financial statements, subject to the renewal of his term of office the Annual General Meeting of May 2023;
- proposed to the Board to renew Mr. Jean-Laurent Bonnafé as Chief Executive Officer of BNP Paribas, to renew Mr. Yann Gérardin and Mr. Thierry Laborde as Chief Operating Officers of BNP Paribas on the proposal of Mr. Jean-Laurent Bonnafé, to renew Mr. Jean-Laurent Bonnafé, Mr. Yann Gérardin and Mr. Thierry Laborde as executive officers of the Bank and, in agreement with Mr. Jean-Laurent Bonnafé, that Mr. Yann Gérardin and Mr. Thierry Laborde, responsible for assisting the Chief Executive Officer, have the same powers as the latter, the duration of their functions being identical to those of the Chief Executive Officer without exceeding the age limit provided for in article 16 of the Articles of association, if applicable after using the option of extension provided for in this same article;
- proposed to the Board to amend the Implementation procedure for conflicts of interest in relation to loans and other transactions granted to the Members of the management body and their related parties in order to take into account the obligations arising from article 72 of the Belgian law on the status and supervision of credit institutions and brokerage firms;
- proposed to the Board an addendum to the Suitability Policy in order to document the succession process in the event of temporary or permanent incapacity or death of the Chairman of the Board of directors or the Chief Executive Officer;
- reflected on the governance of the management body, as part of a longer-term succession plan;
- reviewed the gender objectives for Senior Manager Positions by 2025;

- reviewed the report on the current agreements entered into between BNP Paribas and the directors in accordance with the Application Procedure relating to current conventions signed under normal conditions approved in 2019 by the Board;
- ascertained the suitability of Key function holders with the Human Resources Department;
- was informed of the implementation and outcome of the controls related to the Corporate Governance Policy applicable to all subsidiaries within BNP Paribas' prudential scope of consolidation;
- was informed of the content of exchanges between the Chairman of the Board of directors and investors about the Bank's governance;
- reviewed the corporate governance report for the 2021 financial year, which it recommended to the Board of directors for approval, including the update of the Suitability policy to take into account the new provisions provided in the CRD V directive and the EBA guidelines on Fit and Proper and internal governance revised in July 2021 (in particular in the area of the fight against money laundering and the financing of terrorism).

The Board:

- extended the term of office of Mr. Jean Lemierre as Chairman of the Board of directors for one year, *i.e.* until the Annual General Meeting called to approve the 2023 financial statements, subject to the renewal of his term of office at the Annual General Meeting of May 2023;
- renewed Mr. Jean-Laurent Bonnafé as Chief Executive Officer of BNP Paribas;
- renewed Messrs. Yann Gérardin and Thierry Laborde as Chief Operating Officers of BNP Paribas on the proposal of Mr. Jean-Laurent Bonnafé;
- renewed Messrs. Jean-Laurent Bonnafé, Yann Gérardin and Thierry Laborde as executive officers of the Bank;
- in agreement with Mr. Jean-Laurent Bonnafé, approved that Messrs. Yann Gérardin and Thierry Laborde, responsible for assisting the Chief Executive Officer, have the same powers as the latter, the duration of their functions being identical to that of the Chief Executive Officer without exceeding the age limit provided for in article 16 of the Articles of association, if applicable after using the option of extension provided for in this same article;
- approved the amendment to the Implementation procedure for conflicts of interest in relation to loans and other transactions granted to the Members of the management body and their related parties in order to take into account the obligations arising from article 72 of the Belgian law on the status and supervision of credit institutions and brokerage firms;
- approved the addendum to the Suitability policy in order to document the succession process in the event of temporary or permanent incapacity or death of the Chairman of the Board of directors or the Chief Executive Officer;
- concluded that all the agreements that were examined were in fact current agreements concluded under normal conditions;
- approved the Corporate Governance report for 2021.

Assessment of the Board of directors

The Committee:

- acknowledged the results of the assessment of the Board of directors conducted by SCA, for the financial year 2021. The assessment confirmed the directors' satisfaction with the functioning of the Board of directors in the context of the ongoing health crisis, as well as the collective and individual behaviour, cohesion and hard work of its members. It noted the consistent quality of discussions within the Board of directors and the reciprocal trust between the directors and in the operational management;
- monitored the implementation of the action plan arising from the assessment conducted in 2021. This has resulted in progress in addressing cybersecurity issues and a shared recognition of the growing importance of ESG issues;
- proposed to the Board an action plan including, in particular, the strengthening of the Board of directors' involvement in the environmental and social field;
- prepared the internal assessment of the Board of directors for the financial year 2022.

The Board approved the action plan following the 2021 assessment.

Code of conduct

The Corporate Governance, Ethics, Nominations and CSR Committee, in accordance with its powers, devoted one meeting to reviewing the monitoring of the deployment of the Code of conduct ("Conduct") within the Group's subsidiaries and geographical areas, particularly in terms of risk assessment, changes in the alert framework and the monitoring of indicators, including the one relating to customer complaints.

The Board of directors continued to monitor the deployment of the Code of conduct within the Group's subsidiaries and geographical areas.

Directors' compensation

In light of the Remuneration Committee's approval of the allocation of compensation paid to individual directors for 2022, the Corporate Governance, Ethics, Nominations and CSR Committee reviewed the actual attendance of each director at the committees and Board in 2022.

Social and Environmental Responsibility

As part of its powers, the Corporate Governance, Ethics, Nominations and CSR Committee reviewed the report on the Group's social and environmental responsibility and proposed some amendments and modifications.

The Committee:

- reviewed the report on the Group's social and environmental responsibility and acknowledged the Group's main progress and achievements in 2021 in the field of economic, social, civic and environmental responsibility as well as the new dashboard designed in connection with the 2025 strategic plan, which aims to accelerate and mobilise all of the Group's business lines around the challenges of sustainable finance;
- was informed in particular of (i) the creation of the Low-Carbon Transition Group bringing together 250 professionals dedicated to financing the energy transition of its clients and (ii) the definition of a financing target of EUR 4 billion contributing to the protection of biodiversity by 2025;
- reviewed the statement made on behalf of the Group's entities under the UK and Australian Modern Slavery Acts ("Modern Slavery Act 2015" in the United Kingdom and "Modern Slavery Act 2018" in Australia) to ensure that their activities are free from human trafficking and slavery. This statement is included in the Group's social and environmental responsibility report;
- was informed of the Group's policy on diversity, equality and inclusion, particularly in terms of gender balance in management bodies and strategic priorities.

The Corporate Governance, Ethics, Nominations and CSR and Internal Control, Risk Management and Compliance Committees, held a joint meeting to review the progress made in terms of methodology, analysis and management of ESG risk factors.

The Board of directors:

- approved the Group's social and environmental responsibility report, including the Extra-Financial Performance Statement, with the amendments proposed by the committee;
- approved the statement made on behalf of the Group's entities on the United Kingdom's "Modern Slavery Act 2015" and Australia's "Modern Slavery Act 2018".

2.f Work performed by the Remuneration Committee and work approved by the Board of directors in 2022

Number of members	Meetings	Attendance rate
4	4	94%

Two members of the Remuneration Committee are also members of the Internal Control, Risk Management and Compliance Committee, promoting therein the work of the Committee on the appropriateness of BNP Paribas' compensation principles and risk policy, thus meeting the requirements of the French Monetary and Financial Code.

The Remuneration Committee:

In respect of the year 2021

- after receiving detailed information on Group employees whose responsibilities within the Bank have a significant impact on the Group's risk profile ("material risk takers"):

- reviewed the issues relating to their remuneration,
- acknowledged the final scope of the Group's material risk takers,
- reviewed the 2022 published report on compensation paid to the Group's material risk takers for 2021,
- reviewed the final parameters for determining the variable compensation package for the Global Markets business line in respect of 2021 performance and was informed of the final package awarded and the way in which individual awards were made for this business line,
- reviewed the list of the highest paid employees in 2021,
- audited the 2021 remuneration of the Group's Head of RISK and Head of Compliance,
- was informed of the remuneration of Key function holders for 2021,
- reviewed, without the presence of the Executive Management, the quantitative and qualitative performance criteria related to the annual variable compensation of the corporate officers and proposed to the Board to approve their variable compensation for 2021,
- approved the information relating to the total compensation and benefits of any kind awarded in respect of financial year 2021 or paid during the same financial year ("Say on pay") to directors and corporate officers of BNP Paribas (SA),
- carried out an annual review of the principles of the compensation policy, and of the compensation, indemnities and benefits of any kind granted in respect of the 2021 performance year to the executive corporate officers of the Group's significant subsidiaries in France falling within the set threshold by law and having delegated these missions to the Committee,
- reviewed the resolution on compensation paid in 2021 to the Group's material risk takers that is subject to an annual advisory vote at the Shareholders' Annual General Meeting of 17 May 2022,
- was informed of the provisional results for the 2021 financial year of the implementation of the reviews of compliance with the Code of conduct, rules and regulations and the assessment and control of risks for the Group's Senior Management Position (SMP) and material risk takers populations,
- was informed of the new retention plan allocated to certain key populations under the GTS 2025 Plan,
- was informed of the summary of the General Inspection report concerning the implementation of the review of Group material risk takers' compensation in respect of 2021,
- was informed of the follow-up to the recommendations issued by the ECB as part of one of its missions carried out in 2020.

<u>In respect of the year 2022</u>

- reviewed the scope of the Group's material risk takers identified as an initial estimate in respect of 2022;
- reviewed the rules on deferred compensation and the variable compensation payment terms applicable to the Group's material risk takers in 2022;
- was informed of the regulatory changes in 2022 and those to come, in particular for its branch in the United Kingdom, and of all the actions carried out by the Group in terms of neutrality of the compensation policy from a gender point of view;
- reviewed the initial parameters used to determine the variable compensation package for Global Markets' employees for the 2022 performance year;
- reviewed the remuneration policy for executive directors and corporate officers regarding performance in respect of the 2022 financial year. In particular, the Committee proposed an increase in the criteria related to CSR performance in the structure of their annual variable compensation as well as an increase in the fixed compensation of the director and Chief Executive Officer from 2022;
- proposed that the Board submit to the vote of the Shareholders' Annual General Meeting of 17 May 2022 the increase in the compensation package for directors from EUR 1.4 million to EUR 1.54 million, for which the latest revaluation dated from 2016 and to take into account market practices in terms of compensation of directors of French and European banking institutions of a size and complexity less than or comparable to BNP Paribas;
- proposed to the Board to modify the terms of compensation of the directors, providing for an increased compensation for the members of the CCIRC given the greater workload of this committee;
- reviewed the allocation of directors' compensation and the amount paid to each of them in respect of the 2022 financial year on the basis of an audit of each director's actual presence at Board and Committee meetings.

<u>In respect of the year 2023</u>

- proposed to maintain unchanged the terms and conditions of directors' compensation.

The Board:

- was informed of all the Remuneration Committee's work;
- examined and approved, without the presence of the Chief Executive Officer and the Chief Operating Officers, the assessment made by the committee of the quantitative and qualitative criteria related to the annual variable compensation of

the executive corporate officers for the performance year 2021;

- approved the principles of the remuneration policies for directors and corporate officers submitted for approval to the Annual General Meeting;
- approved the information relating to the total remuneration and benefits of any kind awarded in respect of the 2021 financial year or paid during the same financial year ("Say on pay") to the directors and corporate officers of BNP Paribas (SA) and submitted for the approval of the Annual General Meeting;
- heard the committee Chairman's report on the appropriateness of the remuneration of the Group's Head of RISK and Head of Compliance for the 2021 performance year;
- was informed by the committee Chairman of the approach used to identify those employees whose professional activities have a significant impact on the Company's risk profile and the principles for their compensation as proposed by Executive Management for the 2022 performance year;
- approved, without the presence of the Chief Executive Officer and the Chief Operating Officers, the remuneration policy for directors and corporate officers for the financial year 2022;
- approved the submission to the vote of the Shareholders' Annual General Meeting of 17 May 2022, to increase the compensation package for directors from EUR 1.4 million to EUR 1.54 million as of that date;
- modified the terms and conditions of directors' compensation as from the 2022 financial year;
- approved the individual split of the compensation allocated to the directors for the financial year 2022;
- maintained unchanged the terms and conditions of directors' compensation for 2023.

INTERNAL RULES OF THE BOARD OF DIRECTORS

PREAMBLE

The rules concerning:

- the Board of directors;
- the members of the Board of directors, including their rights and obligations;
- the Board of directors' Committees,

are set by the statutory and regulatory provisions, the Company's Articles of Association, and these rules (in addition to these Internal rules of the Board of directors, there is the Policy on the suitability of Members of the management body and Key function holders mentioned in 1.3 below).

The Board of directors also takes into account the French market guidelines concerning corporate governance and, in particular, the provisions of the corporate governance Code for listed companies published by the French employers' organisations *Association française des entreprises privées* (Afep) and the *Mouvement des entreprises de France* (MEDEF), hereinafter called the Afep-MEDEF Code, to which BNP Paribas (the **"Company"**) refers.

The Board of directors is a collegial body that collectively represents all shareholders and acts in all circumstances in the corporate interests of the Company.

The Board of directors is assisted by specialised committees:

- Financial Statements Committee;
- Internal Control, Risk Management and Compliance Committee;
- Corporate Governance, Ethics, Nominations and CSR Committee; and
- Remuneration Committee;
- as well as by any *ad hoc* committee.

PART ONE – THE BOARD OF DIRECTORS, COLLEGIAL BODY

ARTICLE 1. DUTIES OF THE BOARD OF DIRECTORS

The Board of directors discusses any question coming within the scope of its statutory and regulatory duties and contributes to promoting the corporate values aimed, in particular, to ensuring that the conduct of BNP Paribas' activities by its employees complies with the highest ethical requirements in order to protect the reputation of the Bank.

In particular and non-exhaustively, the Board of directors is competent in the following areas:

1.1. ORIENTATIONS AND STRATEGIC OPERATIONS

The Board of directors:

- determines BNP Paribas' s business orientations and supervises their implementation by the Executive Management, taking the social and environmental challenges of BNP Paribas' activities into consideration;
- subject to the powers expressly allocated to the shareholders' meetings and within the limit of the corporate purpose, it handles any issue concerning the smooth running of the Company and settles by its decisions any matters concerning it;
- gives its prior approval with respect to all investment or disinvestment decisions (other than portfolio transactions) in an amount in excess of EUR 250 million, and any proposal to acquire or dispose of shareholdings (other than portfolio transactions) in excess of that threshold, submitted to it by the Chief Executive Officer. It is also regularly informed by the Chief Executive Officer of significant transactions which fall below this limit;
- gives its prior approval to any significant strategic operation which falls outside the approved orientations;
- promotes long-term value creation by BNP Paribas.

1.2. CODE OF CONDUCT

The Board of directors and the Executive Management have developed a Code of conduct of BNP Paribas Group which defines the standards of conduct in line with the values and missions determined by the Bank. This Code, which shall be integrated by each business line and each employee, governs the actions of each employee and guides the decisions at every level of the organisation. For this purpose, the Board ensures the Executive Management implements this Code into business lines, countries and regions.

1.3. GOVERNANCE, INTERNAL CONTROL AND FINANCIAL STATEMENTS

The Board of directors:

- appoints the Chairman, the Chief Executive Officer (CEO) and, on the recommendation of the latter, the Chief Operating Officer(s) (COO);
- sets any limits to the powers of the Chief Executive Officer and of the Chief Operating Officer(s);
- examines the system of governance, which includes, in particular, a clear organisational structure with well defined, transparent and consistent sharing of responsibilities, efficient processes to identify, manage, monitor and report the risks to which the Company is or might be exposed to; it periodically assesses the efficiency of this governance system and ensures that corrective measures have been taken to remedy any failings;
- determines the orientations and controls their implementation by the actual managers of the monitoring measures in order to guarantee an effective and prudent management of the Company, including the segregation of duties in the organisation of the Company and the prevention of conflicts of interests;
- ensures the fulfilment of the obligations which are incumbent on it concerning internal control, and, in particular, examines, at least twice a year, the activity and the results of the internal control;
- approves the management report and the corporate governance report attached to it;
- carries out the controls and verifications which it deems appropriate;
- ensures that the Chief Executive Officer and/or Chief Operating Officer(s) implement a policy of non-discrimination and of diversity including gender balance in management bodies;
- ensures the implementation of process for preventing and detecting corruption and influence-peddling for which it receives all the information required for that purpose;
- examines and closes the financial statements and ensures their sincerity;
- reviews, at least once a year, the draft budgets and the drafts of the various statutory and regulatory reports which the Chief Executive Officer submits to it;
- prepares a suitability policy that defines the assessment of Members of the management body and of Key function holders (the "Policy on the suitability of Members of the management body and Key function holders"); the Board of directors (and its committees) apply this policy and revise it regularly to account in particular for any regulatory changes;
- gives its approval prior to the dismissal of the Heads of the following functions: Risk Management, Compliance, or the General Inspection.

1.4. RISK MANAGEMENT

The Board of directors:

- regularly examines, in connection with the strategy it has defined, the opportunities and risks, such as financial, legal, operational, social, and environmental risks, those linked to money laundering and terrorist financing issues, as well as the measures taken as a result;
- as such, approves and regularly reviews the strategies and policies governing the taking, management, monitoring and reduction of the risks to which the Company is or might be exposed to, including the risks caused by the economic

environment. In particular, the Board of directors approves the global risk limits and puts into place a specific process organising its information and, as the case may be, the referral of the matter to it in the event these limits are exceeded.

1.5. COMMUNICATION

The Board of directors:

- ensures that the financial information disclosed to the shareholders and the markets is of high quality;
- controls the process of financial publication and communication, quality and reliability of the information intended to be published and communicated by the Company.

1.6. REMUNERATION

The Board of directors:

- allocates, without prejudice to the powers of the Annual General Meeting, the directors' attendance fees;
- adopts and regularly reviews the general principles of the remuneration policy of the Group which relates, in particular, to the categories of staff including the risk takers, staff engaged in control functions and any employee who, given his overall income, is in the same remuneration bracket as those whose professional activities have an impact on the risk profile of the Group;
- decides, without prejudice to the powers of the Annual General Meeting, the remuneration of the managers who are corporate officers (*dirigeants mandataires sociaux*), in particular their fixed and variable remuneration as well as any other means of remuneration or benefit in kind.

Executive corporate officers are not present during the discussions of the Board of directors and the Remuneration Committee regarding their own compensation, nor do they participate in the vote.

1.7. RESOLUTION

The Board of directors settles the preventive recovery plan of the institution, as well as the items necessary to establish the resolution plan communicated to the competent regulatory authorities.

ARTICLE 2. FUNCTIONING OF THE BOARD OF DIRECTORS

2.1. ORGANISATION OF MEETINGS

The Board of directors meets at least four times a year and as often as circumstances or BNP Paribas' interest requires this.

Notices of meetings may be communicated by the Secretary of the Board.

The Secretary of the Board prepares all of the documents necessary to the Board meetings and arranges to place all of the documentation at the disposal of the directors and other participants in the meetings.

An attendance register is kept, which is signed by the directors taking part in the meeting. It mentions the names of the directors considered as present.

The Board of directors' decisions are recorded in minutes by the Secretary of the Board which are entered into a special register, in accordance with the laws in force. The Secretary of the Board of directors is authorised to issue and certify copies or excerpts of the Board minutes. Each set of Board minutes must be approved at a subsequent Board meeting.

The decisions of the Board of directors are carried out either by the Chief Executive Officer, or a Chief Operating Officer, or by any special representative appointed by the Board of directors.

2.2. MEANS OF PARTICIPATION

Directors taking part in the meeting by videoconference or telecommunication means enabling their identification, guaranteeing their effective participation, transmitting at least the voices of the participants, and meeting, through their technical features, the needs of confidentiality, of continuous and simultaneous retransmission, with the exception of Board meetings closing out the financial statements and the annual report, shall be deemed to be present for the purpose of calculating both the quorum and the majority. The minutes state, as the case may be, the occurrence of any technical incidents if they disturbed the conduct of the meeting.

PART TWO – THE MEMBERS OF THE BOARD OF DIRECTORS

ARTICLE 3. COMPOSITION, INFORMATION AND SKILLS

3.1. CHAIRMAN OF THE BOARD OF DIRECTORS

3.1.1. Relations with the Company's other bodies and with parties outside the Company

In relations with the Company's other bodies and with parties outside the Company, the Chairman of the Board of directors alone has the power to act on behalf of the Board of directors and to express himself in its name, except in exceptional circumstances, and except where specific assignments or duties are entrusted by the Board of directors to another director.

The Chairman makes sure that he maintains a close and trusting relationship with Executive Management. He provides him with his assistance and his advice while respecting his executive responsibilities. He organises his activities so as to ensure his availability and put his experience at the Company's service. He contributes to promoting the values and image of the Company, both within the Group and externally.

Coordinating closely with Executive Management, he can represent the Group in its high level relationships, and particularly with major clients, public authorities and the institutions on national, European and international levels.

He ensures that the quality of relations with shareholders is maintained, in close coordination with the work of Executive Management in this area. He reports on this mission to the Board.

He ensures that principles of corporate governance are defined and implemented.

The Chairman is the custodian of the proper functioning of the Board of directors of BNP Paribas. As such:

- with the support of the Corporate Governance, Ethics, Nominations and CSR Committee, with the approval of the Board of directors and of the Annual General Shareholders' Meeting, where appropriate, he endeavours to build an efficient and balanced Board, and to manage replacement and succession plan processes related to the Board of directors and nominations on which it will have to opine;
- he can attend all committee meetings and can add any subject to the agenda of the latter which he considers to be relevant;
- he ensures that the directors have the documentation and information necessary to carry out their duties in a timely manner and in a clear and appropriate form.

3.1.2. Organisation of the work of the Board of directors

The Chairman organises and manages the work of the Board of directors in order to allow it to carry out all of its duties. He sets the timetable and agenda of Board meetings and convenes them.

He ensures that the work of the Board of directors is well organised, in a manner conducive to constructive discussion and decision-making. He directs the work of the Board of directors and coordinates its work with that of the specialised committees.

He sees to it that the Board of directors devotes an appropriate amount of time to issues relating to the future of the Company and particularly its strategy.

The Chairman is kept regularly informed by the Chief Executive Officer and other members of the Executive Management of significant events and situations relating to the business of the Group, particularly those relating to: deployment of strategy, organisation, investment or disinvestment projects, financial transactions, risks, financial statements.

The Chief Executive Officer provides the Chairman with all information required under French law regarding the internal control report.

He may ask the Chief Executive Officer or any manager, and in particular, the heads of the control functions, for any information likely to assist the Board and its committees in the carrying out of their duties.

He may hear the Statutory Auditors in order to prepare the work of the Board of directors and of the financial statements' Committee.

3.2. DIRECTORS

They undertake to act in the corporate interest of BNP Paribas and to comply with all of the provisions of these Internal rules that are applicable to them, and more specifically the procedures of the Board of directors.

3.3. OTHER PARTICIPANTS

3.3.1. Non-voting director (censeurs)

The non-voting directors attend the meetings of the Board and of the specialised committees in an advisory capacity.

3.3.2. Statutory Auditors

The Statutory Auditors attend the meetings of the Board and of the specialised committees which examine or close the annual or interim financial statements and may attend the meetings of the Board and of the specialised committees when the Chairman of the Board considers it necessary.

3.3.3. Persons invited

The Board can decide to invite one or several persons to attend the meetings.

3.3.4. Representative of the Central Works Committee

The representative of the Central Works Committee attends the meetings of the Board in an advisory capacity.

3.3.5. Secretary of the Board

The Secretary of the Board is appointed by the Board and attends the meetings of the latter.

3.3.6. Heads of the control functions

If necessary, in the case of particular events affecting or likely to affect BNP Paribas, the heads of the control functions can report directly to the Board and, as the case may be, to its committees, to express their concerns without referring to the actual managers.

The individuals specified in point 3.3 are subject to the same rules of ethics, confidentiality and professional conduct as the directors.

3.4. ACCESS TO INFORMATION

3.4.1. Information and documentation

For the purpose of efficiently participating in the Board of directors' meetings and making enlightened decisions, each director may ask that the Chairman or the Chief Executive Officer communicates to him all documents and information necessary to perform his duties, if these documents are useful for making decisions and are related to the Board of directors' powers.

Requests are sent to the Secretary of the Board of directors who informs the Chairman thereof.

When the Secretary of the Board of directors considers this preferable, for reasons of convenience or confidentiality, the documents thus placed at the disposal of the directors as well as of any person attending the meetings of the Board are consulted through the Secretary of the Board or through the competent employee of the Group.

3.4.2. Systems

The placing at disposal of the directors or of any person attending the Board meetings of all of the documentation with a view to meetings of the Board may be done by any means, including dematerialised. In this case, all the measures of protection considered necessary are taken to protect the confidentiality, the integrity and the availability of the information and each member of the Board or any person who has received the documentation is responsible not only for the systems and media thus placed at disposal but also for their access.

3.5. TRAINING, INDIVIDUAL AND COLLECTIVE SKILLS

The directors of BNP Paribas possess, both individually and collectively, the expertise, experience, skills, understanding and personal qualities necessary, notably in terms of professionalism and integrity, to properly perform their duties in connection with each of the significant activities of BNP Paribas and guaranteeing efficient governance and supervision.

The directors shall ensure that their knowledge is kept updated in compliance with the Policy on the suitability of Members of the management body and Key function holders.

The directors representing employees and the director representing employee shareholders are given time dedicated to training determined by the Board in accordance with the regulations in force. At the end of the training, the training centre chosen by the Board must issue a certificate of regular attendance, which the director must remit to the Secretary of the Board.

ARTICLE 4. OBLIGATIONS

4.1. HOLDING AND KEEPING OF BNP PARIBAS SHARES

Every director appointed by the General Shareholders' Meeting must personally hold 1,000 shares. The director must hold all of the shares within twelve months of his appointment. At the expiry of this period, every director concerned shall make sure to keep the minimum number of BNP Paribas' shares throughout his term of office.

The directors undertake not to engage in any individual hedging or insurance strategies to cover their risk on such shares.

This obligation does not concern directors representing employees and director representing employee shareholders.

4.2. ETHICS – CONFIDENTIALITY

4.2.1. Ethics

4.2.1.1. Availability and regular attendance

The members of the Board of directors shall devote the time and the effort necessary to carry out their duties and responsibilities, in compliance with the Policy on the suitability of Members of the management body and Key function holders.

The directors representing employees and the director representing employee shareholders are given a preparation time determined by the Board in accordance with the Guidelines on the assessment of the suitability of Members of the management body and Key function holders.

4.2.1.2. Independence and loyalty

Every member of the Board of directors shall at all times maintain his or her independence of mind, in compliance with the Policy on the suitability of Members of the management body and Key function holders.

He shall act with loyalty towards the other directors, shareholders and BNP Paribas.

He shall refuse any benefit or service liable to compromise his independence.

4.2.1.3. Duty of vigilance

Every member of the Board of directors is bound by a duty of vigilance with respect to the keeping, use and, as the case may be, the return of the systems, documents and information placed at disposal.

4.2.2. Confidentiality

Any director and any person participating in the work of the Board is bound by an obligation of absolute confidentiality about the content of the discussions and decisions of the Board and of its committees as well as the information and documents which are presented therein or which are provided to them, in any form whatsoever.

Except as provided by law, he is prohibited from communicating to any person outside of the Board of directors any information that has not been made public by BNP Paribas.

4.3. ETHICAL CONDUCT – LIMITATION ON DIRECTORSHIPS – CONFLICTS OF INTERESTS – PERSONAL DECLARATIONS

4.3.1. Ethical conduct

If directors have any questions related to ethical conduct, they may consult the head of the Group Compliance Function.

The legislation relating to insider trading applies particularly to directors both in a personal capacity and when carrying out their duties within companies that hold shares in BNP Paribas. They are required, in particular, to respect the legal requirements governing the definition, communication and exploitation of privileged information, the principal provisions of which are communicated to them when they take directorship.

Directors can only deal in securities of BNP Paribas on a personal basis during the period of six-weeks beginning on the day after the publication of the quarterly and annual financial statements, or after the publication of a press release on the Company's running, unless they are in possession during that period of information that puts them in the position of an insider with respect to the stock exchange regulations.

Directors shall refrain from any transactions that could be considered as speculative, and in particular from leveraged purchases or short sales, or short-term trading.

The director, as well as persons with close connections with him, are under the obligation to declare to the French Financial Markets Authority (*Autorité des marchés financiers* – AMF), which ensures the publication thereof, and to BNP Paribas, the transactions that they execute in BNP Paribas shares and the financial instruments related thereto.

4.3.2. Limitation on directorships

The director complies with the statutory and regulatory provisions which are applicable to him or her, or which are applicable to BNP Paribas, concerning limitation on directorships, as well as the Policy on the suitability of Members of the management body and Key function holders.

4.3.3. Conflicts of interests

The director complies with the applicable statutory and regulatory provisions regarding conflicts of interests – in particular the so-called "related-party agreements" (*conventions réglementées*) regime as well as with the Policy on the suitability of Members of the management body and Key function holders.

Whatever the circumstances, in the event of breach of the obligations with respect to conflict of interests by a director, the Chairman of the Board of directors shall take all the statutory measures necessary in order to remedy it. He can, furthermore, keep the relevant regulators informed of such acts.

4.3.4. Personal declarations

The director undertakes to inform the Secretary of the Board as soon as possible of any change in his personal situation (change of address, appointment, directorships, duties carried out, or criminal, civil, or administrative convictions, etc.).

In particular, and in compliance with the Policy on the suitability of Members of the management body and Key function holders, the director shall inform, as soon as possible, the Chairman of the Board of directors of any criminal or civil conviction, management prohibition, administrative or disciplinary sanction, or measure of exclusion from a professional organisation, as well as any proceedings liable to entail such sanctions against him or her, any dismissal for professional misconduct, or any dismissal from a directorship of which he or she may be the subject. Similarly, the director informs the Chairman of the Board of directors of any criminal or civil order entered against it, administrative or disciplinary sanction or measure of exclusion from a professional organisation, as well as of any Court-ordered reorganisation or liquidation measure of which a company of which he is the manager, shareholder or partner is the subject or would be liable to be the subject.

ARTICLE 5. REMUNERATION OF DIRECTORS AND NON-VOTING DIRECTORS (CENSEURS)

The overall amount of remuneration given to the directors is determined by the General Shareholders' Meeting.

The individual amount of remuneration given to directors is determined by the Board of directors pursuant to a proposal by the remuneration Committee. It comprises a predominant variable portion based on actual participation in meetings, regardless of the means. Directors residing abroad receive an increased amount, except where they may participate in meetings of the Board of directors by videoconference or telecommunications means.

Actual participation in the committees entitles committee members to an additional remuneration, the amount of which may differ depending on the committees. Committee members receive this additional remuneration for their participation in each different Committee. The Chairmen of Committees also receive an additional remuneration.

The remuneration of the non-voting directors is determined by the Board of directors pursuant to a proposal of the Remuneration Committee.

PART THREE – THE BOARD OF DIRECTORS' SPECIALISED COMMITTEES

To facilitate the performance of their duties by BNP Paribas' directors, specialised committees are created within the Board of directors.

ARTICLE 6. COMMON PROVISIONS

6.1. COMPOSITION AND SKILLS

They consist of members of the Board of directors who do not carry out management duties within the Company. They include the required number of members who meet the criteria required to qualify as independent, as recommended by the Afep-MEDEF Code. The members of the committees have the knowledge and skills suited to carry out of the missions of the committees in which they participate.

The remunerations Committee includes at least one director representing the employees.

Their remits do not reduce or limit the powers of the Board of directors.

The Chairman of the Board of directors sees to it that the number, missions, composition, and functioning of the committees are adapted at all times to the statutory and regulatory provisions, to the Board of directors' needs and to the best corporate governance practices.

By decision of the Board, the internal control, Risk management and compliance Committee (CCIRC), the remunerations Committee (RemCo), the Corporate Governance, Ethics, Nominations and CSR Committee (CGEN) may, in accordance with the provisions of Article L. 511-91 of the French Monetary and Financial Code (*Code monétaire et financier*) ensure their missions for the companies of the Group under the supervision of the regulator on a consolidated or sub-consolidated basis.

6.2. MEETINGS

The committees shall meet as often as necessary.

6.3. MEANS PLACED AT THE DISPOSAL OF THE COMMITTEES

They may call upon outside experts when needed.

The Chairman of a Committee may ask to hear any officer within the Group, regarding issues falling within this Committee's jurisdiction, as defined in the present Internal rules.

The Secretary of the Board prepares all of the documents necessary to the meetings of the specialised committees and organises the placing of the documentation at the disposal of the directors and other participants in the meetings.

This documentation can be placed at disposal by any means, including dematerialised. In this case, all the measures of protection considered necessary are taken for the purposes of protecting the confidentiality, integrity and the availability of the information and each member of the specialised Committee concerned or any person who has received the documentation is responsible not only for the systems and media and their provision but also for their access.

6.4. OPINIONS AND MINUTES

They express opinions intended for the Board of directors. The Chairmen of committees, or in case of their impediment another member of the same committee, present a verbal summary of their work at the next Board of directors' meeting.

Written reports of committees' meetings are prepared by the Secretary of the Board and communicated, after approval at a subsequent meeting, to the directors who so request.

ARTICLE 7. THE FINANCIAL STATEMENTS COMMITTEE

7.1. MISSIONS

In accordance with the provisions of the French Commercial Code, the Committee ensures the monitoring of the issues concerning the preparation and verification of the accounting and financial information.

7.1.1. Monitoring of the process of preparation of the financial information

The Committee is tasked with analysing the quarterly, half-yearly and annual financial statements issued by the Company in connection with the closing of financial statements and obtaining further explanations of certain items prior to presentation of the financial statements to the Board of directors.

The Committee shall examine all matters relating to these accounts and financial statements: the choices of accounting principles and policies, provisions, analytical results, prudential standards, profitability indicators, and all other accounting matters that raise methodological issues or are liable to give rise to potential risks.

It makes, as the case may be, recommendations, in order to ensure integrity of the elaboration process of the financial information.

7.1.2. Monitoring of the efficiency of the internal control systems and of risk management concerning accounting and financial matters

The Committee shall analyse, at least twice a year, the summary of the operations and the results of the internal accounting and financial control, as well as those originate from controls on the elaboration process and the processing of accounting, financial and extra-financial information, based on the information communicated to it by the Executive Management. It shall be briefed of incidents revealed by the accounting and financial internal control, reported on the basis of the thresholds and criteria defined by the Board of directors and shall report on its findings to the Board of directors.

It is informed by the Chairman of the Board of directors of any possible failure to implement corrective measures decided within the framework of the accounting and financial internal control system that has been brought to his direct knowledge by the head of periodic control and reports on its findings to the Board of directors.

7.1.3. Monitoring of the statutory auditing of the annual financial statements and of the consolidated financial statements by the Statutory Auditors as well as of the independence of the Statutory Auditors

The Committee shall steer the procedure for selection of the Statutory Auditors, express an opinion on the amount of fees charged for conducting the legal auditing engagements and report to the Board of directors on the outcome of this selection process.

It shall review the Statutory Auditors' audit plan, together with their recommendations and their monitoring.

It shall be notified on a yearly basis of the amount and breakdown of the fees paid by the BNP Paribas Group to the Statutory Auditors and the networks to which they belong, calculated using a model approved by the Committee. It shall ensure that the amount or the portion of the audit firms or the networks' revenues that BNP Paribas represents is not likely to compromise the Statutory Auditors' independence.

Its prior approval shall be required for any engagement entailing total fees of over EUR 1 million (before tax). The Committee shall approve, *a posteriori*, all other engagements, based on submissions from the Finance Department. The Committee shall validate the Finance Department's fast-track approval and control procedure for all "non-audit" engagements entailing fees of over EUR 50,000. The Committee shall receive, on a yearly basis from the Finance Department, a report on all "non-audit" engagements carried out by the networks to which the Group's Statutory Auditors belong.

It receives from the Statutory Auditors a written report on their main observations concerning the weaknesses of internal control and reviews it, as well as most significant recommendations issued in the framework of their mission and reviews it. It takes notes of the most significant statements and recommendations issued by the internal audit in the framework of their missions regarding accounting and financial information.

Each Statutory Auditor shall report on a yearly basis to the Committee on its internal control system for guaranteeing its independence, and shall provide a written statement of its independence in auditing the Group.

The Committee accounts for the statements and conclusions of the *Haut Conseil des Commissaires aux comptes* (H3C) resulting from the controls provided by the H3C in the professional activity of Statutory Auditors.

At least twice a year, the Committee shall devote part of a meeting to a discussion with the team of Statutory Auditors, without any member of the Company's Executive Management being present.

The Committee meets in the presence of the team of Statutory Auditors, to review quarterly, half-yearly and annual financial statements.

However, the Statutory Auditors shall not attend all or part of Committee meetings dealing with their fees or their re-appointment.

The Statutory Auditors shall not attend all or part of Committee meetings dealing with specific issues that concern a member of their staff.

Except in the event of exceptional circumstances, the files containing the quarterly, half-yearly and annual results and financial statements shall be sent to Committee members at least three days prior to the Committee meetings.

Where questions of interpretation of accounting principles arise in connection with quarterly, half-yearly and annual results, and involve choices with a significant impact, the Statutory Auditors and Finance shall submit, on a quarterly basis, a memorandum to the Committee analysing the nature and significance of the issues at play, presenting the pros and cons of the various possible solutions and explaining the rationale for the choices ultimately made.

They present, at least twice a year, a note on the works on certification of the financial statements. Based on it, the Committee reports to the Board on the results of this mission and on the way this mission has contributed to the integrity of the financial information and on his own role in it.

7.2. CHAIRMAN'S REPORT

The Committee shall review that part of the draft of the Chairman's report on internal control procedures relating to the preparation and processing of accounting and financial information.

7.3. HEARINGS

With regard to all issues falling within its jurisdiction, the Committee may, at its initiative, hear the heads of finances and accounting of the Group, as well as the head of Asset/liability management.

The Committee may ask to hear the head of Finances Group with regard to any issue within its jurisdiction, for which he may be held liable, or the Company's management may be held liable, or that could call into question the quality of accounting and financial information disclosed by the Company.

ARTICLE 8. THE INTERNAL CONTROL, RISK MANAGEMENT AND COMPLIANCE COMMITTEE

8.1. MISSIONS

8.1.1. Missions concerning the global risk strategy

The Committee advises the Board of directors on the adequacy of the global strategy of the Company and the overall current and future risk appetite. It assists the Board of directors when the latter verifies the implementation of this strategy by the actual managers and by the Head of risk management.

For this purpose, the Committee examines the key orientations of the Group's risk policy, including social and environmental orientations, based on measurements of the risk and profitability of the operations reported to it, in accordance with the regulations in force, as well as any specific issues related to these matters and methods.

In the event that a global risk limit is exceeded, a procedure to refer the matter to the Board of directors is provided for: the Executive Management informs the Chairman of the Committee, who can decide to convene the Committee or to request the convening of the Board of directors.

8.1.2. Missions concerning the examination of the prices of the products and services proposed to customers

In the framework of its mission and according to the terms it shall define, the Committee examines whether the prices of the products and services proposed to customers are compatible with the risk strategy. Where prices do not properly reflect the risks, it presents to the Board of directors an action plan to remedy this.

8.1.3. Missions concerning remuneration

Without prejudice to the missions of the Remunerations Committee, the Risk Committee examines whether the incentives provided for by the policy and the remuneration practices of the Company are compatible with its situation with respect to the risks to which it is exposed, its capital, its liquidity and the probability and the spreading over time of the expected profits.

To carry out this mission, the Chairman of the Committee shall attend the Remunerations Committee's meeting and presents to it the position upheld.

8.1.4. Missions concerning internal control and compliance

The Committee also reviews all compliance-related issues, particularly those in the areas of reputation risk or professional ethics.

The Committee analyses the risk measurement and monitoring report. Twice a year it examines the internal control operations and findings (excluding accounting and financial internal control, which is the responsibility of the Financial Statements Committee) based on the information provided to it by Executive Management and the reports presented to it by the heads of permanent control, compliance and periodic controls. It reviews the Company's exchanges of correspondence with the Secretariat General of the Prudential Control and Resolution Authority (*Autorité de contrôle prudentiel et de résolution* – ACPR).

The Committee is briefed on incidents revealed by internal control that are reported on the basis of the thresholds and criteria defined by the Board of directors and reports on its findings to the Board of directors.

It analyses the status of recommendations made by the General Inspection unit that were not implemented. It is informed by the Chairman of the Board of directors of any possible failure to implement corrective measures decided within the framework of the internal control, of which it would have been informed directly by the head of periodic control and reports on its findings to the Board of directors.

8.2. HEARINGS

It proceeds with the hearing, excluding the presence of the Executive Management, of the heads of the Group control functions (General Inspection, Compliance, RISK and LEGAL).

It presents the Board of directors with its assessment concerning the methods and procedures employed.

It expresses its opinion concerning the way these functions are organised within the Group and is kept informed of their work programme.

8.3. ACCESS TO THE INFORMATION

The Committee has all the information about the situation of the Company with respect to risks. It may, if this is necessary, use the services of the Head of risk management or of outside experts.

8.4. MEETINGS COMMON TO THE FINANCIAL STATEMENTS COMMITTEE AND THE INTERNAL CONTROL, RISK MANAGEMENT AND COMPLIANCE COMMITTEE

The Financial Statements Committee and the Internal Control, Risk Management and Compliance Committee shall meet at the request of the Chairman of the Internal Control, Risk Management and Compliance Committee, or at the request of the Chairman of the Financial Statements Committee or at the request of the Chairman of the Board of directors.

In that context, the members of these committees:

- shall be briefed of the mission plan of the General Inspection and of the audit plan of the Statutory Auditors and shall prepare the work of the Board of directors in assessing the risk policies and management systems;
- deal with common subjects concerning the risks and financial impacts policy (including provisioning). They carry out, in particular, a systematic review of the risks that can in the future have a significant impact on the financial statements.

This meeting shall be chaired by the Chairman of the Financial Statements Committee.

ARTICLE 9. THE CORPORATE GOVERNANCE, ETHICS, NOMINATIONS AND CSR COMMITTEE

9.1. MISSIONS CONCERNING CORPORATE GOVERNANCE

The Committee is tasked with monitoring corporate governance issues. Its role is to help the Board of directors to adapt corporate governance practices within BNP Paribas and to assess its functioning.

It ensures the follows up on a regular basis of the evolution in the governance disciplines at the global, European and national levels. At least once a year, it presents a summary thereon to the Board of directors. It selects measures that are suitable for the Group and which are likely to bring its procedures, organisation and conduct in line with best practice in this area.

It examines the draft report on corporate governance and all other documents required by applicable laws and regulations.

The Committee is in charge of the follow up of questions related to the social and environmental responsibility (“CSR”). For this purpose, it handles more specifically the Group’s contribution to sustainable economic development, in particular by an ethical financing of the economy, by promoting the development and the commitment of the employees, by the protection of the environment and the fight against climate change, as well as the positive impact of the Group in the society.

9.2. CODE OF CONDUCT

The Committee carries out regular monitoring of the update of BNP Paribas Group’s Code of conduct.

9.3. MISSIONS CONCERNING THE IDENTIFICATION OF, SELECTION OF, AND SUCCESSION PLAN FOR DIRECTORS, COMMITTEE MEMBERS, AND NON-VOTING DIRECTORS (CENSEURS)

For the identification of, selection of, and succession plan for the directors, the Committee applies the principles and procedure described in the Policy on the suitability of Members of the management body and Key function holders. The Committee regularly reviews this policy and proposes any amendments it deems advisable to the Board of directors.

The Committee sets an objective to achieve with respect to gender balance on the Board of directors. It draws up a policy aimed at achieving this objective. This objective and this policy, once set, are approved by the Board of directors.

As the case may be, the Committee proposes to the Board of directors the appointment of the non-voting directors.

9.4. MISSIONS CONCERNING THE ASSESSMENT OF THE BOARD OF DIRECTORS

The Committee assesses periodically, and at least once a year, the balance and diversity of the Board in compliance with the Policy on the suitability of Members of the management body and Key function holders.

Furthermore, an assessment of the Board of directors is made by a firm of external expert advisors every three years.

9.5. MISSIONS CONCERNING THE SELECTION OF, APPOINTMENT OF, AND SUCCESSION PLAN FOR THE CHAIRMAN, MEMBERS OF EXECUTIVE MANAGEMENT, AND KEY FUNCTION HOLDERS

The Committee periodically examines the Policy on the suitability of Members of the management body and Key function holders regarding the selection of, appointment of, and succession plan for the executive officers, the Chief Operating Officer(s), the Chairman, and the Key function holders as defined in this Policy, and makes recommendations in the matter.

The Committee contributes to the selection and appointment of, as well as the establishment of succession plans for, the Chairman and members of the Executive Management, pursuant to the Policy on the suitability of Members of the management body and Key function holders.

With regard to the Key function holders, it ensures that the Policy on the suitability of Members of the Management body and Key function holders is applied by Executive Management.

9.6. MISSIONS CONCERNING THE ASSESSMENT OF THE CHAIRMAN, CHIEF EXECUTIVE OFFICER, AND CHIEF OPERATING OFFICER(S)

The Committee assesses the action of the Chairman.

It makes an assessment of the performance of the Chief Executive Officer and of the Chief Operating Officer(s) in the light of the strategic directions of the business established by the Board of directors and taking into consideration their capacities for anticipation, decision, organisation and exemplarity.

9.7. MISSIONS CONCERNING THE INDEPENDENCE OF THE DIRECTORS

The Committee is tasked with assessing the independence of the directors, within the meaning of the Afep-MEDEF Code, and reporting its findings to the Board of directors.

9.8. MISSIONS CONCERNING THE GENERAL BALANCE OF THE BOARD OF DIRECTORS

The Committee ensures that the Board of directors is not dominated by one person or, a small group of persons in a manner that is detrimental to the interests of the Company. For this purpose, it applies the Policy on the suitability of Members of the management body and Key function holders.

ARTICLE 10. THE REMUNERATION COMMITTEE

The Committee prepares the decisions that the Board of directors approves concerning remuneration, in particular that which has an effect on risk and the management of risks.

The Committee makes an annual examination:

- of the principles of the remuneration policy of the Company;
- of the remuneration, allowances and benefits of any kind granted to the directors and corporate officers of the Company;
- of the remuneration policies of the categories of staff, including the executive managers, risk takers, and staff engaged in control functions and any employee, who given his overall income, is in the same remuneration bracket as those whose professional activities have a material impact on the risk profile of the Company or of the Group.

The Committee directly controls the remuneration of the Head of RISK and of the Head of Compliance.

Within the framework of the missions described above, the Committee prepares the work of the Board of directors on the principles of the remuneration policies, in particular concerning Group staff whose professional activities have a material impact on the Group's risk profile, in accordance with the regulations in force.

It is tasked with studying all issues related to the personal status of the directors and corporate officers, and in particular the remuneration, the amount of retirement benefits and the allotment of subscription or purchase options to the Company's shares, as well as the provisions governing the departure of the members of the Company's management or representational bodies.

It examines the conditions, the amount and the distribution of the subscription or purchase stock option plans. Similarly, it examines the conditions for the allotment of free shares.

With the Chairman, it is also within its remit to assist the Chief Executive Officer with any matter relating to the remuneration of senior executives that the latter might submit to it.

GUIDELINES ON THE ASSESSMENT OF THE SUITABILITY OF MEMBERS OF THE MANAGEMENT BODY AND KEY FUNCTION HOLDERS

I. Background and definitions

a. Background

The purpose of the Policy on the suitability of Members of the management body and Key function holders is, while complying with the legal and regulatory provisions applicable to the Company, to specify and detail the procedures for implementing the provisions of the Internal Rules and of the regulations applicable to BNP Paribas in the French Monetary and Financial Code (hereinafter "CoMoFi"), the European Banking Authority ("EBA") Guidelines on the assessment of the suitability of Members of the management body and Key function holders (the "Fit and Proper Guidelines") for which the revision has been published on 2 July 2021, and on Internal governance, from the comply or explain process (defined below).

Pursuant to these provisions, these guidelines cover the following topics:

I. Identification of, selection of, and succession plan for Members of the management body and Key function holders:
- **a.** Identification of, selection of, and succession plan for directors,
- **b.** Identification of, selection of, and succession plan for the Chief Executive Officer and Chief Operating Officer(s),
- **c.** Identification of, selection of, and succession plan for Key function holders;

II. Independence of mind and management of conflicts of interest of the Members of the management body:
- **a.** General principles,
- **b.** Cases of conflicts of interests,
- **c.** Management of conflicts of interests;

III. Compliance with the rules on limitation of directorships and on availability of the Members of the management body:
- **a.** Compliance with rules when appointing a Member of the management body,
- **b.** Compliance with rules while holding directorship as a Member of the management body;

IV. Good repute, honesty, and integrity of the Members of the management body;

V. Diversity of the Members of the management body and collective competence of the Board of directors;

VI. Induction and training of the Members of the management body.

These guidelines are approved by the Board of directors. Updates shall also be submitted for approval to the Board of directors.

b. Definitions

Members of the management body means the directors, the Chief Executive Officer, and the Chief Operating Officer(s).

Key function holders means, for the purposes of the Fit and Proper Guidelines, the Chief Financial Officer, the Head of Compliance, the Head of RISK and the Head of the General Inspection, the Head of LEGAL, the Head of Human Resources, and the individuals to whom the Company has decided to confer the title of Deputy Chief Operating Officers.

Fit and Proper means the assessment conducted by BNP Paribas on the collective suitability of the Board and of the relevant individuals with regard to the following criteria:

- knowledge, skills and experience;
- good repute, honesty, and integrity;
- independence of mind;
- compliance with the rules on limitation of directorships and on availability.

Comply or explain process means the procedure in the Single Supervisory Mechanism by virtue of which the European Central Bank (**"ECB"**) and the competent national authorities announce their intention to comply, fully, partially, or not at all, with the guidelines issued by that authority.

Company means BNP Paribas.

CGEN means the Corporate Governance, Ethics, Nominations and CSR Committee of BNP Paribas.

SCA means the Secretariat of the Board of directors of BNP Paribas.

II. Identification of, selection of, and succession plan for Members of the management body and Key function holders

a. Identification of, selection of, and succession plan for directors

The CGEN is tasked with the identification of the persons that are likely to be appointed as directors, regardless of their role on the Board of directors, to establish and to maintain at all times a list of these persons, which will be periodically monitored by the CGEN, without precisely determining the circumstances requiring their nomination to the Board of directors.

Identification by the CGEN of the persons likely to be appointed as directors

The CGEN shall identify and recommend to the Board of directors candidates suitable for appointment as directors, with a view to proposing their candidacy to the General Meeting. In the determination of the potential candidates, the CGEN assesses the balance of skills, experience, diversity, as well as the integrity and the capacity of understanding the stakes and the risks, both personal and collective, of the members of the Board. It ensures, furthermore, that the candidates are able to act objectively, critically and independently, notably with respect to other directorships they hold, that they have the courage necessary to express their thoughts and their judgements, sufficient availability to have a strong commitment in their duties and the objectivity indispensable for their directorship and, lastly, the desire to protect the interests of the Company and ensure its proper running.

The CGEN specifies the missions and the necessary qualifications for the duties to be carried out within the Board of directors and calculates the time to be devoted to such duties.

For the purposes of identifying the candidate, the CGEN,

- on the one hand, mandates, if it wishes so, one or several specialised agencies in the research for independent directors with the meaning of the provisions provided in Afep-MEDEF Code; this or these specialised agencies are selected further to a tender organised in coordination with the SCA;
- on the other hand gathers inputs on this from other Board members.

Upon receipt of a proposal, the CGEN conducts a careful examination of the provisions of these guidelines as well as on the following criteria based on both personal and collective skills:

- knowledge and skill in requested areas, based on experience and the ability to understand the issues and risks of key activities for the Bank, including social and environmental issues as well as money laundering and terrorism financing related risks, enabling directors to make informed and effective decisions;
- courage, in particular to express opinions and make judgments, enabling directors to remain objective and independent;
- availability, *i.e.* sufficient time for the director to dedicate to his directorship and related training, and the assiduity, which allow the necessary hindsight and promote the director’s commitment and sense of responsibility regarding the exercise of their directorship;
- loyalty, which fosters the director’s commitment to the Company and to their duties within the Board, which collectively represents the shareholders;
- director’s proper understanding of the Company’s culture and ethics;
- good repute and propriety: a person should not be considered of good repute and meeting the propriety criterion if his or her personal or business conduct gives rise to any material doubt about his or her ability to ensure his or her directorship as independent director, and if, more specifically, he or she is personally involved in a money laundering or terrorism financing operation or attempt.

The CGEN ensures the regular updating of the list of persons that are likely to be selected, and, once a year, reports to the Board the work performed in order to identify the persons that are likely to be appointed directors so that the Board can deliberate on it.

As appropriate, the CGEN shall identify those individuals likely to be selected for the non-executive directorship of Chairman in consideration of the criteria set out above.

Selection by the Board of directors of the persons likely to become members of the Board

When the Board has to decide the appointment of a new member, the CGEN decides upon the submission of the candidacy to the Board in order, if the Board decides so, to propose such candidacy to the General Meeting. First, it shall communicate to the Chairman of the Board the name of the person who is likely to be appointed setting out the reasons for its proposal. The Chairman of the Board of directors contacts the relevant person and, in the case of an agreement with this person, asked the SCA to review the situation of the person in accordance with the above provisions. The Chairman of the CGEN and the Chairman of the Board met potential candidates.

A candidate for the non-executive directorship of Chairman of the Board of directors is submitted to the Chairman of CGEN so that this latter may contact the relevant candidate.

If the review and interview regarding the duties of both director and Chairman of the Board of directors are deemed to be satisfactory, the CGEN can then propose to the Board of directors to adopt the proposal for the submission of the candidacy.

The SCA can ask the candidates for any document required for its review, which it will retain pursuant to legal and regulatory provisions on personal data.

For specialised committees, the CGEN makes recommendations to the Board of directors on the appointment of the members in cooperation with the Chairman of the relevant committee, and of the Chairmen of the committees when they are to be renewed.

Succession plan for directors and review of the composition of the Board

The CGEN is responsible for examining the provisions allowing for the succession of the directors as well as, where applicable, the Chairman.

Once a year, the SCA, under the responsibility of the CGEN, reviews the composition of the Board of directors in accordance with the provisions relating to the identification of persons likely to become members of the Board of directors. The CGEN presents to the Board of directors the outcome of such review, which is subject to Board's deliberation.

Moreover, the CGEN carries out an annual review of the potential successor(s) for the Chairman of the Board of directors who could be proposed to the Board of directors in the event of temporary or permanent disability or death of the position holder. The Chairman of the Board of directors ensures that the potential successor(s) agree on their potential appointment. This review leads to a list of names that is kept by the SCA.

b. Identification of, selection of, and succession plan for the Chief Executive Officer and Chief Operating Officer(s)

The Board of directors appoints the Chief Executive Officer and, on the recommendation of the latter, the Chief Operating Officer(s), and sets any limits to their powers.

For this purpose, acting jointly with the Chairman, the CGEN puts forward recommendations for the selection of the Chief Executive Officer for consideration by the Board, and, acting on recommendation of the Chief Executive Officer, it puts forward recommendations for the selection of the Chief Operating Officer(s). The CGEN ensures, at the time of identifying and putting forward recommendations for the Chief Operating Officer position(s), upon proposal from the Chief Executive Officer and where applicable with the support of the Company's Human Resources, that there is a gender balance and guarantees the presence of at least one woman and one man until the end of the selection process.

To identify the candidate, the CGEN conducts a careful examination of his or her candidacy in consideration of the provisions of this policy as well as the following criteria:

- knowledge and skill in requested areas, based on experience and ability to understand the issues and risks of key activities for the Bank, including social and environmental issues as well as money laundering and terrorism financing related risks, enabling them to make informed and effective decisions;
- courage, in particular to express opinions and make judgements, enabling directors to remain objective and independent;
- availability, *i.e.* the sufficient time which the Chief Executive Officer and Chief Operating Officer(s) must dedicate to their duties and to the relevant training;
- loyalty, which fosters the commitment of the Chief Executive Officer and the Chief Operating Officer(s) to the Company and its shareholders;
- good repute and propriety: a person shall not be considered of good repute or meeting the propriety criterion if his or her personal or business conduct gives rise to any material doubt about his or her suitability as Chief Executive Officer or Chief Operating Officer, as the case may be, and if, more specifically, he or she is personally involved in a money laundering or terrorism financing operation or attempt.

The SCA can ask the candidate or the Company, as the case may be, for any document required for its review, which it shall retain pursuant to the legal and regulatory provisions on personal data.

It is also responsible for examining the provisions allowing the succession of the Chief Executive Officer and Chief Operating Officer(s).

Moreover, the CGEN carries out an annual review of the potential successor(s) for the Chief Executive Officer who could be proposed to the Board of directors in the event of temporary or permanent disability or death of the position holder. The Chairman of the Board of directors ensures that the potential successor(s) agree on their potential appointment. This review leads to a list of names that is kept by the SCA.

c. Identification and appointment of the Key function holders

The CGEN ensures that in the identification and appointment of the Key function holders by Executive Management, with the support of the Company's Human Resources, as the case may be, the following are considered:

- skills, qualification, and experience;
- good repute, honesty, and integrity, taking particular care to ensure that the concerned person is not personally involved in a money laundering or terrorism financing operation or attempt.

III. Independence of mind and management of conflicts of interest of the members of the management body

In consideration of the so-called "related-party agreements" regime in articles L.225-38 *et seq.* of the French Commercial Code, provisions regarding independence of mind and conflicts of interest set out in section 9 of the Fit and Proper Guidelines and Principle 3 of the Guidelines on Corporate Governance principles for banks, published in July 2015 by the Basel Committee on

Banking Supervision, and with the objective to embrace the best practices observed in the governance area, the aim of this section is to (i) recall the general principles applied to ensure the independence of mind of every Member of the management body, (ii) define the situations of conflicts of interest to which directors may face in light of the various activities that the Group conducts and which could be in competition with the interests of the concerned director, shall it be directly or indirectly, and (iii) provide details, in case such conflict of interest occurs, concerning the necessary measures to be adopted in order to take the situation into account and handle it in an appropriate manner.

a. General principles

Every Member of the management body shall at all times maintain his or her independence of mind, analysis, assessment, decision, and action so as to be able to issue opinions and make decisions in an informed, judicious and objective manner. For this purpose, the Member of the management body shall respect both the legal and regulatory provisions applicable to conflicts of interest – specifically the so-called "related-party" agreements – and the provisions below on the measures to be adopted in recognising conflicts of interest and managing them appropriately.

More specifically, the Members of the management body shall refuse any benefit or service liable to compromise their independence, and undertake to avoid any conflict of interest (as described below).

Each member of the Board of directors shall freely express his or her positions, possibly minority positions, about the subjects discussed in the meetings of the Board or specialised committee.

It is recalled that any conflict of interest may question the fact that a director qualifies as an independent director according to the provisions of the Afep-MEDEF Code.

b. Cases of conflicts of interests

Besides the so-called *conventions réglementées* regime provided for by articles L.225-38 *et seq.* of the French Commercial Code, the following situations may give rise to conflicts of interest:

a) each agreement entered into directly, or through an intermediary person[1], between a company that BNP Paribas controls within the meaning of article L.233-16 of the French Commercial Code and one of the Members of the Company's management body;

b) each agreement to which one of the Members of the Company's management body is indirectly interested, meaning that without being directly party to the said agreement entered into by one of the companies controlled by the Company within the meaning of article L.233-16 of the French Commercial Code, the Member of the management body benefits in a way or another from the agreement;

c) each agreement entered into between one of the companies controlled by the Company, within the meaning of article L.233-16 of the French Commercial Code, and a company owned by a Member of the Company's management body or of which such director is also an owner, general partner, manager, director, Member of the Supervisory Board or, generally, in a senior manager of this company;

d) each situation where Members of the management body are or might be, in relation with the exercise of his or her non-executive directorship, the recipient of privileged information (i) concerning a company in which he or she is an executive director within the meaning of c) or in which he or she exercises a function or holds interests whatever, or (ii) concerning the Company or one of the companies under its control within the meaning of article L.233-16 of the French Commercial Code which may be interests concerning the activity of a company in which he or she is an executive director within the meaning of c) or in which he or she exercises a function or holds interests whatever they may be;

e) each situation where the Member of the management body could take part to a Board meeting to which would be interested any person with whom he or she has family or professional links, or tight relations;

f) the undertaking of a new directorship whether in a listed or unlisted entity, French or foreign, not belonging to a group of which he is a manager, or any participation in the specialised committee of a corporate body or any other new directorship[2];

g) each currently valid commitment made under directorship previously held in France or abroad (*e.g.* a non-competition clause);

h) more generally, each situation that may constitute a conflict of interest between the Member of the management body and the Company or one of its subsidiaries within the meaning of article L.233-16 of the French Commercial Code.

c. Management of conflicts of interests

The assessment of current agreements is subject to a separate procedure by the Board of directors entitled "Implementation procedure for conflicts of interest in relation to loans and other transactions granted to the Members of the management body and their related parties".

Situations covered by the "related-party agreements" regime

The Members of the management body acknowledge having read and understood the related-party agreement regime and the obligations resulting from such regime.

[1] *The interposition of an intermediary corresponds to a situation in which the Member of the management body is the ultimate real beneficiary of the agreement between one of the companies that BNP Paribas controls and the co-contracting party of that controlled company.*

[2] *This includes those of a political nature.*

Other situations

If one of the situations described in a) through e) or g) or h) above should occur, the Member of the management body shall immediately inform the Chairman of the Board of directors, who shall in turn inform the CGEN so that the latter, based on the analysis of the situation presented, may give an opinion, which may consist of one or more measures described in the following paragraph. This opinion is then submitted to the Board of directors and, if followed by the said Board, is notified by the Chairman of the Board, to the director concerned. The decision of the Board of directors will be included in the minutes of the meeting.

More specifically, if one of the situations described in a) through e) or g) or h) above should occur during a Board of directors, meeting or one of its committees, and without prejudice to the application of the preceding paragraph, the Board of directors or the committee, as the case may be, shall immediately determine the measures to be taken, which may take different forms including the fact the concerned director or committee would not participate to the debate or the votes, would not receive the information on the issue that gives or may give rise to a conflict of interest, or even would have to leave the meeting of the Board or the committee during the discussion of the concerned issue. The minutes of the Board or the committee includes the measures adopted.

If the situation covered in f) above should occur, he or she shall inform the Chairman of the Board of directors of his or her intention to accept (i) a new directorship, whether in a listed or unlisted, French or foreign entity that does not belong to a group of which he or she is an executive director, or (ii) each participation in the specialised committees of a corporate body, or (iii) any other new directorship, such that the Board of directors, on the recommendation of the CGEN, may decide on the compatibility of such an appointment with the non-executive directorship of a Member of the management body in the Company. If necessary, the provisions on limitation of directorships and on the availability of Members of the management body set forth below shall be applied *mutatis mutandis*.

In any case, if the Board considers that the relevant Member of the management body is no longer able to perform his or her duties therein because of a conflict of interest, he or she shall resign.

More generally, in the event of a breach of obligations with respect to conflicts of interest by a Member of the management body, the Chairman of the Board of directors shall take all legal measures required to remedy it. He or she may, furthermore, keep the relevant regulators informed of such acts.

IV. Compliance with rules on limitation of directorships and on availability of the Members of the management body

The Member of the management body complies with legal and regulatory provisions, specifically those set out in articles L.511-52 and R.511-17 of the CoMoFi (the **"CoMoFi Provisions"**) and in the Fit and Proper Guidelines, which are applicable to him or her or applicable to the Company in matters of limitation of directorships and of availability as well as those in the Afep-MEDEF Corporate Governance Code.

a. Compliance with rules when appointing a Member of the management body

Once a candidate is chosen by the CGEN and prior to submitting it to the Board of directors, the SCA, under the responsibility of the Chairman of the Board of directors:

a) contacts the candidate in order to request the list of directorships as well as any other functions he or she may hold, and how much time is spent on them each year;

b) ensures that the candidate is in compliance with the Provisions of the CoMoFi regarding the number of directorships;

c) ensures that the candidate has the time required for the duties and training he or she would perform for the directorship in question;

d) and checks that these directorships and other functions are suitable with the position of a Member of the management body, in accordance with the above provisions on independence of mind and management of conflicts of interest.

The candidate shall certify that the list of directorships and functions is complete and provide on request of the SCA any document (company bylaws, extracts from trade registers or equivalent, certificate, statement, *etc*.). that the SCA deems useful to have.

The SCA then analyses the directorships declared by the candidate so as to ensure that the Provisions of the CoMoFi are complied with. It records the written documents on which the analysis and the conclusions were based, in accordance with personal data laws and regulations. As part of this review, the SCA may proceed to the researches he deems useful.

At the outcome of the SCA's review, either

a) the candidate is in compliance with the Provisions of the CoMoFi and has the time required to serve as a director: the SCA shall report to the Chairman of the Board of directors, who shall inform the Chairman of the CGEN. The CGEN shall then propose the candidate to the Board of directors, which shall take a decision on his appointment or co-option, as the case may be; or

b) the candidate is not in compliance with the Provisions of the CoMoFi or does not have the time required to serve as a director: the SCA shall inform the Chairman of the Board, who shall in turn notify the Chairman of the CGEN, so that the measures for remedying this situation can be reviewed with the candidate. If the candidate is willing to make the necessary arrangements prior to his nomination or co-option, the SCA states this in minutes, which will then be submitted to the Board of directors which will decide on the nomination or co-option, as the case may be.

If the candidate is not willing or cannot implement the necessary steps, the SCA establishes minutes submitted to the CGEN, which acts the end of the selection process.

b. Compliance with rules while holding directorship as a Member of the management body

At all times, the Members of the management body shall comply with the rules on limitation of directorships and dedicate the time and effort required to carrying out their duties and responsibilities. They accept the discipline involved in working together in the respect of each other's opinions and they exercise their sense of responsibilities towards shareholders and the other stakeholders of the Group.

In addition, directors shall actively and regularly participate in meetings of the Board of directors and of the committees, and shall attend the Annual General Shareholders' Meeting. Furthermore, the directors representing employees and the directors representing employee shareholders, are given preparation time determined by the Board, in accordance with the laws in force.

To this end, every Member of the management body shall inform the Chairman of the Board of directors of his or her intention to accept (i) a new directorship, whether in a listed or unlisted, French or foreign entity, not belonging to a group of which he or she is an executive officer, or (ii) any participation in the specialised committees of a corporate body, or (iii) any new directorship, in France or abroad, such that the Board of directors, on the recommendation of the Corporate Governance, Ethics, Nominations and CSR Committee may decide on the compatibility of such an appointment with the non-executive directorship in the Company.

In this case, the SCA shall follow the analysis and verification procedure for the appointment of a Member of the management body.

At the end of the analysis referred to above, one of two situations may arise.

Either:

a) the Member of the management body accepting this new directorship complies with the Provisions of the CoMoFi, in which case the SCA informs the Chairman of the Board of directors, who in turn informs the CGEN. The CGEN then ensures that this new directorship complies specifically with the conflicts of interest rules on set out above; or

b) the Member of the management body, by accepting this new directorship, is no longer in compliance with the Provisions of the CoMoFi, in which case the SCA shall inform the Chairman of the Board of directors, who shall report it to the Chairman of the CGEN, so that the measures for complying with the CoMoFi Provisions can be reviewed with the Member of the management body.

Whatever the case, if he or she no longer has the time to perform his or her duties, the SCA shall inform the Chairman of the Board of directors, who shall report it to the Chairman of the CGEN so that the measures for remedying the situation can be reviewed with the Member of the management body.

If the Member of the management body is willing to maintain his or her directorship in the Company, he or she shall either not accept the proposed directorship, or resign from a directorship he or she already holds. The SCA shall include this in minutes that shall then be submitted to the Board of directors.

If the Member of the management body decides to accept this new directorship without resigning from any directorship he or she already holds, the Member of the management body shall tender his or her letter of resignation as Member of the management body. The SCA shall mention this in a report to be addressed to the CGEN which acts this resignation, with the effective date to be decided on by the Board of directors. Any Member of the management body who considers him- or herself unable to continue on the Board of directors, or on the committees of which he or she is a member shall resign.

At least once a year, the SCA asks the Members of the management body to update the form known as the "EBA Form", under which are listed all the directorships held by each Member of the management body, and to which is appended their availability table.

This update shall enable the SCA to ensure that all Members of the management body are in compliance with the Provisions of the CoMoFi and available on an ongoing basis.

V. Good repute, honesty, and integrity of the Members of the management body

At all times, the Members of the management body shall meet the requirements of good repute and show honesty and integrity.

Candidates and Members of the management body undertake to immediately notify the Chairman of the Board of directors and the SCA of:

a) any conviction (including on appeal, in criminal, civil, or administrative proceedings);

b) any disciplinary measure;

c) any prior refusal of validation by competent banking or financial authorities in France or abroad;

d) any refusal, withdrawal, revocation, or prohibition on management of any registration, authorisation, membership, or licence to conduct a business or profession;

e) any sanction by public authorities or professional organisations, or investigations or enforcement proceedings ongoing in France or abroad;

f) any dismissal for professional misconduct or any dismissal from a directorship he or she may be the subject;

g) any situation mentioned in a) through f) above concerning a company of which he or she is an executive officer, shareholder, or partner.

The SCA shall retain the written evidence and documents on which the analysis and the conclusions of the CGEN were based, in accordance with personal data laws and regulations. As part of this review, and at the request of the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, the SCA may carry out any searches it deems useful, including questioning the relevant person.

If the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, is notified of the occurrence of one of the aforementioned cases, he or she shall inform the CGEN so that this latter, based on the analysis of the reported situation, can issue an opinion as to the good repute of the Member of the management body and decide whether to ask him or her to resign. This opinion is then submitted to the Board of directors and if, followed by the said Board, is notified by the Chairman of the Board, to the concerned director. The decision of the Board of directors will be included in the minutes of the meeting.

In addition, every Member of the management board undertakes to act with loyalty and integrity toward the Members of the management board, the shareholders, and the Company alike. Failing this, the Chairman of the Board of directors, or, as applicable, the Chairman of the CGEN, may refer the matter to the CGEN so that the latter can issue an opinion as to the loyalty and integrity of the Member of the management body and may decide to ask him or her to resign.

VI. Diversity of the Members of the management body and collective competence of the Board of directors

The CGEN shall set the objectives to achieve with respect to gender balance on the Board of directors, age diversity, professional qualifications and experience, and nationality among the Members of the management body, so as to ensure that at all times they have the skills necessary to understand the risks, including money laundering and terrorism financing risks, and issues, including social and environmental issues, and potential developments in the Company.

For this purpose, the CGEN periodically assesses and at least once a year, the structure, the size, the composition and the effectiveness of the Board of directors with respect to the missions with which it is entrusted, and makes any useful recommendations to the Board.

VII. Induction and training of the Members of the management body

The Members of the Company's management body shall possess, both individually and collectively, the expertise, experience, skills, understanding, and personal qualities necessary, specifically in terms of professionalism and integrity, to properly perform their duties in connection with each of the significant activities of the Company, guaranteeing effective governance and supervision.

The Members of the management body shall maintain their knowledge in the following fields: finance and banking, risk management (in particular environmental, social, money laundering and terrorism financing related risks), regulations applicable to the Company, and, more broadly, any field related to the development and strategy of the Company.

The Company shall dedicate the human and financial resources required for the training of the Members of the management body. With this aim, annual training courses are administered by the managers of the topics presented, and strategy seminars are held.

In addition to the training courses mentioned above, any director may request additional training. For this purpose, he or she shall initiate a dialogue with the Chairman and the SCA, who shall determine the arrangements for the requested training.

The directors representing employees and the directors representing employee shareholders are given time dedicated to training determined by the Board, in accordance with the laws in force. At the end of the training, the training centre chosen by the Board must issue a certificate of regular attendance, which the director representing employees and the director representing employee shareholders must give to the Secretary of the Board.

The Board of directors shall ensure that new directors meet with the Key function holders.

DESCRIPTION OF THE IMPLEMENTATION PROCEDURE FOR CONFLICTS OF INTEREST IN RELATION TO LOANS AND OTHER TRANSACTIONS GRANTED TO THE MEMBERS OF THE MANAGEMENT BODY AND THEIR RELATED PARTIES

Pursuant to Article L.22-10-12 of the French Commercial Code, the Board of directors has implemented a procedure in order to regularly ensure that the transactions entered into in the ordinary course of business and on arms' length basis (so-called "free" agreements) meet these conditions, to strengthen the process for identifying and monitoring conflicts of interest and to implement a process dedicated to review loans granted by the Bank to Members of the management body and related natural and legal persons.

Pursuant to the provisions of Article 72 of the Belgian law on the status and supervision of credit institutions, this procedure was extended by the Board of directors in June 2022 to transactions concluded between BNP Paribas Fortis and the directors, the Chief Executive Officer and the Chief Operating Officers of BNP Paribas.

This procedure covers agreements concluded between BNP Paribas and the directors, the Chairman, the Chief Executive Officer and the Chief Operating Officers of BNP Paribas or natural persons closely associated with them, their holding companies and legal entities in which they have an interest (directorship or equity holding).

There are two parts to the procedure for so-called "free" agreements:

- agreements between BNP Paribas and the natural persons or holding companies mentioned above:

  Each year, the Bank reviews the list of agreements entered into between BNP Paribas and the natural persons or asset holding companies mentioned above. The Compliance Function ensures that these agreements do cover current operations and are concluded under normal conditions and prepares a report that it sends to the Secretary of the Board of directors;
- agreements between BNP Paribas and legal entities (other than asset management companies) mentioned above:

  This procedure is based on existing policies (such as the Code of conduct or the "Customer Interests Protection Policy") and also provides for:
  - the declaration by the directors and corporate officers of the legal entities with which they are associated,
  - the verification by the Bank of any business relationships between each of these legal entities,
  - in-depth monitoring of agreements identified using a risk-based approach.

A report is prepared for each of these elements and submitted every year to the CGEN which informs the Board of directors.

2.1.3 REMUNERATION AND BENEFITS AWARDED TO THE DIRECTORS AND CORPORATE OFFICERS

The provisions of the French Commercial Code provide for *ex ante* approval each year by the Ordinary General Meeting of the compensation policy for directors and corporate officers. The compensation policy for directors and corporate officers of BNP Paribas is presented below on pages 88 to 96.

The compensation of these same directors and corporate officers is also subject to the *ex post* vote of the Ordinary General Meeting on the information on compensation referred to in article L.22-10-9 I of the French Commercial Code (this information is set out below on pages 96 *et seq.*). When the Annual General Meeting does not approve these items, the Board of directors submits an amended compensation policy, taking into account the shareholders' vote, for the approval of the next Annual General Meeting. The payment of directors' compensation for the current year is suspended until the amended compensation policy is approved. When the payment is reinstated, payments are backdated to the last Annual General Meeting.

Lastly, the compensation of each corporate officer is subject to a second *ex post* vote on the total compensation and benefits in kind paid during the previous year or awarded in respect of the same year (the information relating to this compensation is outlined in tables 1a and b, 2a and b, 3a and b and 4a and b on pages 98 *et seq*.). The variable components of compensation awarded to the corporate officers in respect of the previous year can only be paid after they have been approved by the Annual General Meeting on the basis of this second vote.

COMPENSATION POLICY FOR DIRECTORS AND CORPORATE OFFICERS SUBMITTED FOR SHAREHOLDERS' EX ANTE APPROVAL, IN ACCORDANCE WITH ARTICLE L.22-10-8 OF THE FRENCH COMMERCIAL CODE, AT THE ANNUAL GENERAL MEETING ON 16 MAY 2023

In this report, the Board of directors provides details of the fixed and variable components of total compensation and benefits in kind, attributable to the directors, the Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officers for their corporate offices within BNP Paribas (SA), over a three-year period.

The elements of the compensation policy presented below are the subject of resolutions submitted for the approval of the Shareholders' Annual General Meeting voting under the quorum and majority conditions required for Ordinary General Meetings. If the Annual General Meeting does not approve these resolutions, the previous compensation policy, already approved by the Annual General Meeting of 17 May 2022, will continue to apply. In this case, the Board of directors will submit for the approval of the next Annual General Meeting a draft resolution outlining an amended compensation policy, indicating how the shareholders' vote was taken into account and, where appropriate, the opinions stated during the Annual General Meeting.

The compensation policy for the directors and corporate officers complies with applicable legislation and regulations, the Afep-MEDEF Code and the BNP Paribas Code of conduct. The policy as detailed below (in particular the performance criteria):

(i) is aligned with the Company's corporate interest and contributes to the Company's commercial strategy and sustainability;

(ii) takes into consideration the compensation and employment conditions of employees within the Company; and

(iii) is gender neutral.

Without prejudice to the powers of the Annual General Meeting in this respect, the determination of the compensation of directors and corporate officers is the responsibility of the Board of directors and is based on proposals from the Remuneration Committee, which drafts the decisions which the Board of directors approves regarding compensation. In particular, the Remuneration Committee annually reviews the remuneration, compensation and benefits in kind granted to the Company's directors and corporate officers. This committee is made up of three independent members who have experience of compensation systems and market practices in this area and includes a director elected by employees.

Measures aimed at avoiding and managing conflicts of interest are established in the Internal Rules of the Board of directors, by the Policy on the suitability of Members of the management body and Key function holders, as well as by the Implementation procedure for conflicts of interest in relation to loans and other transactions granted to the Members of the management body and their related parties. Executive corporate officers do not take part in deliberations or voting on their own compensation.

The compensation of corporate officers takes into account, in its principles, the following objectives:

- alignment with the Bank's corporate interest and with that of its shareholders:
  - consistency with a medium to long-term outlook, especially in terms of the growth of the Bank's value, good risk management and the relative performance of its share,
  - integration of extra-financial assessment criteria,
  - taking into account CSR aspects to determine the compensation (for the portion aligned with the CSR objectives considered for certain employees), and in particular criteria related to the Group's climate objectives,
  - guaranteeing sufficient variability in the amounts allocated to reflect changes in the Bank's results without weighing too heavily on fixed expenses;
- the transparency of compensation:
  - all components (fixed, annual variable, conditional long-term incentive plan) are included in the overall assessment of compensation,
  - balance between the components of compensation, which must contribute to the general interest of the Bank and reflect best market practices and legal and regulatory constraints,
  - the rules must be stable, strict and intelligible;
- compensation that is sufficiently attractive to facilitate the selection of profiles that are particularly competent in the Group's business areas.

I. Directors' compensation

The compensation policy for directors is gender neutral.

In accordance with the law, the global amount of directors' compensation is set by the Shareholders' Annual General Meeting.

The individual amount of directors' compensation is determined by the Board of directors pursuant to a proposal of the Remuneration Committee. It consists of a fixed portion and a portion based on actual participation in meetings, regardless of the means. Directors residing abroad receive an increased amount, except where they may participate in meetings of the Board of directors by videoconference or telecommunications means. Additional compensation is paid for actual participation in one of these four committees. This is increased for directors participating in the CCIRC in view of the specific investment required by this committee.

At the end of the year, the Remuneration Committee examines the allocation of directors' compensation and the amount paid to each of them in respect of the year on the basis of an audit of each director's actual presence at Board and Committee meetings. Where applicable, the remainder of the global amount fixed by the Annual General Meeting is allocated in proportion to the amount paid to each director. In the event of an additional extraordinary meeting of the Board or committees, the amount of the compensation due to each director is adjusted in proportion to the amounts paid to each director.

The Board of directors then approves the individual distribution of the directors' compensation for the year before its actual payment to the directors (subject to the provisions of article L.22-10-34 I of the French Commercial Code that the payment of directors' compensation for the current year is suspended in the event of a negative vote by the shareholders on the components of compensation paid during or awarded in respect of the past year to corporate officers).

II. Compensation of the Chairman of the Board of directors

The annual fixed compensation of the Chairman, Mr. Jean Lemierre, amounts to EUR 950,000 gross.

The Chairman does not receive annual variable compensation or conditional long-term incentive plans. The absence of variable compensation reflects the independence of the Chairman with respect to the Executive Management.

Should a new Chairman be appointed, on the proposal of the Remuneration Committee and under this compensation policy, the Board of directors will set the amount of their fixed compensation in line with the new Chairman's profile and experience.

III. Compensation of Executive Management

Compensation includes:

- a fixed component;
- an annual variable component;
- a conditional long-term incentive plan (long-term incentive plan or LTIP).

The levels of these different components are determined using established market benchmarks.

Compensation takes into account the cap on total variable compensation in relation to fixed compensation (including awards under long-term incentive plans) in accordance with article L.511-78 of the French Monetary and Financial Code, applicable specifically to credit institutions.

In accordance with paragraph 2 of said article, the Shareholders' Annual General Meeting of BNP Paribas of 18 May 2021 decided that this cap would be set at twice the amount of the fixed compensation for a duration of three years.

For the purposes of calculating the aforementioned ratio, a discount rate may in addition be applied to no more than 25% of the total variable compensation inasmuch as the payment is made in the form of instruments deferred for at least five years, in accordance with article L.511-79 of the French Monetary and Financial Code.

1. Fixed compensation

The annual fixed compensation of the Chief Executive Officer, Mr. Jean-Laurent Bonnafé, amounts to EUR 1,843,000 gross.

The last increase in the fixed annual compensation of the Chief Executive Officer, decided by the Board of directors subject to the approval given by the Annual General Meeting of 17 May 2022, dates from 7 February 2022, effective from 1 January 2022, when the Board of directors noted the Bank's very good performance since the Chief Executive Officer was appointed.

The previous increase in the Chief Executive Officer's annual fixed compensation was on 25 February 2016, effective 1 January 2016, when the Board of directors rearranged the components of the executive corporate officers' compensation to comply with new European Banking Authority rules, the sum of the fixed compensation and the target annual variable compensation having remained unchanged since 2012.

As part of the annual review of compensation, the Board reviewed the compensation of the Chief Executive Officers of 9 comparable European banks. The compensation of the Chief Executive Officer of BNP Paribas after the proposed revaluation remains significantly lower than the average of the situations observed.

The annual fixed compensation of the Chief Operating Officer in charge of the CIB scope, Mr. Yann Gérardin, amounts to EUR 1,500,000 gross.

The annual fixed compensation of the Chief Operating Officer in charge of the CPBS scope, Mr. Thierry Laborde, amounts to EUR 900,000 gross.

Should a new Chief Executive Officer or a new Chief Operating Officer be appointed, the Board of directors will, on the proposal of the Remuneration Committee and under this compensation policy, set their fixed compensation in line with their profile and experience. The components of annual variable compensation or of the conditional long-term incentive plan will be set in accordance with the principles set out in this compensation policy.

2. Annual variable compensation

The variable component is intended to reflect the effective contribution of executive corporate officers to the success of BNP Paribas in respect of their functions as executive managers of an International Financial Services Group.

General principles

The variable compensation of members of the Executive Management is determined from a target compensation equal to 100% of their annual fixed compensation for the Chief Executive Officer and the Chief Operating Officers.

It varies in accordance with criteria representative of the Group's results, CSR-linked criteria and the qualitative assessment by the Board of directors.

In addition, the payment of the annual variable compensation includes a deferred period, a "malus" and "claw-back" arrangements, as well as a cancellation clause in the event of a bank resolution measure, in accordance with same terms and conditions as those described below for the LTIP (see 3 below).

Criteria linked to the Group's financial performance

Criteria linked to the Group's financial performance account for 75% of the target variable compensation and enable the corresponding portion of the annual variable compensation to be calculated in proportion to the change in numerical indicators. There are two Group-based quantitative criteria for the Chief Executive Officer and four for the Chief Operating Officers, half of which are Group-based and the other half based on their respective areas of responsibility.

If objectives based on quantitative criteria are exceeded (or not achieved), the fraction of the target compensation in question changes proportionally within the limits of the cap mentioned below.

- For the Chief Executive Officer, the quantitative criteria apply to the Group's overall performance based on the following equally weighted criteria:
  - ratio of net earnings per share for the year to net earnings per share for the previous year (37.5% of the target variable compensation);
  - percentage of achievement of the Group's budgeted gross operating income (37.5% of the target variable compensation).
- For the Chief Operating Officers, half of the quantitative criteria are based on the Group's overall performance and the other half on the performance of their respective areas of responsibility based on the following equally weighted criteria:
  - ratio of net earnings per share for the year to net earnings per share for the previous year (18.75% of the target variable compensation);
  - percentage of achievement of the Group's budgeted gross operating income (18.75% of the target variable compensation);
  - change in pre-tax net income for the year compared to the previous year for their respective areas of responsibility (18.75% of the target variable compensation);
  - percentage of achievement of the budgeted gross operating income of their respective areas of responsibility (18.75% of the target variable compensation).

The sale of Bank of the West ("BoW") will not result in a restatement of the indicators used to calculate the annual financial performance of the Chief Executive Officer and the Chief Operating Officers, either in terms of net earnings per share or gross operating income. Only the calculation of the annual financial performance of Mr. Thierry Laborde, with regard to the pre-tax net income of the Commercial, Personal Banking & Services division, will be restated for the BoW result in 2022 in order to have the same basis of comparison between the two years without taking into account the contribution of BoW.

Criteria linked to the Group's CSR performance

A portion of 15% of the target variable compensation is linked to the Group's CSR performance.

The allocation of this portion of the annual variable compensation is based on multi-criteria measurement based on a holistic approach of actions undertaken by the BNP Paribas Group with respect to social, societal and environmental issues.

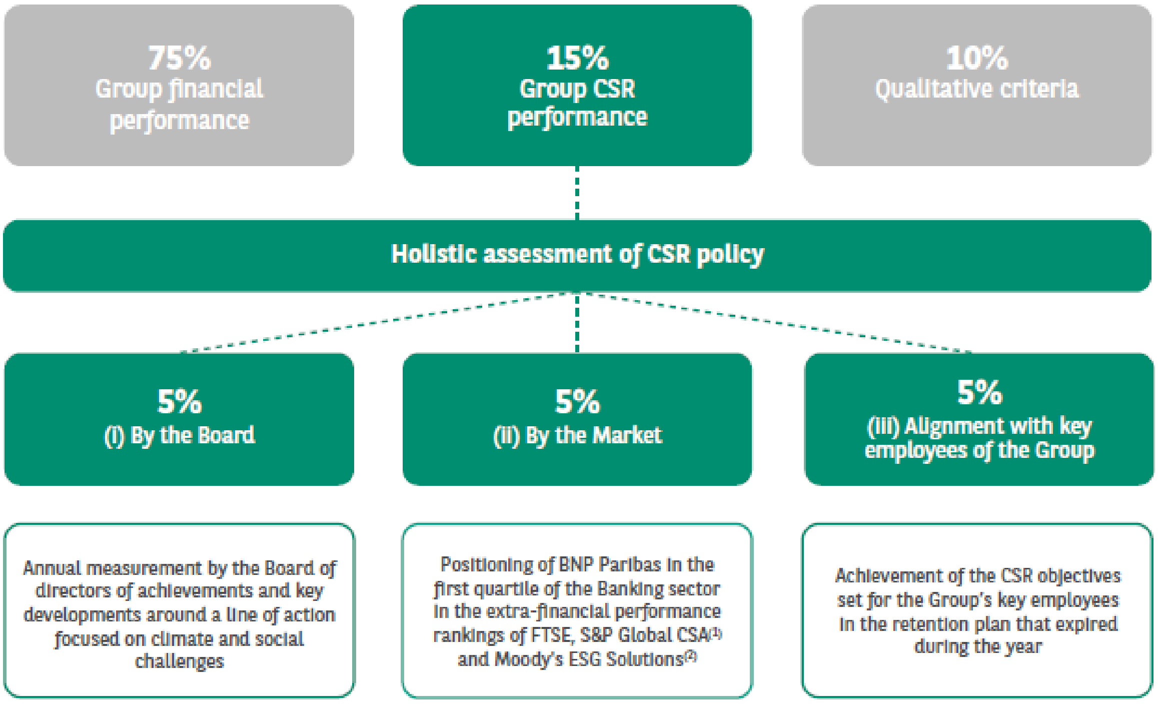
With this in mind, this compensation structure includes three weighted criteria, each at 5%:

(i) the Board of directors' assessment of the year's highlights, primarily with regard to climatic and social challenges;

(ii) publications of extra-financial rating agencies measuring the quality of the BNP Paribas' CSR positioning relative to its peers;

(iii) an alignment with the CSR objectives included in the compensation due to retention plans granted to the Group's key employees. These objectives are based on the Group's four CSR pillars in terms of economic, social, civic and environmental responsibility and include, in particular, quantified climate objectives as part of the support for the Group's clients towards a low-carbon economy and the reduction of the BNP Paribas Group's environmental footprint.

For several years, the BNP Paribas Group has made the variable compensation of executive corporate officers conditional on the achievement of criteria in line with the Group's climate objectives in accordance with the new principle of the Afep-MEDEF Code, which came into force in December 2022.



(1) Formerly SAM.

(2) Formerly Vigeo Eiris V.E.

Qualitative criteria

The portion of the variable compensation linked to the Board of directors' qualitative assessment is 10% of the target variable compensation.

The Board of directors considers it essential to carry out this qualitative assessment, particularly given its enhanced responsibilities in terms of supervision and control pursuant to the French Monetary and Financial Code. In addition to the Bank's strategy, which it must approve by taking into account social and environmental issues, the Board of directors must also assess the performance of Executive Management based on their capacities for anticipation, decision-making, leadership and exemplary behaviour as part of the 2025 strategic plan.

This assessment will be made in light of the economic situation and with regard to the Group's operational and integrated model.

SUMMARY OF THE CRITERIA FOR SETTING THE ANNUAL VARIABLE COMPENSATION APPLICABLE TO THE CHIEF EXECUTIVE OFFICER AND THE CHIEF OPERATING OFFICERS

	% of target variable compensation		
Criteria applicable	**Chief Executive Officer**	**Chief Operating Officers**	**Type**
Criteria linked to the Group's financial performance	37.50%	18.75%	Change in earnings per share
	37.50%	18.75%	Achievement of budgeted Group gross operating income
	N/A.	18.75%	Change in pre-tax net income in the area of responsibility for the year compared to the previous year
	N/A.	18.75%	Achievement of budgeted gross operating income in the area of responsibility
Criteria linked to the Group's CSR performance	15.00%	15.00%	Multicriteria assessment of the actions taken by BNP Paribas Group with respect to social, societal and environmental issues
Qualitative criteria	10.00%	10.00%	Assessment with regard to implementation of the Bank's

	strategic guidelines, particularly the human, organisational and technical dimensions of the 2025 Growth, Technology & Sustainability plan, and taking into account the general context of the year under consideration

Ceiling

The Board of directors ensures the consistency of the annual variable compensation with changes in the Group's results and the area of responsibility of each of the Chief Operating Officers.

In any case:

- each of the criteria related to the Group's financial performance (two in the case of the Chief Executive Officer and four in the case of the Chief Operating Officers) is capped at 130% of its target weight and cannot therefore result in an annual variable compensation exceeding respectively 48.75% of the target variable compensation for the Chief Executive Officer and 24.38% for the Chief Operating Officers;
- the criteria related to the Group's CSR performance, as well as the qualitative criteria, are capped at 100% of their target weight and cannot therefore result in an annual variable compensation greater than, respectively, 15% and 10% of the target variable compensation;
- the amount of the annual variable compensation awarded to each executive corporate officer is capped at 120% of their target variable compensation.

Terms and conditions of payment

The payment terms for variable compensation of BNP Paribas Group's executive corporate officers, in accordance with the provisions of the French Monetary and Financial Code and the European Banking Authority's Guidelines on compensation policy, are:

- 60% of annual variable compensation is deferred over five years, at the rate of one-fifth per year;
- regarding the non-deferred portion of the variable compensation:
  - half will be paid in cash in May of the year of the award, subject to the approval of the Shareholders' Annual General Meeting under the terms provided for by article L.22-10-34 II of the French Commercial Code, and
  - half will be paid in cash indexed to BNP Paribas share performance, at the end of a one-year holding period starting on the award date (award date is the date of the Board of directors' decision), *i.e.* in practice, in March of the year following the year in which the compensation is awarded;
- the deferred portion of the variable compensation will be paid annually in fifths over five years, the first payment being paid only at the end of a deferred period of one year from the award date of the variable compensation. Each instalment will be paid:
  - half in cash in March every year, and
  - half in cash indexed to BNP Paribas share performance, in March of the following year, at the end of a one-year holding period,
  - provided that the Group's pre-tax ROE for the year preceding the payment is greater than 5%.

3. Conditional Long-Term Incentive Plan over five years (LTIP)

To align the interests of executive corporate officers with the medium to long-term performance of the BNP Paribas Group without compromising risk management, in 2011, the Board of directors introduced a conditional long-term incentive plan (LTIP) over five years.

The LTIP, which amounts to the target annual variable compensation awarded in respect of the previous year, is split into two equal parts: one to reward an increase in the intrinsic value of the BNP Paribas share, and the other potential outperformance relative to peers.

First half of the award amount: intrinsic share performance

The first half of the award amount is dependent on the change in share price[1] given that no payment will be made for 50% of the award amount if the BNP Paribas share price does not increase by at least 5% from the date of the award by the Board of directors to the end of a five-year period from the award date.

If the share price increases by at least 5% during this period, a factor is applied to the initial amount, resulting in the amount being increased or reduced, in line with the table below:

Change in the BNP Paribas share price over 5 years	Factor applied to the first half of the award
Strictly under 5%	0 (No payment)

[1] *The initial and final amounts used to measure the performance of the share price over five years are as follows:*

• the initial value is the average of the opening price of the BNP Paribas share for the rolling 12-month period preceding the award date;

• the final value is the average of the opening price of the BNP Paribas share in the rolling 12-month period preceding the payment date.

Equal to or higher than 5% and under 10%	40%
Equal to or higher than 10% and under 20%	80%
Equal to or higher than 20% and under 33%	120%
Equal to or higher than 33% and under 50%	130%
Equal to or higher than 50% and under 75%	150%
Equal or higher than 75%	175%

Thus, the first half of the award amount will only be paid in full at the end of the five-year period if the share price increases by more than 20% in the five years. The first half of the award will, in any event, always be less than or equal to the change in the share price and cannot, under any circumstances, exceed 175% of the award amount, assuming that the share price has increased by more than 75% at the end of the five-year period.

Second half of the award: outperformance of the BNP Paribas share relative to peers

Fulfilment of this condition is assessed by measuring the performance of the BNP Paribas share price relative to the "EURO STOXX Banks" index of main eurozone banks.

It only takes into account outperformance of the BNP Paribas share price relative to the average index measured over the 12 months prior to the award date, compared with the average for this same index for a period of 12 months prior to payment. The second half of the target amount under the LTIP will only be paid in full if the BNP Paribas share price outperforms the index by at least 10%.

Relative performance of the BNP Paribas share in relation to the performance of the EURO STOXX Banks index	Factor applied to the second half of the award
Lower or equal to 0 points	0%
0 to 5 points inclusive	50%
5 to 10 points inclusive	80%
Greater than 10 points	100%

The amount determined by applying each of the conditions over the plan's five-year period is the compensation paid under the LTIP.

Ceiling

According to the provisions of article L.511-78 of the French Monetary and Financial Code relating to the cap on the variable component as a percentage of the fixed component, total variable compensation awarded, including amounts awarded under the LTIP, may not be more than twice the fixed compensation, in accordance with the decision of the Shareholders' Annual General Meeting on 18 May 2021. To calculate the ratio, a discount rate may in addition be applied to no more than 25% of the total variable compensation inasmuch as the payment is made in the form of instruments deferred for at least five years.

Payment of LTIP

Based on the change in the BNP Paribas share price, the first half of the amount paid under the LTIP may not, under any circumstances, exceed 175% of the initial award amount. Payment of the second half of the award may not, under any circumstances, exceed the initial award amount.

Thus, under no circumstances can payments under the LTIP exceed 137.5% of their award value.

Continued presence requirement

LTIP rules require continued presence throughout the entire duration of the plan. Departure from the Group would result in the LTIP not being paid. Nonetheless, in the event of retirement or death after the end of the first year of the plan, payments would be made provided that performance conditions are met and subject to assessment by the Board of directors.

Malus and Claw-back clauses

The LTIP provides for "malus" and "claw-back" arrangements. Thus, in the event that the beneficiary should behave in a way or be guilty of acts that do not comply with BNP Paribas' expectations, as defined in particular in terms of:

(i) compliance with the Code of conduct, Internal Rules, regulations; and

(ii) risk assessment and management, the Board of directors may decide not only not to proceed with the payment of the planned amount, whether or not the beneficiary is present, but also to request the return of all or part of the sums already paid under previous plans over a period of five years.

Moreover, this rule provides that in the event of the implementation of a bank resolution measure under the French Monetary and Financial Code, the LTIP rights shall be definitively cancelled.

The Board of directors reserves the right to reduce awards under the LTIP, in particular in the event of non-compliance with the above-mentioned ceiling.

IV. Extraordinary compensation

No extraordinary compensation may be paid to the directors, the Chairman of the Board of directors, the Chief Executive Officer or the Chief Operating Officers.

V. Benefits in kind

The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officers may have a company car.

VI. Stock option or share purchase subscription plans

Directors and corporate officers do not benefit from any stock option or share purchase subscription plans.

VII. Performance shares

Directors and corporate officers do not receive any performance or free shares.

VIII. Post-employment benefits

1. Payments or benefits due or likely to become due upon termination or change in functions

Directors and corporate officers do not receive any contractual compensation for termination of their term of directorship.

2. Retirement benefits

Directors and corporate officers, with the exception of the Chief Operating Officers, do not receive post-employment benefits when they leave the Company or when they retire.

The Chief Operating Officers are entitled to the standard retirement benefits awarded to all BNP Paribas (SA) employees pursuant to their initial employment contract.

3. Supplementary pension plans

The corporate officers benefit solely from the defined-contribution top-up pension plan set up for all BNP Paribas (SA) employees, in accordance with article 83 of the French General Tax Code.

4. Protection insurance

The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officers are entitled to the same flexible welfare benefits (death and disability insurance, as well as the common healthcare benefit scheme) as all BNP Paribas (SA) employees.

They also benefit from the *Garantie Vie Professionnelle Accidents* system (death and disability insurance), which covers all employees of BNP Paribas (SA).

The Chief Executive Officer and the Chief Operating Officers are also entitled to the supplementary plan set up for members of the Group Executive Committee, which pays out additional capital of EUR 1.10 million in the event of death or total and permanent disability. The employer contribution under this scheme is recognised as a benefit in kind.

5. Non-compete agreement

Please note that the Chief Executive Officer signed a non-compete agreement with BNP Paribas (SA) on 25 February 2016. This agreement was approved by the Annual General Meeting of 26 May 2016 pursuant to the provisions of article L.225-38 of the French Commercial Code.

Under this agreement, if he ceases to hold any role or position in BNP Paribas, Mr. Jean-Laurent Bonnafé undertakes, for a period of 12 months, not to take any role whatsoever, either directly or indirectly, for a credit institution, investment or insurance firm whose securities are traded on a regulated market in France or abroad, or in France for a credit institution, investment or insurance firm whose securities are not traded on a regulated market. Decisions to apply the agreement will be taken in due time with sincerity and loyalty.

Under this agreement, the Chief Executive Officer will receive a payment equal to 1.2 times the total of his fixed and variable compensation (excluding LTIP) received during the year prior to his departure. One-twelfth of the indemnity would be paid each month.

In accordance with the Afep-MEDEF Code and article R.22-10-4 of the French Commercial Code which stipulate that the payment of a non-compete indemnity must be excluded if the person concerned claimed his pension rights or has exceeded the age of 65 and in line with the stipulations of said non-compete agreement, the Board of directors and the Chief Executive Officer have confirmed that they comply with this provision.

IX. Loans, advances and guarantees granted to the Group's corporate officers

BNP Paribas directors and corporate officers and their spouse and dependent children may be granted loans.

These loans, representing normal transactions, are granted on an arm's length basis, in accordance with the Implementation procedure for conflicts of interest in relation to loans and other transactions granted to the Members of the management body and their related parties.

COMPONENTS OF COMPENSATION PAID IN 2022 OR ALLOCATED IN RESPECT OF THE SAME YEAR SUBMITTED TO THE EX POST VOTE OF SHAREHOLDERS DURING THE ANNUAL GENERAL MEETING OF 16 MAY 2023 IN ACCORDANCE WITH ARTICLE L.22-10-34 OF THE FRENCH COMMERCIAL CODE

The total compensation of directors and corporate officers, as described below, is in line with the compensation policy adopted at the Annual General Meeting of 17 May 2022.

DIRECTORS' COMPENSATION *(amounts in euros)*

Directors	Amounts paid in 2021 in respect of the year (as a reminder)	Amounts paid in 2022 in respect of the year
ASCHENBROICH Jacques	77,981	100,901
BONNAFÉ Jean-Laurent	64,432	63,220
BRISAC Juliette(1)	37,029	88,341
De CHALENDAR Pierre André	109,294	111,996
COHEN Monique	122,842	158,993
DE PLOEY Wouter(2)	78,382	42,803
EPAILLARD Hugues(3)	110,498	112,206
GIBSON-Brandon Rajna	87,114	90,748
GUILLOU Marion	94,239	104,042
KESSLER Denis(4)	44,564	N/A
LEMIERRE Jean	64,432	63,220
LOGGHE Lieve(5)	N/A	54,330
NOYER Christian(6)	56,901	110,322
SCHWARZER Daniela	83,099	97,761
TILMANT Michel	129,466	116,078
VERRIER Sandrine(3)	80,389	88,341
WICKER-MIURIN Fields	121,337	136,698
TOTAL	**1,362,000**	**1,540,000**

(1) Director from 18 May 2021.
(2) Director until 17 May 2022.
(3) Amount paid to the corresponding trade union organisation.
(4) Director until 18 May 2021.
(5) Director from 17 May 2022.

(6) Director from 18 May 2021.

For information, the rules for allocating directors' compensation are as follows:

		Share based on actual attendance	
	Fixed portion(1)	Scheduled meeting	Extraordinary meeting
Directors resident in France	€23,000	€3,300/meeting	€4,400/meeting
Directors resident outside of France	€23,000	€4,500/meeting(2)	€4,600/meeting(3)
Chairman of a specialised committee (excluding CCIRC)		€6,000/meeting	€6,000/meeting
Member of a specialised committee (excluding CCIRC)		€3,000/meeting	€3,000/meeting
Chairman of CCIRC		€6,200/meeting	€6,200/meeting
Member of the CCIRC (excluding joint session)		€3,200/meeting	€3,200/meeting

(1) The fixed portion is calculated pro rata temporis of the term of directorship during the year in question.
(2) Or EUR 3,300 per meeting if participation is via videoconference or telecommunication means.
(3) Or EUR 4,400 per meeting if participation is via videoconference or telecommunication means.

Directors elected by the employees and the director representing the employee shareholders receive compensation under their employment contract.

At 31 December 2022, the Board of directors was composed of fifteen members, including eight women and seven men, thus complying with the gender parity obligation introduced by Law No. 2011-107 of 27 January 2011.

Directors' compensation is gender neutral. It consists of a fixed portion and a portion based on actual participation in meetings on the basis of the allocation rules presented above.

Compensation and benefits of the corporate officers

TABLE N° 1: COMPENSATION PAID DURING 2022 OR AWARDED FOR THE SAME YEAR TO MR. JEAN LEMIERRE, CHAIRMAN OF THE BOARD OF DIRECTORS, SUBMITTED TO THE VOTE OF THE SHAREHOLDERS

(amounts in euros)

a. Components of compensation awarded in respect of 2022 to Mr. Jean LEMIERRE, Chairman of the Board of directors

	Amounts	Comments
Fixed compensation	950,000 *(paid)*	The compensation paid to Mr. Jean LEMIERRE is determined by the method recommended by the Remuneration Committee and approved by the Board of directors. His fixed compensation has not changed since December 2014.
Annual variable compensation	None	Mr. Jean LEMIERRE is not entitled to annual variable compensation. The absence of variable compensation reflects the independence of the Chairman with respect to the Executive Management.
Conditional long-term incentive plan	None	Mr. Jean LEMIERRE does not benefit from a conditional long-term incentive plan. The absence of variable compensation reflects the independence of the Chairman with respect to the Executive Management.
Compensation linked to the term of directorship	63,220 *(paid)*	Mr. Jean LEMIERRE does not receive any compensation in respect of directorships that he holds in the Group's companies other than BNP Paribas (SA).
Extraordinary compensation	None	
Stock options awarded during the period	None	
Performance shares awarded during the year	None	
Benefits in kind	5,128	Mr. Jean LEMIERRE has a company car.
TOTAL	**1,018,348**	

b. ***The components of compensation paid to Mr. Jean LEMIERRE, Chairman of the Board of directors during 2022 in respect of previous financial years (having been subject to a shareholders' vote at the time of their award)***

	Amounts	Comments
None		

c. ***All types of commitments undertaken corresponding to compensation components, indemnities or benefits in kind due or likely to be due as a result of the assumption, termination or change in functions or after performing these to the benefit of Mr. Jean LEMIERRE, Chairman of the Board of directors***

	Amounts	Comments
Sign-on bonuses and severance payments	None	Mr. Jean LEMIERRE receives no sign-on bonuses or severance payments.
Top-up pension plan with defined benefits	None	Mr. Jean LEMIERRE does not benefit from any supplemental defined-benefit pension plans.
Top-up pension plan defined-contribution	1,769	Mr. Jean LEMIERRE benefits from the defined-contribution plan set up for all BNP Paribas (SA) employees, in accordance with pension plans (article 83 of the French General Tax Code). The amount of contributions paid by the Company under the plan to Mr. Jean LEMIERRE in 2022 was EUR 1,769.
Welfare benefit and healthcare plans	4,011	Mr. Jean LEMIERRE benefits from the disability, invalidity and death, and healthcare insurance plans offered to employees of BNP Paribas (SA). He also benefits from death and disability insurance covering all employees of BNP Paribas (SA). The amount of the contributions paid by the Company in this respect for Mr. Jean LEMIERRE in 2022 was EUR 4,011.

TABLE N° 2: COMPENSATION PAID DURING 2022 OR AWARDED FOR THE SAME FINANCIAL YEAR TO MR. JEAN-LAURENT BONNAFÉ, CHIEF EXECUTIVE OFFICER, SUBMITTED TO THE VOTE OF THE SHAREHOLDERS *(amounts in euros)*

a. Components of compensation awarded in respect of 2022 to Mr. Jean-Laurent BONNAFÉ, Chief Executive Officer

	Amounts	Comments
Fixed compensation	1,843,000 *(paid)*	The compensation paid to Mr. Jean-Laurent BONNAFÉ is determined by the method recommended by the Remuneration Committee and approved by the Board of directors. The Board of directors decided to increase the fixed compensation of Mr. Jean-Laurent BONNAFÉ by 18% compared to 2021, bringing his gross annual fixed compensation to EUR 1,843,000, effective as of 1 January 2022.
Annual variable compensation awarded in respect of the year(1)	1,931,464	The variable compensation of Mr. Jean-Laurent BONNAFÉ changes on the basis of criteria representative of Group results and his managerial performance. It is expressed as a percentage of a target variable compensation corresponding to 100% of fixed compensation for the year. The quantitative criteria depend on indicators linked to the Group's overall performance; they are as follows: ▪ change in net earnings per share for the year compared to net earnings per share for the previous year (37.5% of the target variable compensation); ▪ percentage of achievement of the Group's budgeted gross operating income (37.5% of the target variable compensation). CSR criteria also condition 15% of the target variable compensation. They correspond to the multi-criteria assessment of the actions taken by BNP Paribas Group with respect to social, societal and environmental issues. The qualitative criteria represent 10% of the target variable compensation. After taking into account quantitative, CSR and qualitative criteria, the Board of directors set the annual variable compensation of Mr. Jean-Laurent BONNAFÉ for 2022 at EUR 1,931,464, i.e. 104.80% of the target annual variable compensation: ▪ half of the non-deferred portion of the variable compensation will be paid in May 2023, and half in March 2024, indexed to the performance of the BNP Paribas share; ▪ the deferred portion of the variable compensation will be paid in fifths as of 2024. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share. The last payment in respect of 2022 will be made in March 2029; ▪ the annual payment of the deferred variable compensation is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%. The ratio between the annual fixed compensation and variable compensation, as required under the French Commercial Code, is 104.80%.
Conditional long-term incentive plan (fully deferred for a period of five years)	759,685	The fair value of the LTIP awarded to Mr. Jean-Laurent BONNAFÉ on 6 February 2023 with respect to 2022 amounts to EUR 759,685. The term of the LTIP is five years. The two conditions of the LTIP, one recognising an increase in the intrinsic value of the BNP Paribas share and the other recognising the potential outperformance of its peers, are assigned equal weighting in order to measure their effects separately. Thus, payments under the LTIP may not exceed 137.5% of their award value.
Compensation linked to the term of directorship	63,220	Mr. Jean-Laurent BONNAFÉ receives compensation for his term of directorship at BNP Paribas (SA).
Extraordinary compensation	None	
Stock options awarded during the period	None	
Performance shares awarded during the year	None	
Benefits in kind	6,446	Mr. Jean-Laurent BONNAFÉ has a company car. This amount also includes the employer contribution of EUR 1,433 paid by BNP Paribas (SA) for 2022 under the Executive Committee professional life insurance policy, offering an additional

		EUR 1.10 million in the event of death or total permanent disability.
TOTAL	**4,603,815**	

(1) Payment subject to the approval of the Annual General Meeting of 16 May 2023 pursuant to article L.22-10-34 II of the French Commercial Code.

b. Components of compensation paid to Mr. Jean-Laurent BONNAFÉ, Chief Executive Officer, during 2022 in respect of previous years (having been subject to the shareholders' vote at the time of their award)

In euros	**Date submitted to the AGM and resolution number**	**Amounts paid in 2022**
Annual variable compensation		**1,689,625**
Including partial payment of the annual variable compensation in respect of 2021	*17 May 2022 15th resolution*	*359,354*
Including partial payment of the annual variable compensation in respect of 2020	*18 May 2021 15th resolution*	*476,315*
Including partial payment of the annual variable compensation in respect of 2019	*19 May 2020 16th resolution*	*230,692*
Including partial payment of the annual variable compensation in respect of 2018	*23 May 2019 14th resolution*	*221,890*
Including partial payment of the annual variable compensation in respect of 2017	*24 May 2018 15th resolution*	*190,676*
Including partial payment of the annual variable compensation in respect of 2016	*23 May 2017 14th resolution*	*210,698*
Conditional long-term incentive plan	*23 May 2017 14th resolution*	**1,405,800**

c. All types of commitments corresponding to components of compensation, indemnities or benefits in kind due or likely to be due as a result of the assumption, termination or change in functions or after performing these to the benefit of Mr. Jean-Laurent BONNAFÉ, Chief Executive Officer

	Amounts	**Comments**
Sign-on bonuses and severance payments	None	Mr. Jean-Laurent BONNAFÉ receives no sign-on bonuses or severance payments.
Non-compete indemnity	None	Under the non-compete clause signed on 25 February 2016, and subject to the conditions detailed below, Mr. Jean-Laurent BONNAFÉ would receive compensation equal to 1.2 times the sum of his fixed and variable compensation (excluding conditional long-term incentive plan) received during the year prior to his leaving the Group. One-twelfth of the indemnity would be paid each month. Under this agreement, if he ceases to hold any role or position in BNP Paribas, Mr. Jean-Laurent BONNAFÉ undertakes, for a period of 12 months, not to take any role whatsoever, either directly or indirectly, for a credit institution, investment or insurance firm whose securities are traded on a regulated market in France or abroad, or in France for a credit institution, investment or insurance firm whose securities are not traded on a regulated market. Decisions to apply the agreement will be taken in due time with sincerity and loyalty. In accordance with the Afep-MEDEF Code and article R.22-10-14 III of the French Commercial Code, which stipulate that the payment of a non-compete payment must be excluded if the person concerned claimed his pension rights or has exceeded the age of 65 and in line with the stipulations of said non-compete agreement, the Board of directors and the Chief Executive Officer have confirmed that they comply with this provision.
Top-up pension plan with defined benefits	None	Mr. Jean-Laurent BONNAFÉ does not benefit from any supplemental defined-benefit pension plans.

Top-up pension plan defined-contribution	1,769	Mr. Jean-Laurent BONNAFÉ benefits from the defined-contribution plan set up for all BNP Paribas (SA) employees, in accordance with article 83 of the French General Tax Code. The amount of contributions paid by the Company in this respect for Mr. Jean-Laurent BONNAFÉ was, in 2022, EUR 1,769.
Welfare benefit and healthcare plans	4,011	Mr. Jean-Laurent BONNAFÉ benefits from the disability, invalidity and death and healthcare insurance plans offered to employees of BNP Paribas (SA). He also benefits from death and disability insurance covering all employees of BNP Paribas (SA). The amount of contributions paid by the Company in this respect for Mr. Jean-Laurent BONNAFÉ was, in 2022, EUR 4,011.

TABLE N° 3: COMPONENTS OF COMPENSATION PAID DURING 2022 OR AWARDED FOR THE SAME FINANCIAL YEAR TO MR. YANN GÉRARDIN, CHIEF OPERATING OFFICER, SUBMITTED TO THE VOTE OF THE SHAREHOLDERS *(amounts in euros)*

a. Components of the compensation awarded in respect of 2022 to Mr. Yann GÉRARDIN, Chief Operating Officer

	Amounts	Comments
Fixed compensation	1,500,000 *(paid)*	The compensation paid to Mr. Yann GÉRARDIN is determined by the method recommended by the Remuneration Committee and approved by the Board of directors.
Annual variable compensation awarded in respect of the year(1)	1,602,000	The variable compensation of Mr. Yann GÉRARDIN changes according to criteria representative of the Group's results as well as the results of the CIB division and his managerial performance. It is expressed as a percentage of a target variable compensation corresponding to 100% of fixed compensation for the year. The quantitative criteria depend on the following performance indicators: ▪ change in net earnings per share for the year compared to net earnings per share for the previous year (18.75% of the target variable compensation); ▪ percentage of achievement of the Group's budgeted gross operating income (18.75% of the target variable compensation); ▪ change in net income before tax for the CIB scope for the year compared to the previous year (18.75% of the target variable compensation); ▪ percentage of achievement of the CIB scope's gross operating income budget (18.75% of the target variable compensation). CSR criteria also condition 15% of the target variable compensation. They correspond to the multi-criteria assessment of the actions taken by BNP Paribas Group with respect to social, societal and environmental issues. The qualitative criteria represent 10% of the target variable compensation. After taking into account quantitative, CSR and qualitative criteria, the Board of directors set the annual variable compensation of Mr. Yann GÉRARDIN for 2022 at EUR 1,602,000, i.e. 106.80% of the target annual variable compensation: ▪ half of the non-deferred portion of the variable compensation will be paid in May 2023, and half in March 2024, indexed to the performance of the BNP Paribas share; ▪ the deferred portion of the variable compensation will be paid in fifths as of 2024. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share. The last payment in respect of 2022 will therefore be made in March 2029; ▪ the annual payment of the deferred variable compensation is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%. The ratio between the annual fixed compensation and variable compensation, as required under the French Commercial Code, is 106.80%.
Conditional long-term incentive plan (fully deferred for a period of five years)	618,300	The fair value of the LTIP awarded to Mr. Yann GÉRARDIN on 6 February 2023 with respect to 2022 amounts to EUR 618,300. The term of the LTIP is five years. The two conditions of the LTIP, one recognising an increase in the intrinsic value of the BNP Paribas share and the other recognising the potential outperformance of its peers, are assigned equal weighting in order to measure their effects separately. Thus, payments under the LTIP may not exceed 137.5% of their award value.
Compensation linked to the term of directorship	None	Mr. Yann GÉRARDIN does not hold a directorship in Group companies.

Extraordinary compensation	None	
Stock options awarded during the period	None	
Performance shares awarded during the year	None	
Benefits in kind	1,433	This amount corresponds to the annual employer contribution paid by BNP Paribas (SA) for 2022 under the Executive Committee professional life insurance policy, offering an additional EUR 1.10 million in the event of death or total permanent disability.
TOTAL	**3,721,733**	

(1) Payment subject to the approval of the Annual General Meeting of 16 May 2023 pursuant to article L.22-10-34 II of the French Commercial Code.

b. Components of compensation paid to Mr. Yann GÉRARDIN, Chief Operating Officer, during 2022 in respect of previous years (having been subject to the shareholders' vote at the time of their award)

In euros	Date submitted to the AGM and resolution number	Amounts paid in 2022
Annual variable compensation		**218,667**
Including partial payment of the annual variable compensation in respect of 2021	*17 May 2022 17th resolution*	*218,667*
Conditional long-term incentive plan	**None**	**None**

c. Commitments of any kind corresponding to elements of compensation, indemnities or benefits due or likely to be due in respect of the assumption, termination or change of functions or after the exercise thereof taken for the benefit of Mr. Yann GÉRARDIN, Chief Operating Officer

	Amounts	Comments
Sign-on bonuses and severance payments	None	Mr. Yann GÉRARDIN receives no sign-on bonuses or severance payments.
Top-up pension plan with defined benefits	None	Mr. Yann GÉRARDIN does not benefit from any supplemental defined-benefit pension plan.
Top-up pension plan defined-contribution	1,769	The directors and corporate officers benefit from the defined-contribution plan (article 83 of the French General Tax Code) set up for all employees of BNP Paribas (SA). In 2022, the amount of contributions paid by the Company in this respect for Mr. Yann GÉRARDIN was EUR 1,769.
Welfare benefit and healthcare plans	4,011	Mr. Yann GÉRARDIN benefits from the disability, invalidity and death and healthcare insurance offered to employees of BNP Paribas (SA). He also benefits from death and disability insurance covering all employees of BNP Paribas (SA). In 2022, the amount of contributions paid by the Company in this respect for Mr. Yann GÉRARDIN was EUR 4,011.

TABLE N° 4: COMPENSATION PAID DURING 2022 OR AWARDED FOR THE SAME FINANCIAL YEAR TO MR. THIERRY LABORDE, CHIEF OPERATING OFFICER, SUBMITTED TO THE VOTE OF THE SHAREHOLDERS *(amounts in euros)*

a. Components of the compensation awarded in respect of 2022 to Mr. Thierry LABORDE, Chief Operating Officer

	Amounts	Comments
Fixed compensation	900,000 *(paid)*	The compensation paid to Mr. Thierry LABORDE is determined by the method recommended by the Remuneration Committee and approved by the Board of directors.
Annual variable compensation awarded in respect of the year[(1)]	973,080	The variable compensation of Mr. Thierry LABORDE changes according to criteria representative of the Group's results as well as the results of the CPBS division and his managerial performance. It is expressed as a percentage of a target variable compensation corresponding to 100% of fixed compensation for the year. The quantitative criteria depend on the following performance indicators: ▪ change in net earnings per share for the year compared to net earnings per share for the previous year (18.75% of the target variable compensation); ▪ percentage of achievement of the Group's budgeted gross operating income (18.75% of the target variable compensation); ▪ change in net income before tax of the CPBS scope for the year compared to the previous year (18.75% of the target variable compensation); ▪ percentage of achievement of the CPBS scope's gross operating income budget (18.75% of the target variable compensation). CSR criteria also condition 15% of the target variable compensation. They correspond to the multi-criteria assessment of the actions taken by BNP Paribas Group with respect to social, societal and environmental issues. The qualitative criteria represent 10% of the target variable compensation. After taking into account quantitative, CSR and qualitative criteria, the Board of directors set the annual variable compensation of Mr. Thierry LABORDE for 2022 at EUR 973,080, i.e. 108.12% of the target annual variable compensation; ▪ half of the non-deferred portion of the variable compensation will be paid in May 2023, and half in March 2024, indexed to the performance of the BNP Paribas share; ▪ the deferred portion of the variable compensation will be paid in fifths as of 2024. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share. The last payment in respect of 2022 will therefore be made in March 2029; ▪ the annual payment of the deferred variable compensation is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%. The ratio between the annual fixed compensation and variable compensation, as required under the French Commercial Code, is 108,12%.
Conditional long-term incentive plan (fully deferred for a period of five years)	370,980	The fair value of the LTIP awarded to Mr. Thierry LABORDE on 6 February 2023 with respect to 2022 amounts to EUR 370,980. The term of the LTIP is five years. The two conditions of the LTIP, one recognising an increase in the intrinsic value of the BNP Paribas share and the other recognising the potential outperformance of its peers, are assigned equal weighting in order to measure their effects separately. Thus, payments under the LTIP may not exceed 137.5% of their award value.
Compensation linked to the term of directorship	None	Mr. Thierry LABORDE does not receive any compensation for the directorships he holds in the Group's companies.
Extraordinary compensation	None	
Stock options awarded during the period	None	
Performance shares awarded during the year	None	
Benefits in kind	6,781	Mr. Thierry LABORDE has a company car. This amount also includes the employer contribution of EUR 1,433 paid by BNP Paribas (SA) for 2022 under the Executive Committee professional life insurance policy, offering an additional EUR 1.10 million in the event of death or total permanent disability.
TOTAL	**2,250,841**	

(1) Payment subject to the approval of the Annual General Meeting of 16 May 2023 pursuant to article L.22-10-34 II of the French Commercial Code.

b. Components of the compensation paid to Mr. Thierry LABORDE, Chief Operating Officer, during 2022 in respect of previous financial years (having been subject to a shareholder vote at the time of their award)

In euros	Date submitted to the AGM and resolution number	Amounts paid in 2022
Annual variable remuneration		**126,493**
Including partial payment of the annual variable compensation in respect of 2021	*17 May 2022 18th resolution*	*126,493*
Conditional long-term incentive plan	**None**	**None**

c. Commitments of any kind corresponding to elements of compensation, indemnities or benefits due or likely to be due in respect of the assumption, termination or change of functions or after the exercise thereof taken for the benefit of Mr. Thierry LABORDE, Chief Operating Officer

	Amounts	Comments
Sign-on bonuses and severance payments	None	Mr. Thierry LABORDE does not receive any sign-on bonuses or severance payments.
Top-up pension plan with defined benefits	None	Mr. Thierry LABORDE does not benefit from any supplemental defined-benefit pension plan.
Top-up pension plan defined-contribution	1,769	The directors and corporate officers benefit from the defined-contribution plan (article 83 of the French General Tax Code) set up for all employees of BNP Paribas (SA). In 2022, the amount of contributions paid by the Company in this respect for Mr. Thierry Laborde was EUR 1,769.
Welfare benefit and healthcare plans	4,011	Mr. Thierry LABORDE benefits from the disability, invalidity and death and healthcare insurance plans offered to BNP Paribas (SA) employees. He also benefits from death and disability insurance covering all employees of BNP Paribas (SA). In 2022, the amount of contributions paid by the Company in this respect for Mr. Thierry Laborde was EUR 4,011.

Details relating to the annual variable compensation of executive corporate officers

Assessment of the achievement of the targets set for 2022

At its meeting of 6 February 2023, the Board of directors assessed the achievement of the objectives set in accordance with the compensation policy.

Group performance criteria

Concerning the criterion linked to the change in net earnings per share for the year compared to the previous year, its measurement for the Chief Executive Officer Mr. Jean-Laurent Bonnafé as a percentage of the target variable compensation, amounts to 40.29% for 2022 (20.15% for the Chief Operating Officers, Mr. Yann Gérardin and Mr. Thierry Laborde).

Concerning the criterion related to the achievement of the gross operating income budget, its measurement for the Chief Executive Officer Mr. Jean-Laurent Bonnafé as a percentage of the target variable compensation, amounts to 39.51% for 2022 (19.76% for the Chief Operating Officers, Mr. Yann Gérardin and Mr. Thierry Laborde).

In addition, for the Chief Operating Officers, Mr. Yann Gérardin and Mr. Thierry Laborde:

- concerning the criterion related to the change in net income before tax for the year compared to the previous year, relating to the scope under their responsibility, its measurement, as a percentage of the target variable compensation, is 21.75% for the CIB scope and 23.27% for the CPBS scope;
- concerning the criterion related to the achievement of the gross operating income budget for the scope under their responsibility, its measurement, as a percentage of the target variable compensation, is 20.14% for the CIB scope and 19.94% for the CPBS scope.

	2021	2022	Variation	Application to

				37.5% of target variable compensation
Chief Executive Officer - Mr. Jean-Laurent BONNAFÉ				
Net earnings per share	7.26	7.80	7.44%	40.29%
Gross operating income	2022 budget(*): EUR 15,866 million	Achieved: EUR 16,717 million	5.37%	39.51%

(*) These data are calculated using the average exchange rate for 2022.

	2021	2022	Variation	Application to 18.75% of target variable compensation
Chief Operating Officers – Mr. Yann GÉRARDIN and Mr. Thierry LABORDE				
Group				
Net earnings per share	7.26	7.80	7.44%	20.15%
Gross operating income	2022 budget(*): EUR 15,866 million	Achieved: EUR 16,717 million	5.37%	19.76%
Scope of responsibility – CIB				
Net income before tax	4,654(**)	5,398	15.99%	21.75%
Gross operating income	2022 budget(*) : EUR 5,317 million	Achieved: EUR 5,712 million	7.43%	20.14%
Scope of responsibility – CPBS				
Net income before tax	6,447(**)	8,000	24.10%	23.27%
Gross operating income	2022 budget(*) : EUR 9,444 million	Achieved: EUR 10,044 million	6.35%	19.94%

(*) These data are calculated using the average exchange rate for 2022.
(**) Net income before tax for 2021 takes into account the restructuring carried out at the end of 2021, presented to the market on 8 February 2022 as part of the presentation of the Group's new organisation.

Criteria linked to the Group's CSR performance

The Board of directors reviewed the achievement of the multi-criteria measurement with regard to the three criteria linked to the Group's CSR performance provided for in the compensation policy, each of which has a 5% weighting.

(i) Board's assessment of the CSR policy

With respect to the qualitative assessment, the Board of directors considered that this criterion had been achieved taking into account the 2022 highlights in terms of climate and social issues.

BNP Paribas has an ambitious policy of societal engagement, with initiatives to promote ethical responsibility and consideration of social and environmental issues with a clear energy strategy. The Bank aims to be a leader in sustainable finance, and has made this one of the pillars of its 2025 strategic plan: Growth, Technology & Sustainability.

- On the economic pillar:
  - award for Best Bank worldwide for Sustainable Finance in 2022 by Euromoney;
  - Sixth in the world in terms of sustainable bonds with EUR 27.9 billion in 2022 according to Bloomberg and third in terms of Sustainability-Linked Loans with EUR 16.7 billion (first European);
  - alignment of the loan portfolio with a Net-Zero emissions target in 2050 with the publication of the first alignment report with targets at the end of 2025 for the electricity production, oil and gas and automotive sectors;
  - deployment of the ESG Assessment, a tool for assessing the environmental, social and governance (ESG) risk profile of the Group's corporate clients, which will be completed at the end of 2023 for the Group's large corporate clients and extended to various client segments.
- On the environmental pillar:
  - First worldwide for green bonds with EUR 18.2 billion in 2022 according to Bloomberg;

  - financing for low-carbon energy production now represents more than 50% of financing for energy production and amounted to EUR 28.2 billion at the end of September 2022 (EUR 23.7 billion for fossil fuels);
  - update of the oil and gas policy with more restrictive criteria;
  - publication of the first measurement of the biodiversity footprint of BNP Paribas Asset Management's investment portfolio;
  - financial advice for the largest offshore wind farm in the world, Dogger Bank Wind Farm, which is part of the UK's strategy to become carbon neutral by 2050.
- On the social pillar:
  - mobilisation with regard to the conflict in Ukraine to preserve the physical, psychological and social security of the employees concerned, while maintaining them as much as possible within the Bank;
  - launch of the Sustainability Academy to give employees the opportunity to acquire the necessary knowledge and skills in sustainable finance at all stages of their career;
  - promotion of diversity and inclusion: "Diversity and Inclusion Index" at the initiative of the French Ministry for Gender Equality, Diversity and Equal Opportunities; in terms of professional equality by setting ambitious targets for the number of women in governing bodies (40% by 2025), which has resulted in an increase in the proportion of women in the Senior Management Position (SMP) population; strengthening of the policy on respect for people;
  - implementation of the European Charter on Remote working, which defines a common framework for the deployment and strengthening of teleworking.
- On the civic pillar:
  - aid of EUR 34 million since 2015 for refugees in Europe, including those from Ukraine;
  - development of the Nickel offer (accounts and payment cards from the age of 12, without conditions): nearly 3 million accounts at the end of 2022, 75% of customers earn less than EUR 1,500 per month;
  - launch of the Just Sustainability Transitions Institute for Climate, Biodiversity & Inclusive Finance (or "JuST Institute") in partnership with the Global Environment Fund, whose aim is to preserve vulnerable populations impacted by climate change and the loss of biodiversity.

(ii) Market assessment of the CSR policy

Regarding the criterion related to the Group's CSR positioning compared to its peers in the extra-financial performance rankings of FTSE, S&P Global Corporate Sustainability Assessment (formerly SAM) and Moody's ESG Solutions (formerly V.E.), BNP Paribas is in the top quartile of the Banks sector of the three aforementioned agencies..

(iii) Assessment of the CSR policy by alignment with employees

Regarding the criterion of alignment with the Group's key employees, the three-year CSR target measure set in the retention plan for the Group's key employees are also met.

Consequently, the multi-criteria measure, as a percentage of the target variable compensation, amounts to 15% for 2022 for the Chief Executive Officer and the Chief Operating Officers.

	CSR – Assessment of the CSR policy			
	(i) By the Board	**(ii) By the market**	**(iii) Alignment with employees**	**Multi-criteria measurement**
Weighting	5.00%	5.00%	5.00%	
Measurement	5.00%	5.00%	5.00%	**15.00%**

Qualitative criteria

The Board of directors assessed the qualitative portion of the annual variable compensation in terms of the application of the criteria provided for in the compensation policy.

For 2022, the Board of directors determined that Mr. Jean-Laurent Bonnafé had principally achieved the following:

- operating results in 2022 up compared to 2021, demonstrating the ability of the Group's diversified and integrated model to continue to support the strong growth in activity and results, in a complex and evolving context marked by the increase in the price of commodities, the inflationary environment and rising interest rates. The Group generated a positive scissor effect and benefits from prudent and proactive long-term risk management, with a low cost of risk;
- his decisive action in the management of the Bank with (i) the deployment of the first steps of the 2025 strategic plan, including cross-functional initiatives (Digitisation, Savings, Mobility, Payments & Flows), (ii) the orderly achievement of the conditions precedent to the conclusion the sale of Bank of the West to BMO Group, (iii) the realisation by 2022 of the growth potential of the acquisitions and targeted investments previously undertaken and (iv) the management of the Group's cybersecurity policy;

- the strengthening the Bank's CSR strategy in terms of (i) the fight against climate change, in particular through the alignment of financing and investment portfolios with the commitment to carbon neutrality by 2050 and financing related to the energy transition and (ii) training, with the launch of the Sustainability Academy to give employees the opportunity to acquire the necessary knowledge and skills in sustainable finance at all stages of their career;
- the monitoring of the situation of the Group's subsidiaries in Ukraine and Russia and his personal commitment to support the initiatives deployed in favour of the 5,000 employees present in Ukraine and their families, aimed at preserving their physical, psychological and social safety;
- the acceleration of the strategy to increase the number of women in governing bodies, notably with a review of the action plans within the SMP (Senior Management Position) population at the beginning of 2022 to reach 40% of women by 2025 (35% at the end of 2022 *vs*. 32% at the end of 2021);
- the deployment of technological innovations as well as the achievement of partnerships and selective investments in innovative companies to continue to improve the customer experience and offer solutions that meet the best market standards.

For Mr. Yann Gérardin, as Chief Operating Officer in charge of the Corporate & Institutional Banking (CIB) division and in line with the assessments proposed for Mr. Jean-Laurent Bonnafé:

- the results of the CIB division in 2022, up sharply compared to an already exceptional year in 2021, despite an unfavourable context on the primary market;
- his leadership in the deployment by CIB of the first steps of the 2025 strategic plan, with significant market share gains enabling CIB to move from 9th to 6th place between 2016 and 2022, and from 4th to 2nd place in Europe over the same period;
- his active talent management policy across CIB's regions and business lines;
- his role in the successful completion of the operational integration of Deutsche Bank's Prime Brokerage activities, as well as in the further integration of Exane's activities, enabling CIB to offer a full range of services in the equity and derivatives segment;
- his involvement in the ongoing transformation of the Securities Services business line with the successful merger of BNP Paribas Securities Services into BNP Paribas SA;
- his involvement in CIB's pursuit of partnerships and selective investments in innovative companies, such as the joint acquisition with the CPBS division of Kantox, a fintech leader in automatic foreign exchange risk management;
- his commitment to continue to make CIB a leader in CSR, with the establishment of the Low-Carbon Transition Group within the Global Banking business line to support companies in their energy transition, the first positions acquired in terms of global and European ESG issuance and lending, the definition of a trajectory to align CIB portfolios with Net-Zero ambitions and global best bank awards for sustainable financing and for ESG data and technologies (Euromoney);
- his monitoring of the implementation of the BNP Paribas integrated model through the acceleration of joint initiatives with each of the CPBS and IPS divisions, in particular as part of the Payments & Flows and Savings cross-functional initiatives;
- his commitment to continue and strengthen the adoption by market activities of the Code of conduct and to deploy the Safety & Trust programme within CIB.

For Mr. Thierry Laborde, as Chief Operating Officer in charge of the Commercial, Personal Banking & Services division (CPBS) and in line with the assessments proposed for Mr. Jean-Laurent Bonnafé:

- the CPBS division's results in 2022, up compared to 2021, with a good performance by commercial banks driven by a generally favourable interest rate environment and a sharp increase in revenues from the Specialised Businesses;
- his leadership in the deployment by CPBS of the first steps of the 2025 strategic plan, with significant progress made in terms of improving customer satisfaction, deployment of the agile transformation programme and digitisation, as well as in support of the business lines and regions requiring transformation or restructuring plans;
- his role as sponsor of the Mobility and Payments & Flows cross-functional initiatives that have had numerous commercial successes in 2022;
- his contribution to accelerating BNP Paribas' presence in the growing sector of innovative payment and credit solutions, in particular the finalisation of the acquisition of Floa and the partnership with the electronic payments specialist Nets;
- his involvement in the closing of the framework agreement with Stellantis to extend the exclusive partnership with BNP Paribas, as well as in the conclusion of a strategic partnership with Jaguar Land Rover for the marketing of innovative financial services;
- his involvement in CPBS's pursuit of partnerships and selective investments in innovative companies, such as the joint acquisition with the CIB division of Kantox, a fintech leader in automatic foreign exchange risk management;
- his decisive contribution to strategic projects, in particular the creation of a multi-use digital portfolio within the European Payment Initiatives;
- his commitment to continue integrating the CSR dimension into CPBS's business lines.

Summary

After taking into account all the criteria used to set annual variable compensation, and the evolution of the Group's operating results, the Board of directors, on the proposal of the Remuneration Committee, set the variable compensation awarded in respect of 2022 at:

- EUR 1,931,464 for Mr. Jean-Laurent Bonnafé (representing 104.80% of his target variable compensation);
- EUR 1,602,000 for Mr. Yann Gérardin (representing 106.80% of his target variable compensation);
- EUR 973,080 for Mr. Thierry Laborde (representing 108.12% of his target variable compensation).

The result in respect of each criterion is set out in the following table:

		Quantitative criteria				CSR performance criteria	Qualitative criteria	Variable with respect to 2022	Reminder of target variable compensation
		EPS[2]	GOI[3]	NIBT[4]	GOI[5]				
		Group	Group	Business	Business				
Jean-Laurent Bonnafé	Weighting[1]	37.50%	37.50%			15.00%	10.00%		
	Measurement[1]	40.29%	39.51%			15.00%	10.00%	1,931,464	1,843,000
Yann Gérardin	Weighting[1]	18.75%	18.75%	18.75%	18.75%	15.00%	10.00%		
	Measurement[1]	20.15%	19.76%	21.75%	20.14%	15.00%	10.00%	1,602,000	1,500,000
Thierry Laborde	Weighting[1]	18.75%	18.75%	18.75%	18.75%	15.00%	10.00%		
	Measurement[1]	20.15%	19.76%	23.27%	19.94%	15.00%	10.00%	973,080	900,000

(1) As a percentage of target annual variable compensation.
(2) Change in net earnings per share (EPS) for the year compared to net earnings per share for the previous year.
(3) Percentage of achievement of target gross operating income (GOI).
(4) Change in net income before tax (NIBT). Yann Gérardin: CIB scope / Thierry Laborde: CPBS scope.
(5) Percentage of achievement of budgeted gross operating income (GOI). Yann Gérardin: CIB scope / Thierry Laborde: CPBS scope.

Terms and conditions of payment

a) The payment terms for variable compensation of BNP Paribas Group executive corporate officers in respect of 2022, in accordance with the provisions of the French Monetary and Financial Code and the EBA's 2 July 2021 Guidelines on compensation policy are:

- 60% of variable compensation is deferred over five years, at the rate of one-fifth per year;
- half of the non-deferred portion of the variable compensation is paid in May 2023, subject to the approval of the Shareholders' Annual General Meeting under the terms provided for by article L.22-10-34 II of the French Commercial Code; and half in March 2024, indexed to the performance of the BNP Paribas share since the award;
- the deferred portion of the variable compensation will be paid in fifths starting in 2024. Each payment will be made half in March every year, and half in March of the following year, indexed to the performance of the BNP Paribas share since the award. The last payment in respect of 2022 will therefore be made in March 2029.

b) In addition, the annual payment of the deferred variable compensation is subject to the condition that the ROE before tax of the Group for the year preceding the payment is greater than 5%.

The Board of directors noted that this performance condition was met in 2022; accordingly, deferred compensation payable in 2023 in respect of previous plans will be paid.

Details relating to the conditional long-term incentive plan covering a five-year period (LTIP)

LTIP amounts awarded in 2023

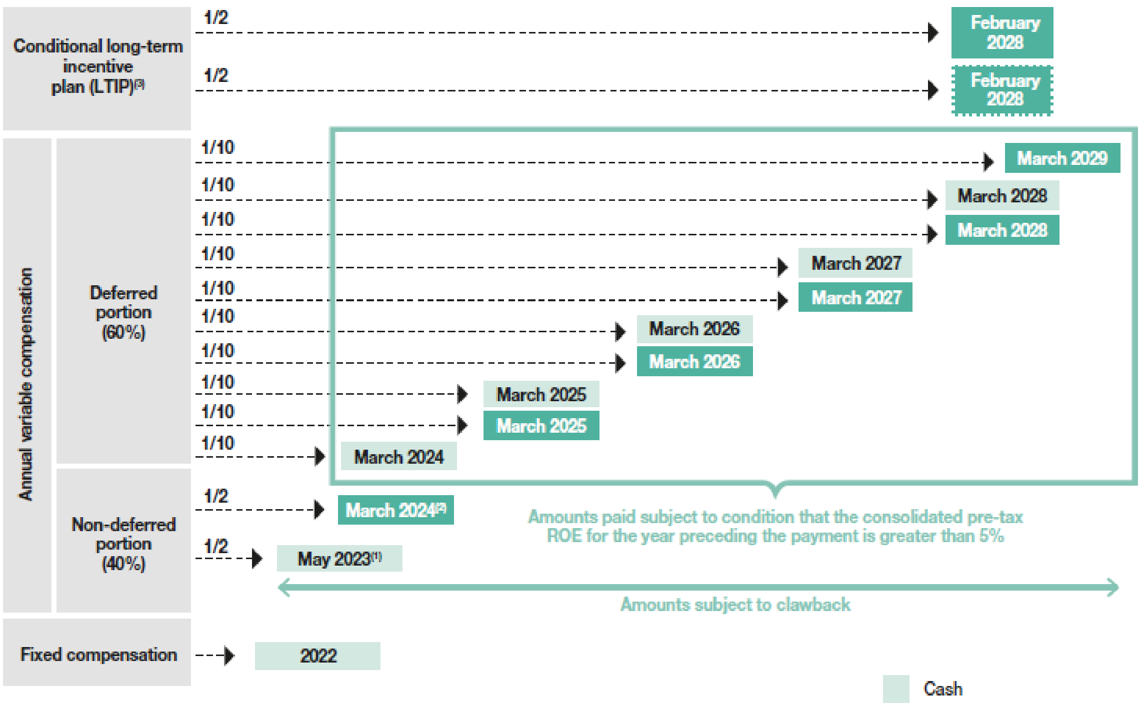
In accordance with the compensation policy and on the proposal of the Remuneration Committee, the Board of directors set the LTIP amounts to be awarded in 2023.

The amount awarded under the LTIP is equal to the target annual variable compensation for 2022.

LTIP awarded on 6 February 2023 *(in euros)*	Amount awarded[(*)]	Fair value of the amount awarded[(**)]
Jean-Laurent Bonnafé	1,843,000	759,685
Yann Gérardin	1,500,000	618,300
Thierry Laborde	900,000	370,980

(*) See explanations above.
(**) Fair value in accordance with IFRS of the amount awarded. The calculation is carried out by an independent expert.

STRUCTURE OF THE PAYMENT OF THE COMPENSATION OF EXECUTIVE CORPORATE OFFICERS IN RESPECT OF 2022 AFTER TAKING INTO ACCOUNT THE EBA GUIDELINES



(1) Awarded in March 2023 and payment deferred until May 2023 subject to the approval of the Shareholders' Annual General Meeting under the terms pursuant to article L.22-10-34 II of the French Commercial Code.
(2) Payment at the end of a one-year holding period starting on the date of the annual variable compensation award.
(3) The LTIP is a long-term compensation plan, payment will be made at the end of the five-year period.

Relative proportion of fixed and variable compensation of corporate officers

The cap on total variable compensation provided for by article L.511-78 of the French Monetary and Financial Code was not exceeded. Pursuant to article L.511-79 of the French Monetary and Financial Code, a discount rate may in addition be applied to no more than 25% of total variable compensation inasmuch as the payment is made in the form of instruments deferred for at least 5 years.

After applying the discount rate to the variable compensation amounts awarded in the form of instruments deferred for five years (discount of 41.52% in accordance with European Banking Authority guidelines on the application of the notional discount rate for variable compensation, published on 27 March 2014), the ratio between total variable compensation and fixed compensation is 1.84 for the Chief Executive Officer Mr. Jean-Laurent Bonnafé, 1.85 and 1.87 respectively for Messrs. Yann Gérardin and Thierry Laborde as Chief Operating Officers for 2022.

Use of "malus" and "claw-back" clauses

The Board of directors has not been called upon to apply the "malus" and "claw-back" clauses, provided for in the compensation policy defined above.

Compensation paid or granted by a company included in the consolidation scope

No compensation has been paid or granted to directors and corporate officers by a company included in the scope of consolidation of BNP Paribas within the meaning of article L.233-16 of the French Commercial Code.

Compensation multiples and changes

In accordance with the provisions of article L.22-10-9 of the French Commercial Code and the Afep guidelines on compensation multiples updated in February 2021, the level of compensation of the Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officers, with respect to the average compensation and the median compensation based on full-time equivalent employees of BNP Paribas (SA), as well as changes in this compensation, these ratios and the Company's performance criteria, are shown below.

This information is provided over a five-year period.

The employees considered are those of BNP Paribas (SA) in France and its branches, continuously present over a financial year. Compensation due or awarded to employees includes the fixed portion and the variable portion of compensation, commercial bonuses, retention plans, profit-sharing and incentive bonuses, as well as benefits in kind.

The compensation due or awarded to corporate officers equals the fixed compensation, variable compensation, the fair value of the long-term incentive plan, directors' compensation, as well as benefits in kind and information already presented in chapter 2 of this document for 2021 and 2022.

All this compensation, due or awarded, is presented on a gross basis, excluding employer contributions.

The table below shows the compensation multiples and changes for each corporate officer.

					Year
	2018	**2019**	**2020**	**2021**	**2022**
Performance of the Company					
Net pre-tax income (in millions of euros)	*10,208*	*11,394*	*9,822*	*13,637*	*14,450*
Change between N/N-1	*-10%*	*12%*	*-14%*	*39%*	*6%*
Operating income (in millions of euros)	*9,169*	*10,057*	*8,364*	*12,199*	*13,752*
Change between N/N-1	*-11%*	*10%*	*-17%*	*46%*	*13%*
Net earnings per share (in euros)	*5.73*	*6.21*	*5.31*	*7.26*	*7.80*
Change between N/N-1	*-5%*	*8%*	*-14%*	*37%*	*7%*
Compensation of employees *(in thousands of euros)*					
Average compensation	*82*	*86*	*88*	*93*	*96*
Change between N/N-1		*5%*	*2%*	*6%*	*3%*
Median compensation	*54*	*56*	*57*	*59*	*62*
Change between N/N-1		*3%*	*2%*	*4%*	*5%*
Chairman of the Board of directors					
Compensation of the Chairman of the Board of directors (in thousands of euros)	*1,017*	*1,014*	*1,013*	*1,020*	*1,018*
Change between N/N-1		*0%*	*0%*	*1%*	*0%*
Average compensation of employees ratio	*12*	*12*	*12*	*11*	*11*
Change between N/N-1		*-5%*	*-2%*	*-5%*	*-3%*
Median compensation of employees ratio	*19*	*18*	*18*	*17*	*16*
Change between N/N-1		*-3%*	*-2%*	*-3%*	*-5%*
Chief Executive Officer					
Compensation of the Chief Executive Officer (in thousands of euros)	*3,381*	*3,858*	*3,756*	*4,110*	*4,604*
Change between N/N-1		*14%*	*-3%*	*9%*	*12%*
Average compensation of employees ratio	*41*	*45*	*43*	*44*	*48*
Change between N/N-1		*9%*	*-5%*	*3%*	*8%*
Median compensation of employees ratio	*62*	*69*	*66*	*69*	*74*
Change between N/N-1		*11%*	*-5%*	*6%*	*7%*
Yann Gérardin(*)					
Compensation of the Chief Operating Officer (in thousands of euros)				*3,924*	*3,722*
Change between N/N-1					*-5%*
Average compensation of employees ratio				*42*	*39*
Change between N/N-1					*-8%*
Median compensation of employees ratio				*66*	*60*
Change between N/N-1					*-10%*
Thierry Laborde(*)					
Compensation of the Chief Operating Officer (in thousands of				*2,323*	*2,251*

euros)		
Change between N/N-1		*-3%*
Average compensation of employees ratio	*25*	*23*
Change between N/N-1		*-6%*
Median compensation of employees ratio	*39*	*36*
Change between N/N-1		*-8%*

(*) The terms of offices of Messrs. Yann Gérardin and Thierry Laborde as Chief Operating Officers began on 18 May 2021. Their compensation for 2021 has been annualised for comparability purposes.

Application of the provisions of the second paragraph of article L.225-45 of the French Commercial Code

The provisions of the second paragraph of article L.225-45 of the French Commercial Code do not need to be applied in 2022.

OTHER INFORMATION ON THE COMPENSATION OF CORPORATE OFFICERS PAID OR AWARDED IN RESPECT OF 2022, NOT SUBMITTED TO THE SHAREHOLDERS' VOTE

The components below, relating to the compensation of corporate officers, reiterate some information already presented in this chapter.

TOTAL COMPENSATION AWARDED IN RESPECT OF 2022 AND COMPARISON WITH 2021

	Jean-Laurent BONNAFÉ		**Yann GÉRARDIN**		**Thierry LABORDE**	
In euros	**2021**	**2022**	**2021****	**2022**	**2021****	**2022**
Fixed compensation amount	1,562,000	1,843,000	927,419	1,500,000	556,452	900,000
Annual variable compensation awarded	1,796,769	1,931,464	1,093,334	1,602,000	632,463	973,080
Sub-total	**3,358,769**	**3,774,464**	**2,020,753**	**3,102,000**	**1,188,915**	**1,873,080**
LTIP amount (fair value)(*)	680,720	759,685	404,169	618,300	242,502	370,980
TOTAL	**4,039,489**	**4,534,149**	**2,424,922**	**3,720,300**	**1,431,417**	**2,244,060**

(*) This is an estimated value at the award date. The final amount will be known at the date of payment.
(**) Mr. Yann Gérardin and Mr. Thierry Laborde took over as Chief Operating Officers with effect from 18 May 2021.

Share ownership

The Board of directors has decided that the minimum number of shares that Messrs. Jean Lemierre, Jean-Laurent Bonnafé, Yann Gérardin and Thierry Laborde shall be required to hold for the duration of their terms of office shall be 10,000, 80,000, 30,000 and 20,000 shares respectively. The four interested parties have complied with this obligation, through the direct ownership of shares or units in the Company Savings Plan fully invested in BNP Paribas shares.

Quantitative information on the compensation of corporate officers

The table after shows the gross compensation awarded in respect of the year, including compensation linked to a term of directorship and benefits in kind, for each corporate officer.

SUMMARY TABLE OF THE COMPENSATION AWARDED TO EACH CORPORATE OFFICER

In euros		2021 Total awarded	2022 Total awarded
Jean LEMIERRE Chairman of the Board of directors	Fixed compensation	950,000	950,000
	Annual variable compensation	None	None
	Conditional long-term incentive plan	None	None
	Value of stock options awarded during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**950,000**	**950,000**
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	64,432	63,220
	Benefits in kind(1)	5,163	5,128
	TOTAL	**1,019,595**	**1,018,348**
Jean-Laurent BONNAFÉ Chief Executive Officer	Fixed compensation	1,562,000	1,843,000
	Annual variable compensation	1,796,769	1,931,464
	Conditional long-term incentive plan(2)	680,720	759,685
	Value of stock options awarded during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**4,039,489**	**4,534,149**
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	64,432	63,220
	Benefits in kind(1)	6,481	6,446
	TOTAL	**4,110,402**	**4,603,815**
Yann GÉRARDIN Chief Operating Officer	Fixed compensation	927,419	1,500,000
	Annual variable compensation	1,093,334	1,602,000
	Conditional long-term incentive plan(2)	404,169	618,300
	Value of stock options awarded during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**2,424,922**	**3,720,300**
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	None	None
	Benefits in kind(1)	1,433	1,433
	TOTAL	**2,426,355**	**3,721,733**

In euros		2021 Total awarded	2022 Total awarded
Thierry LABORDE Chief Operating Officer	Fixed compensation	556,452	900,000
	Annual variable compensation	632,463	973,080
	Conditional long-term incentive plan(2)	242,502	370,980
	Value of stock options awarded during the year	None	None
	Value of performance shares awarded during the year	None	None
	Sub-total	**1,431,417**	**2,244,060**
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	None	None
	Benefits in kind(1)	4,588	6,781
	TOTAL	**1,436,005**	**2,250,841**

(1) The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officers, if applicable, have a company car. The Chief Executive Officer and Chief Operating Officers receive Executive Committee professional life insurance, for which the Company's contribution is recognised as a benefit in kind.

(2) Value of amount awarded subject to certain performance conditions.

The tables below show the gross compensation paid in 2022, including compensation linked to directorships and benefits in kind, for each corporate officer.

SUMMARY TABLE OF COMPENSATION PAID AS CORPORATE OFFICER

In euros		2021 Amounts paid	2022 Amounts paid
Jean LEMIERRE Chairman of the Board of directors	Fixed compensation	950,000	950,000
	Annual variable compensation	None	None
	Conditional long-term incentive plan	None	None
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	64,432	63,220
	Benefits in kind(1)	5,163	5,128
	TOTAL	**1,019,595**	**1,018,348**

In euros		2021 Amounts paid	2022 Amounts paid
Jean-Laurent BONNAFÉ **Chief Executive Officer**	Fixed compensation	1,562,000	1,843,000
	Annual variable compensation	1,220,036	1,689,625
	of which annual variable compensation in respect of 2021	*None*	*359,354*
	of which annual variable compensation in respect of 2020	*295,843*	*476,315*
	of which annual variable compensation in respect of 2019	*405,996*	*230,692*
	of which annual variable compensation in respect of 2018	*180,750*	*221,890*
	of which annual variable compensation in respect of 2017	*161,107*	*190,676*
	of which annual variable compensation in respect of 2016	*176,340*	*210,698*
	Conditional long-term incentive plan	0(2)	1,405,800(2)
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	64,432	63,220
	Benefits in kind(1)	6,481	6,446
	TOTAL	**2,852,949**	**5,008,091**
Yann GÉRARDIN **Chief Operating Officer**	Fixed compensation	927,419	1,500,000
	Annual variable compensation	None	218,667
	of which annual variable compensation in respect of 2021	*None*	*218,667*
	of which annual variable compensation in respect of 2020	*None*	*None*
	of which annual variable compensation in respect of 2019	*None*	*None*
	of which annual variable compensation in respect of 2018	*None*	*None*
	of which annual variable compensation in respect of 2017	*None*	*None*
	of which annual variable compensation in respect of 2016	*None*	*None*
	Conditional long-term incentive plan	None	None
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	None	None
	Benefits in kind(1)	1,433	1,433
	TOTAL	**928,852**	**1,720,100**

In euros		2021 Amounts paid	2022 Amounts paid
Thierry LABORDE **Chief Operating Officer**	Fixed compensation	556,452	900,000
	Annual variable compensation	None	126,493
	of which annual variable compensation in respect of 2021	*None*	*126,493*
	of which annual variable compensation in respect of 2020	*None*	*None*
	of which annual variable compensation in respect of 2019	*None*	*None*
	of which annual variable compensation in respect of 2018	*None*	*None*
	of which annual variable compensation in respect of 2017	*None*	*None*
	of which annual variable compensation in respect of 2016	*None*	*None*
	Conditional long-term incentive plan	None	None
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	None	None
	Benefits in kind(1)	4,588	6,781
	TOTAL	**561,040**	**1,033,274**

The average tax and social contribution rate on this compensation was 34% in 2022 (37% in 2021).

(1) The Chairman of the Board of directors, the Chief Executive Officer and the Chief Operating Officers, if applicable, have a company car. The Chief Executive Officer and Chief Operating Officers receive Executive Committee professional life insurance, for which the Company's contribution is recognised as a benefit in kind.

(2) The application of the performance conditions attached to the LTIP awarded in 2017 led to a payment in 2022 corresponding to 90% of the amount awarded for Mr. Bonnafé. As a reminder, the 2016 LTIP did not give rise to any payment in 2021 due to the failure to meet the minimum performance condition of the BNP Paribas share.

SUMMARY TABLE OF COMPENSATION PAID DURING THEIR TERMS OF OFFICE, IN RESPECT OF THEIR PREVIOUS ACTIVITIES AS EMPLOYEES OF THE GROUP

In euros		**2021[2]** Amounts paid	**2022** Amounts paid
Yann GÉRARDIN Chief Operating Officer	Fixed compensation	None	None
	Annual variable compensation[1]	1,075,361	1,913,812
	of which annual variable compensation in respect of 2021	*None*	*367,912*
	of which annual variable compensation in respect of 2020	*515,073*	*215,404*
	of which annual variable compensation in respect of 2019	*117,424*	*207,559*
	of which annual variable compensation in respect of 2018	*163,401*	*276,858*
	of which annual variable compensation in respect of 2017	*136,241*	*283,453*
	of which annual variable compensation in respect of 2016	*143,222*	*562,626*
	Conditional long-term incentive plan	None	None
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	None	None
	Benefits in kind	None	None
	TOTAL	**1,075,361**	**1,913,812**
Thierry LABORDE Chief Operating Officer	Fixed compensation	None	None
	Annual variable compensation[1]	285,518	715,244
	of which annual variable compensation in respect of 2021	*None*	*149,707*
	of which annual variable compensation in respect of 2020	*221,214*	*55,138*
	of which annual variable compensation in respect of 2019	*23,398*	*41,369*
	of which annual variable compensation in respect of 2018	*23,016*	*38,986*
	of which annual variable compensation in respect of 2017	*9,981*	*20,808*
	of which annual variable compensation in respect of 2016	*7,909*	*409,236*
	Conditional long-term incentive plan	None	None
	Extraordinary compensation	None	None
	Compensation linked to the term of directorship	None	None
	Benefits in kind	None	None
	TOTAL	**285,518**	**715,244**

(1) The amounts shown here correspond to the deferred variable compensation awarded in respect of the previous salaried activities of the corporate officers, prior to their term of office.
The average tax and social contribution rate on this compensation is 34% in 2022 (37% in 2021).

In euros	2021(2) Amounts paid	2022 Amounts paid

(2) *In 2021, only the amounts of annual variable compensation in indexed cash are shown for the Chief Operating Officers, the amounts in cash having been paid before the start of their term of office. In addition, in 2021, the Chief Operating Officers did not benefit from payment under the long-term retention plan due to the extension of the deferral period from the 2016 performance year.*

STOCK SUBSCRIPTION OR PURCHASE OPTIONS AWARDED DURING THE YEAR TO EACH CORPORATE OFFICER BY THE ISSUER AND BY EACH COMPANY IN THE GROUP

No stock subscription or purchase options were awarded during the year to the corporate officers by the Company or by any other Group company.

STOCK SUBSCRIPTION OR PURCHASE OPTIONS EXERCISED DURING THE YEAR BY EACH CORPORATE OFFICER

No stock subscription or purchase options were exercised during the year by the corporate officers.

PERFORMANCE SHARES AWARDED DURING THE YEAR TO EACH CORPORATE OFFICER BY THE ISSUER AND BY EACH COMPANY IN THE GROUP

No performance share was awarded during the year to corporate officers by the Company or any company in the Group.

PERFORMANCE SHARES THAT BECAME AVAILABLE DURING THE YEAR FOR EACH CORPORATE OFFICER

No performance share became available during the year for the corporate officers.

HISTORY OF STOCK SUBSCRIPTION AND PURCHASE OPTIONS

None.

HISTORY OF PERFORMANCE SHARE AWARDS

None.

VALUATION(1) OF THE CONDITIONAL LONG-TERM INCENTIVE PLAN AT THE AWARD DATE AND AT 31 DECEMBER 2022

Award date of the plan	05/02/2018		05/02/2019		04/02/2020		04/02/2021		07/02/2022		06/02/2023
Maturity date of the plan	05/02/2023		05/02/2024		04/02/2025		04/02/2026		07/02/2027		
Valuation(1)	At the award date of the plan	At 31/12/2022	At the award date of the plan	At 31/12/2022	At the award date of the plan	At 31/12/2022	At the award date of the plan	At 31/12/2022	At the award date of the plan	At 31/12/2022	At the award date of the plan
Jean LEMIERRE	-	-	-	-	-	-	-	-	-	-	-
Jean-Laurent BONNAFÉ	479,065	779,483	282,644	856,876	617,927	982,392	649,636	938,387	680,720	472,306	759,685
Yann GÉRARDIN	-	-	-	-	-	-	-	-	404,169	280,426	618,300
Thierry	-	-	-	-	-	-	-	-	242,502	168,256	370,980

LABORDE											
TOTAL	**479,065**	**779,483**	**282,644**	**856,876**	**617,927**	**982,392**	**649,636**	**938,387**	**1,327,391**	**920,988**	**1,748,965**

(1) Valuation according to the method adopted for the consolidated financial statements.

ASSUMPTIONS USED TO VALUE THE CONDITIONAL LONG-TERM INCENTIVE PLAN IN ACCORDANCE WITH THE METHOD ADOPTED FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Valuation at award date

Award date of the plan	07/02/2022	06/02/2023
Opening price of BNP Paribas share	65.00	61.08
Opening level of the EURO STOXX Banks index	110.61	111.40
Zero-coupon rate	Euribor	Euribor
Volatility of the BNP Paribas share	24.82%	25.57%
Volatility of the EURO STOXX Banks index	23.48%	24.59%
Correlation between the BNP Paribas share and the EURO STOXX Banks index	93.95%	93.59%
Financial model used	Monte-Carlo	Monte-Carlo
Fair value of the plan at award date(*)	**43.58%**	**41.22%**

(*) As a percentage of the amount awarded.

	Initial value of the share at the award date	**Fair value at date of award(2)**	**Valuation at closing date 31/12/2021**	**Valuation at closing date 31/12/2022**
Closing price of BNP Paribas share			€60.77	€53.25
Closing level of the EURO STOXX Banks index			€100.44	€95.86
Zero-coupon rate			Euribor	Euribor
Volatility of the BNP Paribas share			24.61%	27.59%
Volatility of the EURO STOXX Banks index			24.21%	26.26%
Correlation between the BNP Paribas share and the EURO STOXX Banks index			94.38%	93.08%
Financial model used			Monte-Carlo	Monte-Carlo
Fair value of the plan awarded on 5 February 2018	**€63.99(1)**	**30.67%**	**53.95%**	**49.90%**
Fair value of the plan awarded on 5 February 2019	**€53.08(1)**	**18.10%**	**70.98%**	**54.86%**
Fair value of the plan awarded on 4 February 2020	**€45.27(1)**	**39.56%**	**76.31%**	**62.89%**
Fair value of the plan awarded on 4 February 2021	**€36.83(1)**	**41.59%**	**74.82%**	**60.08%**
Fair value of the plan awarded on 7 February 2022	**€55.13(1)**	**43.58%**		**30.24%**

(1) The initial value is the average of the opening price of the BNP Paribas share for the rolling 12-month period preceding the award date.
(2) As a percentage of the amount awarded.

DETAILED CONTRACTUAL SITUATION OF THE GROUP'S CORPORATE OFFICERS

	Employment contract		Top-up pension plan		Payments or benefits due or likely to become due upon termination or change in functions		Non-compete indemnity	
Corporate officers in 2022	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Jean LEMIERRE Chairman of the Board of directors		✓(1)	✓(2)			✓		✓
Jean-Laurent BONNAFÉ Chief Executive Officer		✓(3)	✓(2)			✓	✓(4)	
Yann GÉRARDIN Chief Operating Officer	✓(5)		✓(2)			✓		✓
Thierry LABORDE Chief Operating Officer	✓(5)		✓(2)			✓		✓

(1) Waiver of employment contract with effect from 1 December 2014 in accordance with Afep-MEDEF Code.
(2) Messrs. Jean Lemierre, Jean-Laurent Bonnafé, Yann Gérardin and Thierry Laborde benefit exclusively from the pension plan set up for all BNP Paribas (SA) employees (article 83 of the French General Tax Code).
(3) Waiver of employment contract with effect from 1 July 2012.
(4) See Section regarding the Non-compete agreement.
(5) Employment contract suspended.

SUMMARY OF TRANSACTIONS REPORTED ON BNP PARIBAS STOCK

The following table lists the transactions indicated in article L.621-18-2 of the French Monetary and Financial Code on the Company's securities, covered by articles 223-22 A to 223-26 of the General Regulation of the AMF, carried out in 2022 by the directors and corporate officers and which must be disclosed pursuant to the AMF regulations.

First name and surname Quality	Transactions carried out	Type of financial instrument	Nature of the transaction	Number of transactions	Amount of transactions *(in euros)*
Jean-Laurent BONNAFÉ **Chief Executive Officer**	On a personal basis	BNP Paribas Equities	Purchase	1	88,730
Jean-Laurent BONNAFÉ **Chief Executive Officer**	On a personal basis	BNP Paribas Equities	Reinvestment of dividend	1	219,937
Thierry LABORDE **Chief Operating Officer**	On a personal basis	BNP Paribas Equities	Purchase	9	196,065
Yann GÉRARDIN **Chief Operating Officer**	On a personal basis	BNP Paribas Equities	Purchase	1	90,289
Lieve LOGGHE **Director**	On a personal basis	BNP Paribas Equities	Purchase	1	51,690
Jean LEMIERRE **Chairman**	On a personal basis	BNP Paribas Equities	Purchase	2	179,920
Jean LEMIERRE **Chairman**	In respect of a related person	BNP Paribas Equities	Donation received	1	4,591

2.1.4 OTHER INFORMATION

1. INFORMATION ON SHARE SUBSCRIPTION OR PURCHASE OPTIONS AND ON PERFORMANCE SHARES

The Company did not grant any instruments to employees who are not directors or corporate officers in 2022.

No instruments were transferred or exercised in 2022, for the benefit of employees who are not directors or corporate officers.

2. LOANS, ADVANCES AND GUARANTEES GRANTED TO THE GROUP'S CORPORATE OFFICERS

As at 31 December 2022, the total outstanding loans granted directly or indirectly to corporate officers amounted to EUR 5,179,096 (EUR 6,392,969 as at 31 December 2021). This represents the total amount of loans granted to BNP Paribas' directors and corporate officers, their spouse and dependent children. These loans representing normal transactions were carried out at arm's length, in accordance with the Implementation procedure for conflicts of interest in relation to loans and other transactions granted to the Members of the management body and their related parties.

3. TABLE OF DELEGATIONS

Resolutions adopted at Shareholders' Annual General Meetings valid for 2022

The following delegations to increase or reduce the share capital have been granted to the Board of directors under resolutions approved by Shareholders' General Meetings and were valid during 2022:

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2022
Shareholders' Combined General Meeting of 18 May 2021 (5th resolution)	Authorisation given to the Board of directors to set up a share buyback programme for the Company up to a maximum of 10% of the shares comprising the share capital. Said acquisitions of shares, at a price not exceeding EUR 73 per share (previously EUR 73), would be intended to fulfil several objectives including: ▪ fulfilling obligations arising from the issue of securities giving access to capital, stock option programmes, the award of free shares, the award or assignment of shares to employees in connection with the employee profit-sharing scheme or Company Savings Plans, and all forms of share grants to employees and/or directors and officers of BNP Paribas and the companies controlled exclusively by BNP as defined in article L.233-16 of the French Commercial Code; ▪ cancelling shares in accordance with conditions set by the Shareholders' Combined General Meeting of 18 May 2021 (20th resolution); ▪ holding and subsequently remitting them in exchange or payment for external growth transactions, mergers, spin-offs or asset contributions; ▪ under a market-making agreement in accordance with Decision No. 2018-01 of 2 July 2018 of the French Financial Markets Authority (Autorité des Marchés Financiers - AMF); and ▪ carrying out investment services for which BNP Paribas is authorised or to hedge them. That authorisation was granted for a period of 18 months and replaces that granted by the 5th resolution of the Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 19 May 2020 (19th resolution)	Capital increase, with preferential subscription rights maintained, through the issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 1 billion (*i.e.* 500 million shares). That authorisation was granted for a period of 26 months and replaces that granted by the 19th resolution of the Shareholders' Combined General Meeting of 24 May 2018.	This authorisation was not used during the period

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2022
Shareholders' Combined General Meeting of 19 May 2020 (20th resolution)	Capital increase, without preferential subscription rights, by issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out, immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 240 million (i.e. 120 million shares). That authorisation was granted for a period of 26 months and replaces that granted by the 20th resolution of the Shareholders' Combined General Meeting of 24 May 2018.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 19 May 2020 (21st resolution)	Capital increase, without preferential subscription rights, through the issue of ordinary shares and share equivalents giving access, immediately or in the future, to shares to be issued intended to remunerate contributions of securities up to a limit of 10% of the share capital. The nominal amount of capital increases that may be carried out on one or more occasions, by virtue of this authorisation, may not exceed 10% of the share capital of BNP Paribas as at the date of the decision of the Board of directors. This delegation was given for a period of 26 months and replaces that granted by the 21st resolution of the Shareholders' Combined General Meeting of 24 May 2018.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 19 May 2020 (22nd resolution)	Overall limit on authorisations to issue shares with cancellation or without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with cancellation or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 240 million for shares by virtue of the authorisations granted under the 20th and 21st resolutions of this Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 19 May 2020 (23rd resolution)	Capital increase by capitalising reserves, retained earnings, additional paid-in capital or contribution premium. Authorisation was given to increase the share capital up to a maximum amount of EUR 1 billion on one or more occasions, by capitalising all or part of the reserves, profits or additional paid-in capital, merger or contribution premiums, successively or simultaneously, through the issuance and award of free shares, through an increase in the par value of existing shares, or through a combination of these two methods. That authorisation was granted for a period of 26 months and replaces that granted by the 23rd resolution of the Shareholders' Combined General Meeting of 24 May 2018.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 19 May 2020 (24th resolution)	Overall limit on authorisations to issue shares with, with cancellation or without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 1 billion for shares by virtue of the authorisations granted under the 19th to 21st resolutions of the Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 19 May 2020 (25th resolution)	Authorisation granted to the Board of directors to carry out transactions reserved for members of the BNP Paribas Group Company Savings Plan, with cancellation of preferential subscription rights, which may take the form of capital increases and/or disposals of reserved titles. Authorisation was given to increase the share capital within the limit of a maximum nominal amount of EUR 46 million on one or more occasions by issuing ordinary shares (with cancellation of preferential subscription rights for existing shareholders), reserved for members of the BNP Paribas Group's Company Savings Plan, or by selling of shares. That authorisation was granted for a period of 26 months and replaces that granted by the 25th resolution of the Shareholders' Combined General Meeting of 24 May 2018.	This authorisation was not used during the period

	Resolutions adopted at Shareholders' General Meetings	Use of authorisation in 2022
Shareholders' Combined General Meeting of 18 May 2021 (20th resolution)	Authorisation granted to the Board of directors to reduce the share capital by cancelling shares. Authorisation is given to cancel, on one or more occasions, through reduction of the share capital, all or some of the shares that BNP Paribas holds and that it could hold, up to a maximum of 10% of the total number of shares constituting the share capital existing as at the date of the transaction, for a period of 24 months. Delegation of all powers to carry out this reduction in share capital, and allocate the difference between the purchase price of the cancelled shares and their nominal value to share premium and retained earnings, including the legal reserve up to 10% of the share capital cancelled. That authorisation was granted for a period of 18 months and replaces that granted by the 26th resolution of the Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 17 May 2022 (5th resolution)	Authorisation given to the Board of directors to set up a share buyback programme for the Company up to a maximum of 10% of the shares comprising the share capital. Said acquisitions of shares, at a price not exceeding EUR 88 per share (previously EUR 73), would be intended to fulfil several objectives including: ▪ fulfilling obligations arising from the issue of securities giving access to capital, stock option programmes, the award of free shares, the award or assignment of shares to employees in connection with the employee profit-sharing scheme or Company Savings Plans, and all forms of share grants to employees and/or directors and officers of BNP Paribas and the companies controlled exclusively by BNP as defined in article L.233-16 of the French Commercial Code; ▪ cancelling shares in accordance with conditions set by the Shareholders' Combined General Meeting of 17 May 2022 (28th resolution); ▪ holding and subsequently remitting them in exchange or payment for external growth transactions, mergers, spin-offs or asset contributions; ▪ under a market-making agreement in accordance with Decision No. 2021-01 of 22 June 2021 of the French Financial Markets Authority (Autorité des Marchés Financiers – AMF); and ▪ carrying out investment services for which BNP Paribas is authorised or to hedge them. That authorisation was granted for a period of 18 months and replaces that granted by the 5th resolution of the Shareholders' Combined General Meeting of 18 May 2021.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 17 May 2022 (21st resolution)	Capital increase, with preferential subscription rights maintained, through the issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out, immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 985 million. That authorisation was granted for a period of 26 months and replaces that granted by the 19th resolution of the Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 17 May 2022 (22nd resolution)	Capital increase, without preferential subscription rights, by issue of ordinary shares and share equivalents giving access immediately or in the future to shares to be issued. The nominal amount of capital increases that may be carried out, immediately and/or in the future, by virtue of this authorisation, may not exceed EUR 240 million. That authorisation was granted for a period of 26 months and replaces that granted by the 20th resolution of the Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period

Resolutions adopted at Shareholders' General Meetings		Use of authorisation in 2022
Shareholders' Combined General Meeting of 17 May 2022 (23rd resolution)	Capital increase, without preferential subscription rights, through the issue of ordinary shares and share equivalents giving access, immediately or in the future, to shares to be issued intended to remunerate contributions of securities up to a limit of 10% of the share capital. The nominal amount of capital increases that may be carried out on one or more occasions, by virtue of this authorisation, may not exceed 10% of the share capital of BNP Paribas as at the date of the decision of the Board of directors. This delegation was given for a period of 26 months and replaces that granted by the 21st resolution of the Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 17 May 2022 (24th resolution)	Overall limit on authorisations to issue shares with cancellation or without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 240 billion for shares by virtue of the authorisations granted under the 22nd and 23rd resolutions of the Shareholders' Combined General Meeting of 17 May 2022.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 17 May 2022 (25th resolution)	Capital increase by capitalising reserves, retained earnings, additional paid-in capital or contribution premium. Authorisation was given to increase the share capital up to a maximum amount of EUR 985 billion on one or more occasions, by capitalising all or part of the reserves, profits or additional paid-in capital, merger or contribution premiums, successively or simultaneously, through the issuance and award of free shares, through an increase in the par value of existing shares, or through a combination of these two methods. That authorisation was granted for a period of 26 months and replaces that granted by the 23rd resolution of the Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 17 May 2022 (26th resolution)	Overall limit on authorisations to issue shares with, with cancellation or without preferential subscription rights for existing shareholders. The maximum overall amount for all issues with or without preferential subscription rights for existing shareholders carried out immediately and/or in the future may not exceed EUR 985 billion for shares by virtue of the authorisations granted under the 21st to 23rd resolutions of the Shareholders' Combined General Meeting of 17 May 2022.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 17 May 2022 (27th resolution)	Authorisation granted to the Board of directors to carry out transactions reserved for members of the BNP Paribas Group Company Savings Plan, with cancellation of preferential subscription rights, which may take the form of capital increases and/or disposals of reserved titles. Authorisation was given to increase the share capital within the limit of a maximum nominal amount of EUR 46 million on one or more occasions by issuing ordinary shares (with cancellation of preferential subscription rights for existing shareholders), reserved for members of the BNP Paribas Group's Company Savings Plan, or by selling of shares. That authorisation was granted for a period of 26 months and replaces that granted by the 25th resolution of the Shareholders' Combined General Meeting of 19 May 2020.	This authorisation was not used during the period
Shareholders' Combined General Meeting of 17 May 2022 (28th resolution)	Authorisation granted to the Board of directors to reduce the share capital by cancelling shares. Authorisation is given to cancel, on one or more occasions, through reduction of the share capital, all or some of the shares that BNP Paribas holds and that it could hold, up to a maximum of 10% of the total number of shares constituting the share capital existing as at the date of the transaction, for a period of 24 months. Delegation of all powers to carry out this reduction in share capital, and allocate the difference between the purchase price of the cancelled shares and their nominal value to share premium and retained earnings, including the legal reserve up to 10% of the share capital cancelled. That authorisation was granted for a period of 18 months and replaces that granted by the 20th resolution of the Shareholders' Combined General Meeting of 18 May 2021.	This authorisation was not used during the period

4 ITEMS LIKELY TO HAVE AN IMPACT IN THE EVENT OF A PUBLIC TENDER OR EXCHANGE OFFER (ARTICLE L.22-10-11 OF THE FRENCH COMMERCIAL CODE)

Among the items referred to in article L.22-10-11 of the French Commercial Code, there is no item likely to have an impact in the event of a public tender or exchange offer.

2.2 Statutory Auditors' report, prepared in accordance with article L.22-10-71 of the French Commercial Code, on the Board of directors' Corporate Governance report

The comments required by article L.22-10-71 of the French Commercial Code are covered in the Statutory Auditor's report on the parent company financial statements (chapter 6.6).

2.3 The Executive Committee

At 7 February 2023, the BNP Paribas Executive Committee had the following members:

- **Jean-Laurent Bonnafé**, Director and Chief Executive Officer;
- **Yann Gérardin**, Chief Operating Officer in charge of the Corporate & Institutional Banking division;
- **Thierry Laborde**, Chief Operating Officer in charge of the Commercial, Personal Banking & Services division;
- **Laurent David**, Deputy Chief Operating Officer;
- **Renaud Dumora**, Deputy Chief Operating Officer in charge of the Investment & Protection Services division;
- **Marguerite Berard**, Head of Commercial & Personal Banking in France
- **Charlotte Dennery**, Director and Chief Executive Officer of BNP Paribas Personal Finance;
- **Elena Goitini**, Chief Executive Officer of BNL;
- **Michael Anseeuw**, Director and Chief Executive Officer and Chairman of the Executive Board of BNP Paribas Fortis
- **Yannick Jung**, Head of Corporate & Institutional Banking Global Banking EMEA;
- **Pauline Leclerc-Glorieux**, Chief Executive Officer of BNP Paribas Cardif;
- **Olivier Osty**, Head of Corporate & Institutional Banking Global Markets;
- **Bernard Gavgani**, Chief Information Officer;
- **Stéphanie Maarek**, Head of Compliance;
- **Lars Machenil**, Chief Financial Officer;
- **Sofia Merlo**, Head of Human Resources;
- **Frank Roncey**, Chief Risk Officer;
- **Antoine Sire**, Head of Company Engagement.

The BNP Paribas Executive Committee has had a permanent Secretariat since November 2007.

2.4 Internal control

The following information relating to internal control was submitted to the Group's Executive Management. The Chief Executive Officer, as executive director, is responsible for the organisation and procedures of internal control and for all information required by French law regarding the internal control report. This document is based on the information provided by the Compliance, RISK, Finance, LEGAL and General Inspection Functions. It has been approved by the Board of directors.

BNP PARIBAS' INTERNAL CONTROL STANDARDS

The principles and procedures for the internal control of banking activities in France and abroad are at the heart of banking and financial regulations and are subject to numerous legislative and regulatory provisions.

The main text applicable to BNP Paribas is the Ministerial Order of 3 November 2014. This text sets out the conditions for the implementation and monitoring of internal control in credit institutions and investment firms, in compliance with the European Directive CRD 4. In particular, it specifies the principles relating to internal transaction control systems and procedures, organisation of accounting and information processing, risk and result measurement systems, risk monitoring and control systems, and the information and documentation system for internal control. Article 258 of the Order provides for the drafting for the Board of directors of an annual regulatory report on the conditions under which internal control is implemented.

This Order requires BNP Paribas to have an internal control system (hereinafter Internal control) comprising specific departments and persons responsible for permanent control (including the Compliance and RISK Functions) and periodic control. This system must also take into account, as appropriate, the general regulation of the AMF, the regulations applicable to foreign branches and subsidiaries and to specialised activities such as portfolio management and insurance, and the recommendations of leading international bodies dealing with issues related to the prudential regulation of international banks, first and foremost the Basel Committee, the Financial Stability Board, the European Authorities, the European Securities and Markets Authority, the European Central Bank and the *French Autorité de contrôle prudentiel et de résolution*.

DEFINITION, OBJECTIVES AND STANDARDS OF INTERNAL CONTROL

The BNP Paribas Group's Executive Management has implemented an internal control system whose main purpose is to ensure overall control of the risks and to provide reasonable assurance that the Company's objectives in this respect are achieved.

The BNP Paribas Internal Control Charter specifies the framework of this system and constitutes BNP Paribas' basic internal control framework. Widely distributed within the Group and accessible to all its employees, this charter firstly recalls the objectives of internal control, which aims to ensure:

- a sound and prudent risk management approach, aligned with BNP Paribas' values and Code of conduct in conjunction with the policies outlined in its corporate social responsibility framework;
- operational security of BNP Paribas' internal operations;
- the relevance and reliability of accounting and financial information;
- compliance with laws, regulations and internal policies.

Its implementation requires, in particular, that a high-level culture of risk and ethics be promoted to all employees and in BNP Paribas' relations with third parties, clients, intermediaries or suppliers as well its shareholders.

The charter then sets out the rules governing the organisation, responsibility and scope of operations of the various internal control entities and establishes the principle according to which the control functions (Compliance, LEGAL, RISK and General Inspection in particular) execute these controls independently.

SCOPE OF INTERNAL CONTROL

The BNP Paribas Group's internal control is overarching:

- it covers all types of risks to which the Group may be exposed (credit and counterparty risk, market risk, liquidity risk, interest rate risk in the banking book, underwriting risk with respect to insurance, operational risk, risk of non-compliance, equity risk, *etc.*);
- it is applied at the Group level and at the level of directly or indirectly controlled entities, irrespective of their line of business and irrespective of whether they are consolidated entities or otherwise. For other entities (in particular, legal entities subject to significant influence), the Group's representatives on the corporate bodies of these entities are strongly encouraged to promote the same standards of internal control;
- it also covers the use of outsourced services, in accordance with principles defined by regulation.

FUNDAMENTAL PRINCIPLES OF INTERNAL CONTROL

BNP Paribas' internal control system is based on its values and the Code of conduct as well as the following additional principles of action:

- clearly identified responsibilities: internal control is the responsibility of every employee, irrespective of their seniority or responsibilities. The exercise of a managerial function carries the additional responsibility of ensuring the proper implementation of the internal control system within the scope subject to regulation. As such, the necessary responsibilities and delegations must be clearly identified and communicated to all stakeholders;
- a structured risk identification, assessment and management system (involving, among others, a decision-making system, delegation, organisational principles, controls, reporting and alert mechanism, *etc*.);
- independent control and oversight of risks: the Heads of the operational activities have the ultimate responsibility for those risks created by their activities and as such, the foremost responsibility of implementing and operating a system that identifies, assesses and manages risk. The internal control system provides for mandatory intervention, and as early as possible, of functions exercising independent control under a second level of control. This intervention takes the following forms:
  - defining the overall normative framework for risk identification, assessment and management,
  - defining cases where a prior second review by a function exercising a second-level control shared with the operational entity is necessary for decision-making;
- independent controls, called second-level controls, carried out by said function on the system implemented by the Heads of the operational activities and on their operations (result of the risk identification and assessment process, relevance and compliance of the risk control systems and in particular, compliance with the limits set);
- separation of duties: this is a key element of the risk control system. It consists of assigning certain operational tasks that contribute to the performance of a single process to stakeholders at various hierarchical levels or to separate these tasks by other means, in particular by electronic means. Thus, for example, tasks related to transaction initiation, confirmation, accounting, settlement and accounts reconciliation must be performed by different parties;
- proportionality of risks: the internal control system must be implemented under an approach and with an intensity that is proportionate to the risks involved. This proportionality is determined based on one or more criteria:
  - risk intensity as identified in the context of assessment programmes ("Risk ID", RCSA, *etc*.),
  - amount of allocated capital and/or ratios in terms of solvency and liquidity,
  - criticality of activities with regard to systemic issues,
  - regulatory conditions governing the exercise of business activities, size of business activities carried out,
  - customer type and distribution channels,
  - complexity of the products designed or marketed and/or services provided,
  - complexity of the processes carried out and/or the level of use of outsourcing with internal/external entities of the Group,
  - sensitivity of the environment where the activities are located,
  - legal form and/or presence of minority shareholders;
- appropriate governance: the internal control system is subject to governance involving the different stakeholders and covering the various aspects of internal control, both organisational and monitoring and oversight; the Internal Control Committees are a key instrument in this system. The framework is part of the decision-making processes managed through a system of delegations in the management reporting lines. They may involve the input of a third party belonging to another reporting line, whenever the systems defined by the Operational Entities and/or the functions exercising a second-level control so provide. The escalation process allows for disagreements between the operational entities and functions exercising second-level control, especially those related to decision-making, to be escalated to the higher hierarchical and possibly functional levels, to which the two parties report, and ultimately, if these disputes cannot be resolved in this way, to arbitration conducted by the Group's Executive Officers. This process is implemented in accordance with the powers conferred to the Group Risk Officer, who may exercise his right of veto under the conditions set out in the RISK Function Charter;
- a requirement for formalisation and traceability: Internal Control relies on the instructions of the Executive Officers, written policies and procedures and audit trails. As such, the controls, their results, their implementation and the feedback from the entities to the higher levels of the Group's governance are documented and traceable;
- a duty of transparency: all Group employees, irrespective of their position, have a duty to communicate, in a transparent manner, that is, spontaneously and promptly, to a higher level within the organisation to which they belong:
  - any information required for a proper analysis of the situation of the entity in which the employee operates, and which may impact the risks or the reputation of the entity or the Group,
  - any question that the employee could not resolve independently in the exercise of his duties,
  - any anomaly of which the employee becomes aware.

In addition, he or she has a whistleblowing right, as provided for in the Group's Code of conduct, allowing them to make a report within a framework placed under the responsibility of the Compliance Function, providing a guarantee of confidentiality and enhanced protection against the risk of retaliation;

- Human Resources management taking into account internal control objectives: the internal control objectives to be considered in employee career management and remuneration (including: as part of the employee evaluation process, training, recruitment for key positions, and in determining remuneration);
- continuous adaptation of the system in response to changes: the internal control system must be actively managed by its various stakeholders. This adjustment in response to changes of any kind that the Group must face must be done according to a periodic cycle defined in advance but also continuously as soon as events so justify.

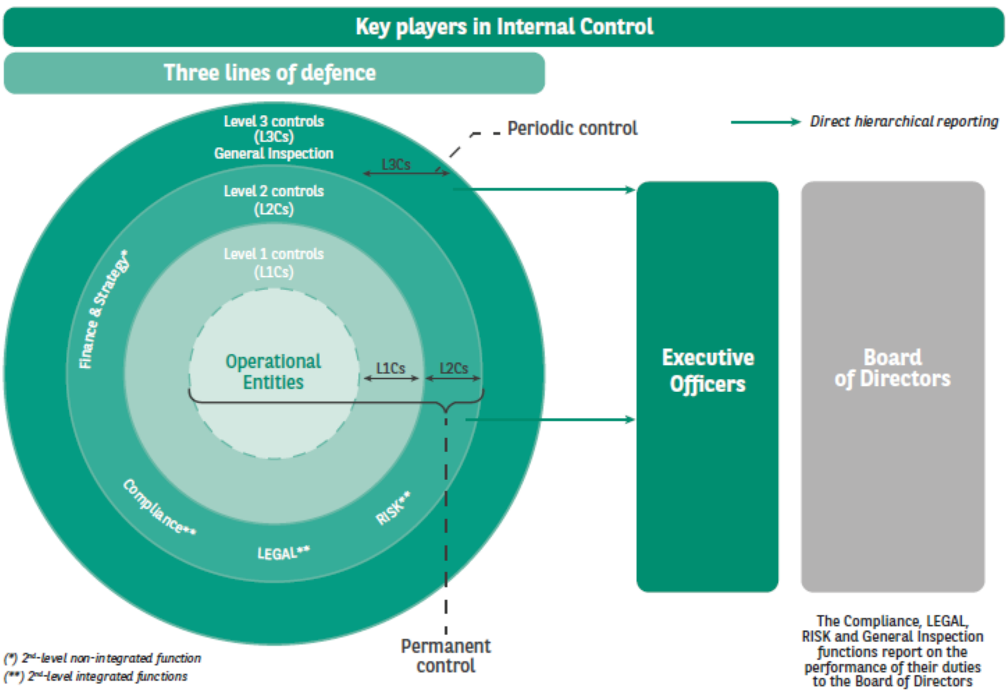
Compliance with these principles is verified on a regular basis, in particular through assignments carried out by the periodic control teams (General Inspection).

ORGANISATION OF INTERNAL CONTROL

BNP Paribas Group's internal control system is organised around three lines of defence, under the responsibility of the Executive Officers and under the oversight of the Board of directors.

Permanent control is the ongoing implementation of the risk management system and is provided by the first two lines of defence. Periodic control, provided by the third line of defence, has an audit and assessment function that is performed according to its own audit cycle.

The functions exercising the second and the third lines of defence are so-called functions exercising independent control. They report directly to the Executive Officers and with respect to Compliance, LEGAL, RISK and General Inspection, they report on the performance of their duties to the Board of directors.



KEY PLAYERS IN INTERNAL CONTROL

- Operational entities are the first line of defence: operational entities are primarily responsible for managing their risks and are the front-line in permanent control. They act within the framework defined by the Group's Executive Officers and reviewed by its Board of directors, transcribed in the form of policies and procedures and to the extent necessary, tailored by the corporate bodies of the Group's entities.
- The risk control system operated by the first line of defence forms what is called the first-level control system. It is implemented by employees and/or their reporting line and/or control teams that do not operate the processes under their control.

  The operational entities cover:

  - all operating divisions and business lines, whether these are profit centres or their support functions;
  - all cross-divisional functions, including the control functions for the processes that they operate directly and not under the responsibility of the second line of defence;
  - all the Territories, attached to an operating division.

- The functions exercising second-level control (second line of defence):
  - the functions exercising second-level control are responsible, under the delegation given by the Executive Officers, for the organisation and functioning of the risk control system and its compliance with laws and regulations on a range of areas (subjects and/or processes), as defined in their Responsibility Charter;
  - as such, in their field of expertise and, where appropriate, after having consulted the operational entities, they define the general normative framework in which they manage the risk for which they are responsible, the terms of their intervention (thresholds, delegations, escalation, *etc*.), implement this system in the relevant areas and for which they are responsible, for first-level and second-level permanent control. They challenge and provide an independent view of risk identification and assessment *vis-à-vis* operational entities. They also contribute to spreading a culture of risk and ethics within the Group;
  - the Heads of these functions provide the Executive Officers and Board of directors with a reasoned opinion on the level of risk control, current or potential, in particular regarding the "Risk Appetite Statement" as defined and propose any actions for improvement that they deem necessary;
  - the Head of a function performing a second-level control performs this mission by relying on teams that can be placed, either
    - under its direct or indirect hierarchical responsibility, where the function is then called integrated. It thus has full authority over its budget and the management of its Human Resources; or
    - under its direct or indirect functional responsibility (so-called non-integrated function) subject to joint decision-making with the reporting line manager for Human Resources and budget.

  The three integrated functions exercising second-level control are:
  - RISK, in charge of organising and overseeing the overall system for controlling those risks to which the BNP Paribas Group is exposed, particularly credit risk and counterparty risk, market risk, funding and liquidity risk, interest rate and exchange rate risk in the Banking book, insurance risk, operational risk, and environmental and social risk factors that affect the above risk categories;
  - Compliance, responsible for organising and overseeing the non-compliance risk control system. As such, it contributes to the permanent control of compliance with laws and regulations, professional and ethical standards and the guidelines of the Board of directors and the instructions of the Executive Management;
  - LEGAL, responsible for organising and overseeing the legal risk control system, exercises its responsibility to prevent and manage legal risks through its advisory and control roles. It exercises this control by (i) issuing legal opinions for the purpose of avoiding or mitigating the effects of a major legal risk, (ii) first- and second-level control exerted on the legal processes and (iii) the definition of a Group-level control plan for the business lines and functions to cover certain risks that may affect the processes under their responsibility. The missions entrusted to this function are performed independently of the business activities and support functions. The function is integrated hierarchically under the sole authority of its Department head, *i.e.* "Group General Counsel", who reports to the Chief Executive Officer.

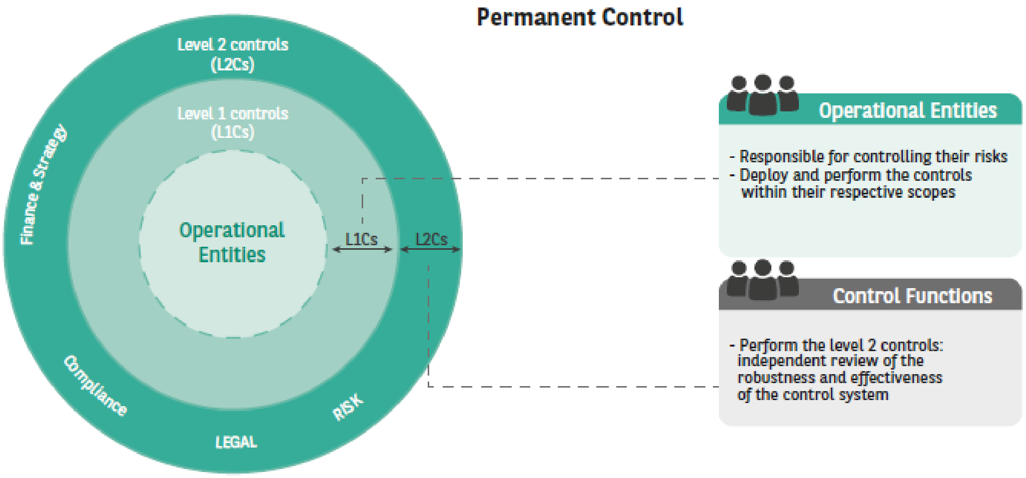
The Heads of these functions may be heard by the Board or any of its specialised committees, directly, possibly without the presence of Executive Officers, or at their request.

Finance & Strategy is a non-integrated function that exercises a second-level control. The Standards & Controls Department, within it, is responsible for defining and implementing the risk management system related to accounting and financial information.

RISK, Compliance and Finance & Strategy share responsibility for the second line of defence in terms of tax risk with the support of the Tax function, which acts as an expert on tax-related issues.

The appointment of the Heads of the Compliance, Finance & Strategy and RISK Functions falls within the framework defined by the European Banking Authority.

Permanent control can be outlined as follows:



- General Inspection (third line of defence): the General Inspection is responsible for periodic control, performs the internal audit function and contributes to the protection of the Group by independently acting as its third line of defence on all Group entities and in all areas. It includes:
  - centrally-based inspectors who carry out their duties throughout the Group;
  - auditors distributed in the geographical or business line platforms (called "hubs").

  The General Inspector, responsible for periodic controls, reports to the Chief Executive Officer.
- Executive Officers: the Chief Executive Officer and the Chief Operating Officers ensure the effective management of the Company for regulatory and legal purposes. In practice, the Executive Officers make key decisions through specialised committees that allow them to rely on experts with a deep understanding of the issues to be addressed.

  Executive Officers are responsible for the internal control system as a whole. As such and notwithstanding the powers of the Board of directors, the Executive Officers:
  - decide on the key policies and procedures serving as the basis for this system;
  - directly oversee the functions exercising independent control and provide them with the means to allow them to fulfil their responsibilities effectively;
  - define the Group's risk-taking policies, validate the most important decisions in this area and, if necessary, make the final decisions in the context of the escalation process. This process is implemented in accordance with the powers conferred to the Group Risk Officer, who may exercise his or her right of veto under the conditions set out in the RISK Function Charter;
  - periodically evaluate and monitor the effectiveness of the internal control policies, systems and procedures and implement the appropriate measures to remedy any deficiencies;
  - receive the main reports on internal control within the Group;
  - report to the Board of directors or its relevant committees on the operation of this system.
- Pursuant to the Decree of 3 November 2014 on the internal control of companies in the banking, payment services and investment services sector subject to the control of the ACPR, BNP Paribas must appoint an executive director responsible for overseeing the consistency and effectiveness of the BNP Paribas Group's internal control. At 31 December 2021, the Chief Executive Officer is the Executive Officer responsible for overseeing the consistency and effectiveness of BNP Paribas Group's internal control.
- The Board of directors: the Board of directors exercises directly or through specialised committees (Financial Statements Committee, Internal Control, Risk Management and Compliance Committee, Corporate Governance, Ethics, Nominations and CSR Committee, *etc.*) key responsibilities in terms of internal control. Among others, the Board of directors:
  - determines, on the proposal of the Executive Officers, the strategy and guidelines of the internal control activity and ensures their implementation;
  - reviews the internal control activity and results at least once per year;
  - regularly reviews, assesses and verifies the effectiveness of the governance system, including in particular clearly defined responsibilities, and internal control, which notably includes risk reporting procedures, and takes appropriate measures to remedy any failings uncovered;
  - validates the "Risk Appetite Statement", approves and periodically reviews the strategies and policies for taking up, managing, monitoring and controlling risks and approves their overall limits.

The organisation of the Board of directors and its specialised committees is defined through its Internal Rules. The Heads of General Inspection and the integrated functions exercising second-level control have the right to be heard, possibly without the presence of Executive Officers, by the Board of directors or one of its specialised committees.

Finally, among the specialised committees, the Internal Control, Risk Management and Compliance Committee (CCIRC) is essential in the Group's internal control system. Indeed, it assumes the following responsibilities:

- analyses reports on internal control and on risk measurement and monitoring, reports on the activities of the General Inspection, and significant correspondence with the main regulators;
- examines the strategic directions of the risk policy;
- reports to the Board of directors.

COORDINATION OF INTERNAL CONTROL

At the consolidated level, the Group Supervisory & Control Committee coordinates internal control, and is responsible, in particular, for ensuring consistency and coordination in the internal control system. Chaired by the Chief Executive Officer, it brings together the Chief Operating Officers, the Deputy Chief Operating Officers and the Heads of control functions.

In those entities and territories that are significant for the Group, their Executive Officers are responsible for arranging this coordination, generally within the framework of the Internal Control Committees.

PROCEDURES

The procedures are one of the key elements of the permanent control system alongside the identification and assessment of risks, controls, reporting and monitoring of the control system.

Written guidelines are distributed throughout the Group and provide the organisation and procedures to be applied as well as the controls to be performed. These procedures constitute the basic framework for internal control. The RISK Function regularly monitors procedure guidelines. The Group's cross-functional procedures framework is regularly updated with contributions from all divisions and functions. Regarding the control framework, investigations into the status of the system are included in the report on permanent control.

Among the Group's cross-functional procedures, applicable in all entities, risk control is critically important in, for example:

- the procedures that govern the process for approving exceptional transactions, new products and new business activities;
- the procedure for approving credit and market transactions;
- the procedures for compliance with embargoes, anti-money laundering and the financing of terrorism and anti-corruption.

The processes from these procedural frameworks rely primarily on committees (Exceptional Transactions Committees, New Business Activities and Products Committees, Credit Committees, *etc*.) mainly covering both operational and related functions such as IT and Operations, as well as the control functions (RISK, Compliance, Finance & Strategy and LEGAL Functions), which take a "second-look" on transactions. In the event of a dispute, they are submitted to a higher level of the organisation. At the highest level of the Group, there are committees (Credit, Market Risk, Risk Policy Committees, *etc*.) chaired by members of Executive Management.

2022 HIGHLIGHTS

2022 was marked by the conflict in Ukraine. Ukrsibbank conducted its activities in deteriorated conditions for most of 2022. The vital activities of this entity have continued to operate and some staff originally located in Ukraine have been relocated to other countries, where they can work remotely. In this context, increased monitoring of cyber threats has also been implemented across the Group.

COMPLIANCE

Organisation and change to the function

Compliance is a globally integrated function: all compliance managers in the operating divisions, business lines, regions, territories and their teams report to it hierarchically, which guarantees their independence. Its organisation brings together proximity teams aligned with the structure of the Group's operating divisions, business lines and entities, as well as central areas of expertise.

Compliance contributes to the three components of the Group's GTS 2025 strategic plan:

- Growth: by participating in projects for new products, new channels and external growth as part of the business lines' development strategy;
- Technology: by continuing the automation of processes and the deployment of standard IT tools;
- Sustainability: by anticipating emerging risks and regulatory changes, and by supporting the Group's ESG commitments.

The Compliance workforce stood at 3,791 full-time equivalents (FTE) at the end of December 2022.

Compliance activity in 2022

Financial security

Compliance continued to oversee the implementation of the Group's remediation plan initiated as part of its agreements with the authorities in France and the United States regarding international financial sanctions. This plan has been largely implemented. The last mission of the independent consultants appointed by the ACPR and the Federal Reserve Bank produced positive conclusions on the system in place.

The system for combating money laundering and the financing of terrorism, compliance with international sanctions and the freezing of assets is subject to continuous improvement of its standards and IT tools to deal with regulatory changes and new types of risks identified.

This improvement focused in particular on the monitoring of operations, the screening of customer relationships, the filtering of transactions and the management of third-party lists, making it possible to strengthen the management of alerts and the supervision capacity of all Group entities.

In particular, the detection algorithms have undergone a major update and work has been launched to incorporate artificial intelligence models to increase the relevance of alerts.

The invasion of Ukraine that marked the year 2022 and the increasingly complex sanction measures against Russia strongly mobilised the Compliance teams and led to the adaptation of tools and operational processes to effectively manage this crisis.

In the area of Know Your Client (KYC), the objectives of reviewing client files were generally met. Joint work with the business lines is underway to improve the fluidity of the process. In addition, the inclusion of the ESG dimension in the customer approach is the subject of a specific project in conjunction with the RISK Function.

Professional ethics and fight against corruption

In accordance with best practices, the various components of **the corruption prevention and detection system** are being updated: assessment of at-risk third parties using the knowledge process on clients (KYC) and other relationships, the development of detection scenarios, alert processing, accounting controls and related policies, as well as the training programme.

Gifts and invitations are subject to revised rules and are managed, along with the personal transactions and private mandates of employees, by a standard tool being rolled out throughout the Group.

The whistleblowing system is now extended to external players and the protection of whistleblowers has been strengthened. In addition, employees responsible for processing alerts receive specific training. Finally, a comprehensive report on alerts is presented each year to Executive Management and the Board of directors.

Market integrity

In order to meet the increasing expectations of regulators *vis-à-vis* the industry, the standards have been updated, the RCSA (Risk and Control Self-Assessment) enhanced, and the control system revised to ensure oversight proportionate to the risks.

Lastly, a new training course was introduced on the rules for declaring conflicts of interest and the management of inside information.

Regulation of extra-territorial banking activities

Compliance CIB is now responsible for compliance with regulations with an extra-territorial scope, Investment Banking being the main activity concerned.

Mainly covering regulations such as, in France, the law on banking separation and regulation (SRAB), and in the United States, the Volcker rule and provisions relating to dealer swap activities enacted by the CFTC (Commodity Futures Trading Commission) and SEC (Securities and Exchange Commission), it was enhanced in 2022 with revised standards on the monitoring and reporting of market transactions.

Extra-territorial tax regulations applicable to customers

The BNP Paribas Group is subject to a set of tax regulations with extra-territorial scope: FATCA (Foreign Account Tax Compliance Act), QI (Qualified Intermediary) regime regulating the withholding of income from US securities; AEOI (automatic exchange of tax information within the OECD); DAC6 directive (declaration of tax schemes considered to be aggressive in the European Union).

The systems for complying with these regulatory obligations have been updated, the training programme and control plans in place have been adapted as part of the review of the organisation of the first and second lines of defence in this area (business lines and Compliance).

Conduct

In addition to its role as second line of defence in terms of risks relating to the rules of conduct that it shares with RISK and LEGAL, Compliance ensures the coordination, steering and information of management on cross-functional initiatives aimed at strengthening the Group's Conduct system composed of the following pillars:

- client interest;

- financial security;
- market integrity;
- conflicts of interests;
- professional ethics;
- respect for colleagues;
- protection of the Group;
- commitment to society;
- the fight against corruption and influence peddling.

Work is underway to improve Conduct risk identification in the general risk assessment process in Group entities (Risk and Control Self-Assessment).

In particular, the classification of Conduct-related customer complaints was standardised. This indicator aims to capture customer perception in addition to all the indicators that are reported to Executive Management.

Finally, the training of all employees was renewed as part of the course on the Code of conduct ("Conduct Journey").

Controls

In 2022, the consolidation of the permanent control system focused on:

- improved risk assessment (Risk and Control Self-Assessment);
- the accountability of the first line of defence in the business lines and functions in terms of executing the controls prescribed by Compliance;
- the generalisation of second-level controls on the relevance and effectiveness of the system put in place by the first line of defence;
- updated controls on operational processes specific to the Compliance Function.

Training

Mandatory training programmes, adjusted in their content, continued with high completion rates.

All new employees, upon joining the Group, are systematically registered for training on the Code of conduct and on international sanctions and embargoes.

All Group employees are assigned a mandatory training course on all the topics of the Code of conduct as well as on international sanctions and embargoes:

- as training on the Code of conduct was revised in 2021, after a first component that was assigned in 2021, a second component was launched in 2022 with a completion rate of 97.2%;
- 96.9% of Group employees received training on international sanctions and embargoes.

Employees particularly exposed to certain risks follow additional training on the fight against money laundering and the financing of terrorism (advanced course, 96.7%), the fight against market abuse (97.2%), the fight against corruption (advanced course, 94.7%), MiFID2 regulations (91.9%), tax regulations (AEOI, 95% and FATCA, 96.5%) and banking laws with extra-territorial scope (96.4%).

Industrialisation

The Industrialisation Department of Compliance, OPTI (Operations, Processes, Technology and Innovation) has set up a coordination mechanism with the Group IT that ensures more effective monitoring of IT projects and production.

In 2022, OPTI focused its efforts on the effectiveness and efficiency of tools, as well as on the implementation of artificial intelligence systems. Tactical solutions were also rapidly deployed, for example for the detection of weak signals in the fight against the financing of terrorism and the search for adverse information.

LEGAL

Organisation and change to the function

LEGAL is an independent and integrated function comprising all the Group's legal teams. All LEGAL employees report directly or indirectly to the Group General Counsel, in order to enable the legal experts to carry out their duties under conditions that guarantee their freedom of judgement and action.

At all levels of the Group, there is a LEGAL organisation enabling adequate coverage of legal risks. Thus, based on the Group's organisation, dedicated legal teams cover the business lines, regions and territories. In addition, the platforms, created in 2020 and numbering seven at the end of 2022, are dedicated internal legal teams whose aim is to structure and organise the provision of legal services in all business sectors, entities and geographies concerned, within the framework of their exclusive area of expertise. The LEGAL practices, which numbered two at the end of 2022, are teams specialised by area of legal expertise responsible for cross-functional coordination within LEGAL in the business lines, regions and platforms, as well as reporting of major legal risks within their scope. In addition, Group Dispute Resolution (GDR) is a global and hierarchically integrated team to ensure appropriate management of the Group's major litigation and investigations as well as legal issues related to financial security (such as embargoes and anti-money laundering). Finally, two central departments provide support services to the organisation of LEGAL.

Main achievements in 2022 concerning the legal risk management system

Throughout the year, LEGAL continued to strengthen the legal risk management system:

- by defining a Group-level control plan to be applied by the business lines and functions on their processes;
- by clarifying and formalising the division of responsibilities between the various functions constituting the second line of defence;
- by updating the RCSA (Risk and Control Self-Assessment) across the entire function, in accordance with the Group's methodology;
- by performing second-level controls on legal processes, including verification, re-performance, specific controls or dedicated review;
- by carrying out check & challenge and quality review exercises of the Group's operational risk incidents identified as giving rise to a legal risk, and by continuing to provide educational support to the business lines and functions;
- by launching a new environment for sharing procedures issued by the LEGAL Function.

LEGAL also contributed to the definition of remediation plans with a view to addressing the recommendations issued by the ECB's inspection mission on the Group's permanent control system.

Lastly, LEGAL, through its practice dedicated to competition law, has partnered with Compliance to strengthen the compliance system with competition law.

RISK AND PERMANENT CONTROL

Operational risk management

The operational risk management model for the RISK Function is based on both decentralised teams within the Businesses, under the responsibility of the Risk managers of these Businesses, close to the processes, operational staff and systems, and on a central structure (RISK ORM) with a steering and coordination role providing local teams on subjects requiring specific expertise (for example: cyber security, anti-fraud or managing risks related to products and services supplied by third parties).

All of the components of the procedural system for operational risk have been significantly overhauled since 2018:

- Risk and Control Self-Assessment (RCSA);
- controls;
- collection of historical incidents;
- analysis and quantification of operational risk scenarios ("potential incidents");
- action plans;
- outsourcing risk management.

Work on the taxonomy of risks as well as the mapping of processes and organisational structures has also been completed to further standardise guidelines supporting the assessment and management of operational risk.

In addition to these methodological changes, a new integrated operational risk management tool ("360 Risk Op"), composed of various interconnected modules, was rolled out in the 4th quarter of 2019. After the launch of the module dedicated to the collection of Historical Incidents in 2019, those relating to RSCAs, Potential Incidents and the collection of outsourcing arrangements in 2020, the one dedicated to Action Plans has been available since April 2021. The last remaining modules relate to controls and have been gradually developed and deployed since the summer of 2021 with the aim of full commissioning in 2023.

Management of risks related to information and communication technologies

The ongoing implementation of the Group's digitisation initiatives aimed at creating streamlined channels for its customers and partners as well as new ways of collaboration for its staff, introduces new technologies and risks, and reinforces the need to continue to monitor the Group's technological risk profile and ensure the effectiveness of controls.

In 2022, the RISK teams continued to improve the risk management framework related to information and communication technologies (ICT) through the following actions:

- the performance of penetration tests (Red Team) on several entities in order to assess their capabilities of detecting cybersecurity incidents, and reinforcing protection measures where necessary;
- better integration of ICT risk elements into the entire reference framework;
- participation in major Group programmes in order to provide an independent analysis of the risks and action plans identified on topics such as fraud, cyber risk management or the deployment of the cloud;
- monitoring cybersecurity threats in the context of the conflict in Ukraine.

Management of risks related to personal data protection

In 2022, BNP Paribas continued to further integrate and incorporate personal data protection into the existing management and governance practices of the RISK Function. The Group's control system has been extended to address the concerns of data protection authorities, prioritise actions to manage vulnerabilities and demonstrate the Group's responsibility in this area.

Major achievements include:

- following the revision of the Group RISK taxonomy incorporating the protection of personal data, the Group's strengthening of its Generic Control Library for the protection of personal data, by providing guidance and increased support to the business lines on specific controls in the field of data protection;
- the Group's implementation of a rigorous independent testing plan (Independent testing) on data protection, within all entities, and in most countries;
- revision of data protection notices and associated governance;
- revisions to the reporting of personal data breaches and related tools to improve the Group's ability to respond effectively to incidents and prevent them from occurring;
- a comprehensive review of established contracts with third parties and cross-border transfers to meet regulatory expectations. In order to support this approach, the Group has automated several practices with the aim of maximising the visibility of processing activities, and the involvement of third parties or associated transfers in these processing operations;
- strengthening of the adoption of data protection automation tools, including the development of risk indicators as well as a review of the governance and risk assessment process.

All of these elements bring consistency within the Group, reduce risks and vulnerabilities, and improve the visibility and control of key data protection practices.

Regulatory changes

In terms of regulations, 2022 was marked by:

- the final approval by the European Parliament of the Digital Operational Resilience Act (DORA) previously approved by the Council on 10 November 2022. This regulation introduces and harmonises digital operational resilience requirements for the European Union financial services industry, requiring companies to ensure that they can resist, respond and recover from all types of disruptions and threats related to information and communication technologies (ICT);
- the continued European legislative process to transpose the international agreement for the completion of Basel III, with the publication of the final position of the European Council on 8 November 2022; the Parliament's position is still being prepared;
- the publication, on 26 April 2022, of the RTS (Regulatory Technical Standards) 2022/76 specifying the conditions governing prudential consolidation in the cases referred to in article 18, paragraphs 3 to 6 and 18 of Regulation 575/2013 (CRR2).

Changes to the RISK Function

RISK continued to roll out its RISK2025 Transformation Plan, the aim of which, in line with the Group's GTS Strategic Plan, is to optimise the effectiveness and efficiency of the function through the development of enhanced capabilities to manage risks, optimise the function's operating model and ensure the attraction, retention and development of talent.

In this context, a certain number of initiatives were continued and new ones launched, structured around cross-functional programmes covering the main types of risks. They make it possible to simplify, automate and pool certain internal processes and contribute to the end-to-end review of customer processes, while ensuring that the control system is at the highest level. This is based on the one hand on the strengthening of new technologies (for example in the context of lending processes and the detection and monitoring of risks) and on the other hand on the strengthening of internal skills (for example through increased use of key profiles linked to new modelling methods). At the same time, the RISK Function continued its industrialisation, notably *via* the reinforcement of its shared operational platforms in Lisbon, Mumbai, Madrid and Montreal.

Environmental, social and governance risk management

Under the Group's new "Sustainable finance" governance established at the end of 2021, a specific "ESG Methodologies, Analysis and Risk Management" (ESG MARM) component was set up. The latter, co-sponsored by the Head of the RISK Function and the Director of Engagement, drew on the achievements of the previous ESG action plan to continue and extend the integration work on ESG risk factors for the entire life cycle of the processes enabling the management of the Group's risks. The various ESG risk factors likely to affect so-called traditional risk categories (such as credit, market or operational risks) will thus be better identified, assessed and analysed, and therefore better integrated into the Group's risk management.

Thus, the ESG MARM programme includes several projects intended to strengthen the approaches and processes for identifying ESG risk factors, particularly in the risk profile of customers, as well as their assessment, analysis and management. This work includes, in particular, the deployment of the common approach to assess the ESG profile of the Group's large corporate customers. The latter aims in particular to identify companies whose ESG weakness could translate into credit, investment, reputational risks, and negative environmental and social impacts. This analysis and identification of ESG risk factors also makes it possible to accompany dialogue with companies and support the transition of those wishing to evolve towards a more sustainable business model.

As a second line of defence for environmental risks, the RISK Function has continued to integrate this analysis approach into the credit processes, in collaboration with the operational entities. In 2023, work will continue, including to define appropriate approaches for other customer segments such as medium-sized companies or financial institutions.

Additional information on climate change risk management can be found in Commitment 3 described in chapter 7 of the Universal Registration Document.

PERIODIC CONTROL

2022 saw the return to almost normal health conditions, which facilitated the implementation of the mission plan. The audit plan was largely met. In total, 884 missions will have been completed in 2022, *i.e*. 95% of the target for the year; 90% of them were scheduled in the original audit plan.

The General Inspection department maintained the collaboration methods created during the pandemic - between the central General Inspection teams and those of the audit hubs present in the countries and between auditors and audited parties - allowing work in remote mode and also better team coordination.

At the end of 2021, the General Inspection had laid the foundations of a new modernisation plan with the creation of the Transformation & Digital Intelligence team. 2022 was the first year of the operational implementation of the IG+ plan. This plan is structured around seven projects, the first two of which are the pillars that support the whole.

Four projects focused on processes and tools:

- selection and implementation of an end-to-end audit tool to the best standards of the profession, enabling an improvement in the Function's overall operating efficiency. At the end of 2022, the tool was being configured for implementation in the spring of 2023;
- reinforcement of Data Analytics capabilities backed by a complete overhaul of the underlying tools and technologies, a systematisation of the use of these techniques in the missions and a continuous effort of acculturation and training aimed at all General Inspection employees;
- revision of mission management methodologies, by systematically integrating the audit guides to improve efficiency and consistency between similar missions, thanks to the new tool;
- overhaul of the Risk Assessment mechanisms by working on to better integrate the results of the work of the first and second lines of defence, and also by taking advantage of new Data Analytics techniques to improve access and industrial use of the business data required for Risk Assessment.

Three projects focused on people:

- an overhaul of the "employer value" proposition for inspectors/auditors;
- a review of working methods to continue to improve cross-functionality and everything that contributes to it; and
- a change management project to support employees in these transformations.

In 2022, the General Inspection repeated its annual Risk Assessment exercise. All of the nearly 3,000 Audit Units (AUs) were reviewed and a document describing the broad outline of the AU and detailing the assessment of its inherent risk and the quality of the controls carried out therein was produced for each. Despite an increase in the number of AUs and changes in the mapping, in particular due to the reorganisation of Global Markets, the residual risk profile for 2022 resulting from the combination of the two previous factors is ultimately fairly comparable to that of 2021. Nevertheless, the inherent risk took into consideration the geopolitical effects in the world and the changes by the FATF of its list of Very High Sensitive countries. On the other hand, it should be noted that the assessment of the quality of controls is very good, with improvements recorded throughout nearly all of the Group.

In terms of the audit plan, 2022 is the last year of the 2018/2022 cycle which, despite the disruption related to the pandemic, demonstrated an ability to cover almost the entire auditable scope at the right frequency. The audit frequency for each AU is, in practice, based on the residual risk score. The frequency is shorter when the residual risk measured is high. If the AU has a specific regulatory audit cycle, the applicable cycle is the shorter of the regulatory cycle and that resulting from the Risk Assessment. All the AUs were placed in order of priority by combining these different elements. The duration of the audit cycle cannot exceed five years in any case. A new cycle, therefore, begins in 2023 for the 2023/2027 period.

The policy of very high investment in training in other the actions undertaken in Data Analytics was also continued in other areas to enable new employees to acquire the required skills base. All employees of the function receive regulatory training with a high level of expertise or technical training related to their profiles and specialisations. In the same vein, a tool to check knowledge of methodological principles has been deployed for all inspectors and auditors. Post pandemic, the training system was completely reorganised between face-to-face, distance learning and e-learning, to provide for digital and classroom-based at the same time.

The General Inspection's ability to carry out all of its missions was based on a slight decrease in the number of employees at the end of 2022 compared to the level at the end of 2021, concealing a permanent recruitment effort in a context of a "talent war", which makes this subject the first priority of the General Inspection.

INTERNAL CONTROL EMPLOYEES

At end 2022, the various internal control functions are based on the following headcount (in FTE = Full-Time Equivalents, calculated at the end of the period):

	2017	2018	2019	2020	2021[(1)]	2022[(2)]	Change (2022/2021)
Compliance	3,759	4,183	4,219	4,105	3,770	3,791	1%
LEGAL	1,807	1,846	1,810	1,779	1,736	1,703	-2%
RISK	5,367	5,520	5,462	5,191	5,029	4,885	-3%
Periodic control	1,296	1,394	1,446	1,381	1,355	1,342	-1%
TOTAL	**12,229**	**12,943**	**12,937**	**12,456**	**11,890**	**11,721**	**-1%**

(1) In 2021, the reduction in the workforce of the Compliance and RISK functions is mainly due to the transfer of control teams to the first line of defence (business lines).

(2) Financial FTE; in 2022, the workforce reductions result from the continuation of this transfer for the RISK function, and a change in the scope of consolidation for all functions (deconsolidation of Ukrsibbank in Ukraine). On a like-for-like basis, the headcount increased by 2.7% for Compliance and remained virtually stable for the other functions.

INTERNAL CONTROL PROCEDURES RELATING TO PREPARING AND PROCESSING ACCOUNTING AND FINANCIAL INFORMATION

ROLES AND RESPONSIBILITIES FOR PREPARING AND PROCESSING ACCOUNTING AND FINANCIAL INFORMATION

Under the authority of the Chief Executive Officer, the Finance & Strategy Function is notably responsible for preparing and processing financial information. It also performs an independent control mission which aims at ensuring control of the risk related to accounting and financial information. The specific missions assigned by the Group to the Finance & Strategy Function are defined by a charter. These consist of:

- preparing the financial information and guaranteeing the consistency and fairness of the financial and prudential information published, in compliance with the regulatory framework and standards;
- providing Executive Management with support for the Group's economic management at each level of its organisation;
- managing the Group's tax risk, representing the Group in tax matters and helping to preserve its reputation;
- defining accounting policies, management standards and prudential standards for the Group and overseeing their operational implementation;
- defining, deploying and supervising the permanent control system concerning financial information for the entire Group;
- assisting Executive Management in defining the Group's strategy, ensuring the benchmarking of the Group's performance and initiating and examining mergers and acquisitions ("M&A");
- managing the Group's equity and conducting the analysis and financial structuring of the Group's external and internal acquisition, partnership and disposal projects;
- ensuring the Group's financial communication and monitoring of the BNP Paribas share price, shareholders and market reactions;
- managing relations with market authorities and investors and organising Annual General Meetings;
- anticipating regulatory and prudential changes, and developing and communicating the Group's positions on these issues;
- coordinating the Group's banking supervision, in particular the relationship with the ECB;
- meeting the economic research needs of all of the Group's customers, business lines and functions;
- defining and managing the organisation of the Finance & Strategy Function and monitoring its resources and costs;
- managing the implementation of the target operational system, contributing to the definition of the functional architecture and the design of the Finance systems and deploying them.

All these missions require those involved to be fully competent in their particular areas, to understand and check the information they produce and to comply with the required standards and time limits. Particular attention is paid to compliance, quality and integrity of the information used and data protection. All those involved in the function have a duty to alert Executive Management. The missions of the function are carried out in conjunction with the RISK and ALM Treasury Functions for regulatory requirements, with the Project

Management team for Finance & Strategy and RISK, housed within Group IT, with regard to user processes and the changes to the information system. In practice, the responsibility of the Finance & Strategy Function is carried out as follows:

- the financial data produced is the responsibility of the Finance Department of each entity, whether produced at its own level or by shared regional platforms; when they contribute to the Group's consolidated results, they are sent to the divisions/business lines for approval;
- the production of forecast financial data is carried out by the divisions/business lines, ensuring their consistency with the actual data produced by the entities or regional platforms;
- centrally, the Finance & Strategy Function prepares the reporting instructions distributed to all divisions/business lines and consolidated entities in order to ensure that the data is homogeneous and complies with the Group's rules. It gathers all the accounting and management information produced by the entities and approved by the divisions/business lines and assembles and consolidates these data for use by Executive Management or for communication to third parties.

PRODUCTION OF ACCOUNTING AND FINANCIAL DATA

Accounting policies and rules

The local financial statements for each entity are prepared following the accounting standards prevailing in the country where the entity carries on business, while the Group consolidated financial statements are prepared under IFRS (International Financial Reporting Standards) as adopted by the European Union.

Within Finance & Strategy (Group), the "Standards & Controls – Group Financial Policies" (GFP) department defines the IFRS-based accounting principles to be applied to the Group as a whole. It monitors changes to IFRS and French standards and interprets them as necessary by issuing new principles. A manual of the Group's IFRS accounting principles is available for the divisions/business lines and entities on the internal network communication tools ("intranet") of BNP Paribas. It is regularly updated to reflect regulatory changes. At the request of GFP or those responsible for reporting, certain interpretations and major elements of doctrine are submitted to a specialised committee ("Accounting Policy Committee") for approval or arbitration. This committee reviews and approves the changes to be made to the accounting principles manual.

In addition, the "Group Financial Policies" department responds to requests for specific accounting studies made by the divisions/business lines or entities as part of the preparation of the financial statements and during the approval process for new products or new activities.

Finally, this department is also responsible for maintaining the management standards manual, incorporating the needs identified by the performance management teams. These principles and standards can also be accessed using internal network tools (intranet).

The solvency framework is the joint responsibility of the RISK and Finance & Strategy Functions. The Finance & Strategy Function is notably responsible for the normative elements relating to the prudential scope, regulatory capital, and the calculation of leverage and GSIB ratios. The other aspects relating to risk measurement are the responsibility of the RISK Function. A joint "Solvency Policies Committee", co-chaired by the two functions, performs the same role as the "Accounting Policy Committee" in terms of prudential standards.

The regulatory liquidity framework is the responsibility of ALM Treasury (with the contribution of the Finance & Strategy and RISK Functions).

Data processing system

The data processing system is organised around two channels, the first structured according to entities, and the second according to business lines:

- "Measure, Control and Explain (MCE)" is the Finance channel dedicated to the preparation of financial data. Organised around shared and multi-business regional platforms, it combines expertise and industrialisation for all financial reporting flows (financial statements, regulatory, management, solvency, liquidity, taxes), at Group or local level;
- "Monitor and Foster Performance (MFP)" is the Finance channel which has an analysis and advisory role in terms of strategic management of the businesses, based on the financial data provided by the MCE channel. It is also responsible for preparing forecast financial reports (estimate, budget, three-year plan, financial information in stressed scenarios) by interacting closely with the Business heads. This is why this channel is structured according to the division, Business, Function.

PERMANENT CONTROL OF ACCOUNTING AND FINANCIAL INFORMATION

Internal control within the Finance & Strategy Function

In order to enable it to centrally monitor risk management related to accounting and financial information, Finance & Strategy (Group) has a "Financial Control, Certification and Audit Affairs" team within the "Group Financial Controls" entity which carries out the following main missions:

- defining the Group's policy as regards the accounting internal control system. This system requires accounting entities to follow rules in organising their accounting internal control environments and to implement key controls ensuring that the information in their consolidation packages is reliable. The Group has issued internal accounting control guidelines for use by the consolidated entities and a standard accounting control plan listing the major mandatory controls aiming at covering the accounting risk;

- ensuring that the internal control environment for accounting and financial information functions properly within the Group, in particular *via* the procedure for internal certification of accounts described below; reporting quarterly to Executive Management and the Board of directors' Financial Statements Committee on the quality of the Group's financial statements;
- together with the RISK Function, overseeing the proper functioning of the system for collecting and processing consolidated credit risk reporting, including by means of quality indicators;
- ensuring the proper functioning of the data collection and processing system for the preparation of liquidity reports, in particular by means of a specific certification system and quality indicators;
- ensuring the implementation by the entities of the Statutory Auditors' recommendations, the recommendations of the General Inspection relating to the Finance process and the ECB's recommendations allocated to Finance & Strategy with the support of the divisions/business lines. This monitoring is facilitated by use of a dedicated tool that enables each entity to monitor the recommendations made to it and to regularly report on the progress made on the various action plans. Centralised monitoring of these recommendations enables Group Finance to identify improvements to the accounting internal control system made within the consolidated entities, identify any cross-functional problems and, if necessary, revise the Group-level procedures and instructions.

These missions are relayed within the Finance Departments of the divisions/business lines by central, independent control teams who carry out close supervision of the entities and develop, if necessary, accounting control procedures adapted to the specificities of their scope, in line with Group-level procedures.

Lastly, within the entities/businesses' Finance Departments, the Group's accounting internal control principles have led to dedicated and independent second-level accounting control teams or representatives, depending on the size of the entities, being set up. As such, the Group's established approach, in which the reporting production tasks are consolidated on regional platforms (improving the harmonisation of the first-line reporting and control processes and increasing their efficiency for the scope of the entities concerned), also ensures that the second-level accounting control teams are the appropriate size and have the necessary expertise. The main missions of these local teams are as follows:

- implementing second-level accounting controls on all entities falling within their scope and covering in particular the controls carried out by the entities' Finance Functions (including the first-level controls carried out on the processes operated by the Back Offices). These procedures are based, in particular, on standardised accounting control plans and accounting control tools that allow control responsibilities to be allocated to the various contributors to flows. Several control tools support first- and second-line defence controls, for example, identifying, for each account, the department responsible for its justification and control, and reconciling the balances recorded in the accounting system with the balances appearing in the Operations systems of each activity and identifying, justifying and monitoring the clearance of outstanding items in the flow accounts;
- implementing control and coordinating (directly when this task is not performed by first-line controls) the "elementary certification" process (described below) requiring an entity's different departments to report to the Finance & Strategy Function on the controls that they have carried out;
- ensuring that the accounting internal control system enables the entity's Finance Department to have sufficient oversight of the process of preparation of account summaries, and in particular over all the elements necessary for the Group's certification process (described below). To assist in achieving this objective, the tasks involved in accounts closure are formally defined. The use of tools to map the processes and associated risks and to document the checks as well as the coordination with other control channels contributes to improving the quality.

Internal Certification Process

At Group level

Finance & Strategy (Group) uses FACT (Finance Accounting Control Tool) for the internal certification of the quarterly data produced by each entity for the consolidation package and for the consolidation process for which the "Financial & Regulatory Reporting" Department within Finance & Strategy (Group) is responsible.

The Chief Financial Officer of each entity concerned certifies to Finance & Strategy (Group) that:

- the transmitted data have been prepared in accordance with the Group's norms and standards;
- the accounting internal control system guarantees its quality and reliability.

The main certificate completed by fully consolidated entities reproduces the results of all of the major controls defined in the Group's accounting control plan, and leads to the determination of a rating for each entity. Entities consolidated by the equity method complete an appropriate certificate. Finally, non-consolidated entities are certified annually through a simplified procedure.

This internal certification process forms part of the Group's monitoring system for Internal control and enables the Finance & Strategy (Group) Function, which has the overall responsibility for the preparation and quality of the Group's consolidated financial statements, to be informed of any problems in the financial statements and to monitor the entities' implementation of appropriate corrective measures. A report on this process is presented to Executive Management and to the Financial Statements Committee of the Board of directors at the close of the Group's quarterly consolidated accounts.

This certification system is also in place, in conjunction with the RISK Function, for the information included in regulatory reporting on credit risk and the capital adequacy ratio. Those contributing to the reports attest that they have complied with the standards and procedures and that the data used is of appropriate quality. They further describe the results of the controls carried out at the various stages of producing the reports.

On the same principles, a certification system is in place for the reporting of liquidity-related data. The various contributors report on the compliance of the data transmitted with the standards, and the results of key controls performed to ensure the quality of reporting.

At entity level

In order to ensure the oversight of all the process of preparation of accounting information at the level of each entity's Finance Department, the permanent control procedures of Finance & Strategy (Group), developed by Group Financial Controls require the implementation of first-level procedures relating to accounting data or controls when the process of preparing the accounting information is operated or controlled in a decentralised way. In this context, an "elementary certification" (or "sub-certification") procedure can be deployed.

This is a process by which the providers of the information used to prepare accounting and financial data (*e.g.* Middle Office, Back Office, Human Resources, Risk, Suppliers' Accounts, *etc*.) formally certify that the fundamental controls intended to ensure the reliability of the accounting and financial data under their responsibility function properly. The elementary certificates are sent to the local Finance Department first level of control, which analyses them in combination with the accounting controls that it exercises directly, prepares a summary report intended to be used to prepare the main certificate, and liaises with the various players in order to monitor points requiring attention.

The FACT application also makes it possible to automate this sub-certification process by providing entities with a dedicated environment in which they can directly manage the processes set up at their level.

Valuation control of financial instruments measured at fair value

Assets and derivatives measured at fair value through profit or loss in the trading portfolio

The trading portfolio mainly focuses on the market activities of Global Markets and a few other, less significant scopes. Finance & Strategy (Group) has defined a specific system for the main scope. This is based on the principle that Finance & Strategy, responsible for the preparation and quality of the Group's accounting and management information, delegates the production and control of the market or model value of financial instruments to the various players of the chain, thus constituting a single and integrated valuation channel for financial instruments. The processes covered include in particular:

- verifying the appropriateness of the valuation system as part of the approval process for new transactions or activities;
- verifying the proper recording of transactions in the systems and ensuring it is appropriate with the valuation methodologies;
- verifying the development and approval mechanism independent of the valuation methods;
- determining the market parameters and the procedure for an independent verification of these parameters;
- determining valuation adjustments for market, liquidity and counterparty risks;
- determining and reviewing the rules for making parameters observable;
- classifying instruments within the fair value hierarchy, determining day one profit adjustments, estimating the sensitivity of level 3 valuations to valuation assumptions.

Through appropriate processes and tools, the channel's objectives are to ensure both the correctness and the reliability of the process for valuing financial instruments, and the quality and comprehensiveness of the control system. It can thus provide the appropriate data to the various decision-making bodies, data that also informs the operational processes for compiling the accounting and management results, and ensures the transparency of appendices dedicated to fair value.

Control of the valuation channel, which involves all participants, is supervised by the Finance & Strategy Function within the framework of a specific charter and a dedicated governance. This control system is based on a set of organisational principles defined in the Group's Internal Control Charter for each organisational level, *i.e.* Group, CIB and the main entities that account for market transactions.

To ensure its proper functioning, the Finance & Strategy Function relies on dedicated teams ("Standards & Controls – Valuation Risk and Governance, S&C – VRG"), which oversee the entire system. The Finance Function decides on the information that must be reported by the various players: this comprises both quantitative and qualitative data indicating trends in different businesses as well as the results and quality of upstream controls carried out.

Several committees that meet on a quarterly or monthly basis are set up to bring all the players together to review and examine, for each process and business line, the methods used and/or the results of the controls conducted. These committees' operating methods are governed by procedures approved by the Finance & Strategy Function, ensuring that Finance & Strategy takes part in the main choices and arbitrations. Lastly, the S&C – VRG reports at each accounting quarter-end to the Product Financial Control Committee (PFC), chaired by the Group Deputy Chief Financial Officer, on its work, and informs the committee of the points of arbitration or attention concerning the effectiveness of the controls and the degree of reliability of the valuation and results determination process. This quarterly committee brings together the business lines, Finance & Strategy (Group) and the divisions concerned, ALMT and the RISK Function. Intermediary PFC committees complete this system and aim at defining project priorities, monitoring their implementation and thoroughly examining certain technical elements.

Instruments measured at fair value through profit or loss or through equity outside the trading portfolio

Fixed income securities, derivatives and debt measured at fair value through profit or loss or through equity

Most of the instruments relating to this scope are covered by the system in place for the trading portfolio, thanks to an adapted extension of the governance as well as the pooling of systems, processes and valuation methodologies. The main business line concerned is ALM Treasury, which is represented on the aforementioned PFC committee.

Equity securities measured at fair value through profit or loss or through equity

Since 2020, Group Financial Policies has developed a specific valuation standard, and the valuation governance system has been standardised to ensure homogeneous coverage of this portfolio and an appropriate distribution of responsibilities and decision-making chains.

Other items measured at fair value

Control systems, meeting the requirements of the Group's accounting control plan, exist at the level of the entities or at the level of the divisions/business lines to ensure the necessary level of control on loans that do not meet IFRS 9 SPPI criteria[1].

Development of the system

The Finance & Strategy Function's general permanent control framework

The permanent control system related to the risk on accounting and financial information is continuously being adapted. The procedures described above, as well as the change in the tools are part of an evolving framework that aiming at guaranteing an adequate level of control throughout the Group, and a better harmonisation of the control of accounting and financial information. In 2021, the Finance & Strategy Function reviewed its permanent control system and the articulation between its two lines of defence as well as with the functions exercising second line of defence missions. This framework has also introduced a strong governance of the system articulated through committees called "FORCC[2]" through which all the permanent control processes of the Finance operating business units are reviewed. The comprehensive deployment of this system was completed in 2022.

Moreover, the quality of the accounting certification process is regularly reviewed with the divisions/business lines, for instance with the preparation of quantitative indicators for some controls, targeted cross-functional reviews of a major control and *ad hoc* reviews with the divisions/business lines on specific points for improvement in various scopes. These reviews are supplemented by presentations to the various committees in the Finance & Strategy channel and training sessions. Group procedures clarifying some major controls, and detailed instructions aiming at ensuring consistent responses and adequately-documented processes are also distributed. These Group procedures and instructions are extended where necessary at division/business line level to cover issues specific to them.

Similarly, the certification system of the data contributing to the calculation of the capital solvency ratio is subject to adjustment in order to take into account developments in the processes and the organisation, and to capitalise on indicators and controls in place in the various sectors in connection with the improvement programme on the reporting and the quality of the data.

In addition, for liquidity reporting, changes in processes and tools are carried out regularly in order to adapt to the new regulatory reporting demands, and specific actions are taken with the various contributors in order to enhance the quality and controls for the channel.

Data control system

As in previous years, the Group continued to adapt its system in 2022 to continue to improve the quality and integrity of the data required to produce the reports covering the different types of risks to which BNP Paribas is exposed (risk related to the accounting and financial information, credit, market, liquidity and operational risks), and to improve the consistency of related reporting at all levels of the organisation during normal periods as well as during stress or crisis periods.

This continuous adaptation of the system is part of the regulatory framework of the principles set by the Basel Committee for the aggregation of risk data and their reporting ("Principles for effective risk data aggregation and risk reporting – Basel Committee on Banking Supervision – Standard 239") and aims at ensuring the Group's compliance with these principles.

Significant initiatives launched in previous years were continued in 2022 and confirmed as part of the data strategy ("Data Towards 2025") in line with the Group's 2025 ambitions, in particular in the following areas:

- the adaptation of the Group's Data Management strategy, including the introduction of the Data Management by Design approach, the data compilation model around the Group Data Management tool, "WeData", monitoring and quality control (strengthening of local business line indicators and their consolidated vision, organisation of the extension of the scope of critical data for implementation from 2023/2025), the organisation of the processes supporting these activities (inclusion of

[1] *SPPI (Solely Payment of Principal and Interest): The SPPI criterion is a criterion required in addition to the management model in order to determine the classification of financial instruments excluding trading activities on the balance sheet. It is linked to the contractual characteristics of the instruments. The tests must be carried out on all assets whose management model is "HTC" ("Held To Collect", collect contractual cash flows and keep the asset until maturity) or "HTCS" ("Held To Collect and Sell", collect contractual flows and sell the asset) in order to determine the accounting category: amortised cost, fair value through equity or fair value through profit or loss.*

[2] *FORCC: Financial and Operational Risk Control Committee.*

the Single Channel organisational model), the use of adapted technologies and a strengthened data culture within the Group with active management of the Data community (organisation of different Data events during the year);

- the sustainability of Data governance, in particular with the holding of the Group Data Board (biannual), a Shared Data Council for Group data guidelines and committees to assess the quality and monitoring of remedial actions at the level of the Group, business lines or functions and entities (Quality Assessment & Remediation Committees – QARC) generally held quarterly, and the realisation for the third consecutive year of an internal assessment of the Group's level of compliance with BCBS 239 principles;
- emphasis on the consideration of the Data strategy as part of the Group's IT strategy, notably by integrating the principles of Data Management by Design and the IT contribution to the data compilation model (including the development of dictionaries of application data as part of the new Group Data Management tool "WeData" or an equivalent tool), and with the permanent presence of the Group CIO on the Group Data Board, the assignment of data responsibilities within the Group IT Function and the participation in the main Data projects.

PERIODIC CONTROL

General Inspection has a dedicated Finance channel (called the "Finance Domain") with a team of specialist inspectors in accounting and financial auditing, thus reflecting the General Inspection's strategy of having a robust auditing capability, as regards both the technical complexity of its work and its scope of coverage of accounting and financial risk.

Its action plan is based on an annual risk assessment exercise, the practical details of which have been established by General Inspection based on the risk evaluation chart defined by the RISK Function.

The core aims of this team are as follows:

- establishing a hub of accounting and financial expertise in order to reinforce the capability of General Inspection when carrying out inspections in these areas;
- disseminating internal audit best practices and standardising the quality of related audit work within the Group;
- identifying and inspecting areas of accounting and financial risk at Group level.

RELATIONS WITH THE STATUTORY AUDITORS

Each year, as part of their statutory assignment, the Statutory Auditors issue a report in which they give their opinion concerning the consistency and fairness of the consolidated financial statements of the BNP Paribas Group as well as the annual financial statements of the Group's companies. The Statutory Auditors also carry out limited reviews on the closing of the half-yearly accounts, and specific tasks in relation to the quarterly accounts.

Thus, as part of their statutory mission:

- they examine any significant changes in accounting standards and present their opinions to the Financial Statements Committee concerning the accounting choices with a material impact;
- they present their conclusions to the Finance & Strategy Functions in the entities/business lines/divisions and at a Group level, and in particular any observations and recommendations to improve certain aspects of the internal control system that contribute to the preparation of the accounting and financial information that they reviewed during their audit.

FINANCIAL COMMUNICATION (PRESS RELEASES, SPECIAL PRESENTATIONS, ETC.)

Financial communications for publication are written by the "Investor Relations and Financial Information" Department within Finance & Strategy (Group). It is directed at retail and institutional shareholders, financial analysts and rating agencies, and presents the Group's different activities, explains its results and describes its development strategy, while maintaining the financial information homogenous with that used at an internal level.

The team, which reports to Executive Management and the Chief Financial Officer, proposes and defines the format in which financial information is published by the BNP Paribas Group. It works with the divisions and functions to prepare the presentation of financial results, strategic projects and specific topics. It distributes them to the financial community.

The Statutory Auditors are associated with the validation and review phase of communications relating to the closing of quarterly, half-yearly or annual financial statements, before their presentation to the Financial Statements Committee and to the Board of directors, who approve them.

3 2022 REVIEW OF OPERATIONS

3.1 BNP Paribas consolidated results

On 18 December 2021, the Group concluded an agreement with BMO Financial Group for the sale of 100% of its commercial banking activities in the United States operated by the BancWest cash-generating unit. The terms of this transaction fall within the scope of IFRS 5 relating to groups of assets and liabilities held for sale. The closing of the sale of Bank of the West to BMO Financial Group was made on 1 February 2023. Unless otherwise stated, the financial information and elements include in particular the activity relating to BancWest to reflect an operational vision. They are, therefore, presented excluding effects of the application of IFRS 5 relating to groups of assets and liabilities held for sale.

In millions of euros	**2022**	**2021**	**2022/2021**
Revenues	**50,419**	**46,235**	**+9.0%**
incl. Interest Income	*23,168*	*21,209*	*+9.2%*
incl. Commissions	*10,570*	*10,717*	*-1.4%*
Operating Expenses and Dep.	(33,702)	(31,111)	+8.3%
Gross Operating Income	**16,717**	**15,124**	**+10.5%**
Cost of Risk	(2,965)	(2,925)	+1.4%
Operating Income	**13,752**	**12,199**	**+12.7%**
Share of Earnings of Equity-Method Entities	699	494	+41.6%
Other Non-Operating Items	(1)	944	n.s.
Non-Operating Items	**698**	**1,438**	**-51.4%**
Pre-Tax Income	**14,450**	**13,637**	**+6.0%**
Corporate Income Tax	(3,853)	(3,757)	+2.6%
Net Income Attributable to Minority Interests	(401)	(392)	+2.3%
Net Income Attributable to Equity Holders	**10,196**	**9,488**	**+7.5%**
Cost/income	**66.8%**	**67.3%**	**-0.5 pt**

VERY SOLID RESULTS DRIVEN BY THE STRENGTH OF THE BNP PARIBAS MODEL

The Group's diversified and integrated model and its ability to support clients and the economy by mobilising teams, resources, and expertise, continued to drive strong growth in business activity and results in 2022.

BNP Paribas' solid model, backed by its long-term approach, generated an increase in net income of 7.5% compared to 2021 (+19.0% excluding exceptional items, which were negative in 2022). This strong, disciplined growth came with a positive jaws effect of 0.7 point (+1.5 point excluding the contribution to the Single Resolution Fund), thanks to recurring cost savings of almost EUR 500 million in 2022 and to the effects of the adaptation of the operating model. The Group has a long-term, prudent and proactive risk management policy in place, as illustrated, for example, by a ratio of cost of risk *vs.* gross operating income that is among the lowest in Europe.

The Group has stepped up its policy of engaging with society. It deploys a comprehensive approach and, alongside its clients, is committed to transitioning towards a sustainable, low-carbon economy. It is also taking the steps necessary to align its loan portfolios to comply with its carbon-neutrality commitments. On the back of the capabilities it has developed through the Low-Carbon Transition Group and with loan outstandings in low-carbon energy production almost 20% higher than those for fossil-fuel production[1], BNP Paribas announced on 24 January 2023 new targets reflecting a very strong acceleration in the financing of low-carbon energies production and a reduction of financing of fossil-fuel production at a 2030 horizon.

All in all, revenues, at EUR 50,419 million, rose strongly, by 9.0% compared to 2021 (+6.6% at constant scope and exchange rates).

In the operating divisions, they were up sharply by 10.4% compared to 2021 (+7.8% at constant scope and exchange rates). Revenues at Corporate & Institutional Banking (CIB) increased very sharply, driven by the very good performance of Global Markets and Securities Services and by the rise at Global Banking in an unfavourable market. Revenues at Commercial, Personal Banking & Services (CPBS)[2] grew strongly by 9.3% (+7.2% at constant scope and exchange rates), driven by strong growth in Commercial & Personal Banking (+8.0%) and very strong increase in revenues at specialised businesses (+12.0%). Revenues also rose by 3.0% at Investment & Protection Services (IPS) (+2.4% at constant scope and exchange rates) in an unfavourable market context sustained by strong growth in Private Banking.

The Group's operating expenses, at EUR 33,702 million, were up by 8.3% compared to 2021 (+5.3% at constant scope and exchange rates). Operational performance was high and reflected in a positive jaws effect of 0.7 point despite the increased contribution to the Single Resolution Fund (+1.5 point excluding this contribution). Operating expenses include the exceptional impact of restructuring and adaptation costs (EUR 188 million) as well as IT reinforcement costs (EUR 314 million) for a total of EUR 502 million (EUR 292 million in 2021).

For 2022, Group operating expenses were impacted by a EUR 398 million increase in taxes subject to IFRIC 21 (including the contribution to the SRF[3]) compared to 2021. These taxes stood at EUR 1,914 million in 2022, including the contribution to the SRF[(2)] for EUR 1,256 million in 2022 (EUR 967 million in 2021).

In the operating divisions, operating expenses increased by 8.0% compared to 2021 (+5.2% at constant scope and exchange rates). The jaws effect was very positive (+2.4 points). Operating expenses at CIB rose by 13.6% (+8.1% at constant scope and exchange rates), due particularly to support for growth in activity as well as the impact of the change in scope and exchange rates. The jaws effect was positive (+2.1 points). Operating expenses[(1)] were up by 6.0% (+4.2% at constant scope and exchange rates) at CPBS, on the back of the growth in business activity and the changes of scope in Commercial & Personal Banking and specialised businesses. The jaws effect was very positive (+3.3 points). Operating expenses[(1)] were up by 6.0% in Commercial & Personal Banking and by 6.1% in specialised businesses. Lastly, at IPS, operating expenses increased by 3.5% (+2.5% at constant scope and exchange rates), driven mainly by business development and targeted initiatives. The jaws effect was close to 0 at constant scope and exchange rates.

The Group's gross operating income thus came to EUR 16,717 million, up strongly by 10.5% compared to 2021 (+9.3% at constant scope and exchange rates).

The cost of risk, at EUR 2,965 million, rose slightly by 1.4% compared to 2021. In 2022 it included the exceptional EUR 204 million impact of Poland's "Act on Assistance to Borrowers" in the third quarter 2022. At 31 basis points of customer loans outstanding, the cost of risk stood at a low level. Provisions on non-performing loans (stage 3) were at a low level. Provisions on performing loans (stages 1 and 2) in 2022 came to EUR 463 million, with provisions related to the indirect effects of the invasion of Ukraine, higher inflation and interest rates, offset partly by releases of provisions related to the public health crisis as well as EUR 251 million impact in the fourth quarter 2022 on changes in methods to align with specific European standards.

The Group's operating income, at EUR 13,752 million, was thus up sharply by 12.7% compared to 2021 (+13.4% at constant scope and exchange rates) on the back of very strong growth in the operating divisions (+18.0%).

Non-operating items came to EUR 698 million in 2022 (EUR 1,438 million in 2021). At EUR 15 million, exceptional items decreased very sharply compared to 2021 (EUR 952 million). In 2022, they reflected the +EUR 244 million positive impact of badwill on bpost bank and a +EUR 204 million capital gain on the sale of a stake, offset by the -EUR 159 million impairment of Ukrsibbank shares and the negative -EUR 274 million impact of the reclassification to profit-and-loss of exchange differences[4]. As a reminder, in 2021 they included the exceptional impacts of capital gains realised on the sale of buildings (+EUR 486 million), on the sale of Allfunds shares[5] (+EUR 444 million), and on the sale of a BNP Paribas Asset Management stake (+EUR 96 million), as well as -EUR 74 million in depreciations.

Pre-tax income increased by 6.0% compared to 2021, to EUR 14,450 million (EUR 13,637 million in 2021).

Corporate income taxes came to EUR 3,853 million (EUR 3,757 million in 2021). The average corporate tax rate was 28.5% (28.7% in 2021). The Group is also a substantial taxpayer with a total amount of taxes and levies of EUR 7.2 billion paid in 2022.

The Group's net income attributable to equity holders thus came to EUR 10,196 million in 2022, up sharply by 7.5% compared to 2021. Excluding exceptional items, it came to EUR 10,718 million, up very sharply by 19.0% compared to 2021.

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[1] *See press release issued 24/01/2023.*

[2] *Including 100% of Private Banking in Commercial & Personal Banking (including PEL/CEL effects in France).*

[3] *Single Resolution Fund.*

[4] *Previously recorded in Consolidated Equity.*

[5] *Disposal of 8.69% stake in Allfunds.*

The return on tangible equity not revaluated was 10.2% and reflected the solid performance of the BNP Paribas Group, driven by the strength of its diversified and integrated model.

As of 31 December 2022, the Common Equity Tier 1 ratio stood at 12.3%[1]. The Group's immediately available liquidity reserve totalled EUR 461 billion, equivalent to more than one year of room to manoeuvre in terms of wholesale funding. Its leverage ratio[2] stood at 4.4%.

Tangible net book value[3] per share came to 79.3 euros, equivalent to a compound annual growth rate of 6.7% since 31 December 2008, illustrating continuous value creation throughout economic cycles.

Capital allocation

Revenue from the capital allocated to each division is included in the division's profit and loss account. The capital allocated to each division corresponds to the amount required to comply with CRR2/CRDV regulation, also known as Basel 3, and is based on 11% of risk-weighted assets.

Risk-weighted assets are calculated as the sum of:

- the risk-weighted assets for credit and counterparty risk, calculated using the standard approach or the Internal Ratings Based Approach (IRBA) depending on the particular entity or business activity;
- the regulatory capital requirement for market risks, for adjustment of credit valuation and for operational risk, multiplied by 12.5.

Moreover, elements that are deducted from Tier 1 capital are allocated to each division.

Last, the capital allocated to the insurance business is based on the minimum solvency capital requirement as defined by Solvency II.

3.2 Core Business results

CORPORATE AND INSTITUTIONAL BANKING (CIB)

In millions of euros	2022	2021	2022/2021
Revenues	**16,465**	**14,236**	**+15.7%**
Operating Expenses and Dep.	(10,753)	(9,467)	+13.6%
Gross Operating Income	**5,712**	**4,769**	**+19.8%**
Cost of Risk	(325)	(173)	+88.2%
Operating Income	**5,387**	**4,596**	**+17.2%**
Share of Earnings of Equity-Method Entities	20	33	-39.0%
Other Non-Operating Items	(10)	24	n.s.
Pre-Tax Income	**5,398**	**4,654**	**+16.0%**
Cost/Income	65.3%	66.5%	-1.2 pt
Allocated Equity (€bn, year to date)	29.9	26.2	+14.3%

[1] *CRD 4, including IFRS 9 transitional arrangements.*

[2] *Calculated in accordance with Regulation (EU) 2019/876.*

[3] *Revaluated.*

GLOBAL BANKING

In millions of euros	2022	2021	2022/2021
Revenues	**5,218**	**5,087**	**+2.6%**
Operating Expenses and Dep.	(2,878)	(2,652)	+8.5%
Gross Operating Income	**2,340**	**2,435**	**-3.9%**
Cost of Risk	(336)	(201)	+67.6%
Operating Income	**2,004**	**2,234**	**-10.3%**
Share of Earnings of Equity-Method Entities	4	16	-73.3%
Other Non-Operating Items	0	(4)	n.s.
Pre-Tax Income	**2,009**	**2,246**	**-10.6%**
Cost/Income	55.1%	52.1%	+3.0 pt
Allocated Equity (€bn, year to date)	16.5	14.3	+15.5%

GLOBAL MARKETS

In millions of euros	2022	2021	2022/2021
Revenues	**8,660**	**6,820**	**+27.0%**
incl. FICC	*5,234*	*3,947*	*+32.6%*
incl. Equity & Prime Services	*3,426*	*2,872*	*+19.3%*
Operating Expenses and Dep.	(5,806)	(4,924)	+17.9%
Gross Operating Income	**2,855**	**1,896**	**+50.6%**
Cost of Risk	11	27	-57.7%
Operating Income	**2,866**	**1,923**	**+49.1%**
Share of Earnings of Equity-Method Entities	14	14	+0.7%
Other Non-Operating Items	(10)	5	n.s.
Pre-Tax Income	**2,870**	**1,942**	**+47.8%**
Cost/Income	67.0%	72.2%	-5.2 pt
Allocated Equity (€bn, year to date)	12.0	10.7	+12.5%

SECURITES SERVICES

In millions of euros	2022	2021	2022/2021
Revenues	**2,587**	**2,329**	**+11.0%**
Operating Expenses and Dep.	(2,069)	(1,892)	+9.4%
Gross Operating Income	**517**	**438**	**+18.1%**
Cost of Risk	0	1	n.s.
Operating Income	**517**	**439**	**+17.8%**
Share of Earnings of Equity-Method Entities	2	4	-40.3%
Other Non-Operating Items	0	23	n.s.

Pre-Tax Income	**519**	**466**	**+11.4%**
Cost/Income	80.0%	81.2%	-1.2 pt
Allocated Equity (€bn, year to date)	1.4	1.2	+16.1%

For the whole of 2022, CIB achieved very good results, driven by strong client activity. Its business drive was robust and leveraged the efficiency of the diversified and integrated model.

CIB confirmed its EMEA[1] leadership in syndicated loans, bond issuances, in Transaction Banking (cash management and trade finance), as well as on multi-dealer electronic platforms.

Client demand was strong on the markets, particularly in rates, foreign exchange, emerging markets and commodity derivatives. The level in client demand was good in Equities. Financing led for clients on primary markets worldwide (syndicated loan markets, bond and equity issuances) held up well, amid a market that shrank by 17% compared to 2021[2]. Securities Services achieved strong business drive with a high level of transactions.

At EUR 16,465 million, CIB revenues rose sharply by 15.7% (+11.3% at constant scope and exchange rates) compared to 2021, with a very good performance in Global Banking in an unfavourable context (+2.6%), a very strong increase in Global Markets (+27.0%) and solid growth at Securities Services (+11.0%).

In an unfavourable context, Global Banking revenues rose by 2.6% compared to 2021, to EUR 5,218 million. The level of activity was good with a very strong rebound in the fourth quarter 2022, thanks to the diversified model. In an unfavourable market context, Capital Markets held up well in EMEA(1) (-12.5%). Transaction Banking revenues rose very sharply (+30.0%), particularly in cash management, and mergers & acquisitions fared especially well in EMEA(1). The growth was strong in the Asia-Pacific region. At EUR 188 billion[3], loans outstanding were up sharply by 10.5%(3) compared to the fourth quarter 2021. At EUR 219 billion(3), deposits rose strongly by 11.9%(3) compared to the fourth quarter 2021.

Driven by strong client demand, Global Markets revenues, at EUR 8,660 million, rose very strongly, by 27.0% compared to 2021. FICC[4] revenues, at EUR 5,234 million, rose very sharply, by 32.6%, thanks to very strong client demand, related particularly to reallocation and hedging needs in rates and forex products, emerging markets and commodity derivatives. The context was less favourable to primary activities and credit. Equity & Prime Services revenues, at EUR 3,426 million, rose by 19.3%, driven by robust client activity, particularly in equity derivatives and a good contribution from prime services. VaR (1 day, 99%), which measures market risks, stood at a low level and decreased slightly compared to the third quarter 2022, thanks to prudent management and the decrease in commodities. It stood at EUR 33 million.

Backed by new mandates in Europe and by very good momentum in Private Capital, business drive was very good at Securities Services and benefited from its diversified model. At EUR 2,587 million, revenues at Securities Services were up sharply by 11.0% compared to 2021, thanks to a strong increase in transactions fees and the favourable impact of the interest-rate environment. Transaction volumes were up very strongly at Securities Services (+8.6% compared to 2021). The level of average outstandings held up well (-3.0% compared to 31 December 2021) in an unfavourable market context. Securities Services continues to transform its operating model. Its merger with BNP Paribas S.A. has been effective since 1 October 2022. It also contributed its issuer service activities in France to the Uptevia entity on 1 January 2023.

Operating expenses at CIB, at EUR 10,753 million, were up by 13.6% compared to 2021, in relation with the strong development of activity and the exchange-rate effect (+8.1% at constant scope and exchange rates). The jaws effect was positive (+2.1 points).

At EUR 5,712 million, gross operating income at CIB increased by 19.8% compared to 2021.

CIB's cost of risk stood at EUR 325 million, and Global Banking's at EUR 336 million (EUR 201 million in 2021). At 19 basis points of customer loans outstanding, it is at a low level, reflecting a decrease in provisions on non-performing loans (stage 3) while provisions on performing loans compares with releases in 2021.

CIB thus achieved pre-tax income of EUR 5,398 million, up sharply by 16.0% compared to 2021.

[1] *Europe, Middle East, Africa.*

[2] *Source: Dealogic as at 31/12/2022, bookrunner in volume.*

[3] *Average outstandings, change at constant scope and exchange rates.*

[4] *Fixed Income, Currency and Commodities.*

COMMERCIAL, PERSONAL BANKING & SERVICES (CPBS)

In millions of euros	**2022**	**2021**	**2022/2021**
Revenues	**28,301**	**25,888**	**+9.3%**
Operating Expenses and Dep.	(17,928)	(16,909)	+6.0%
Gross Operating Income	**10,373**	**8,979**	**+15.5%**
Cost of Risk	(2,452)	(2,598)	-5.6%
Operating Income	**7,920**	**6,381**	**+24.1%**
Share of Earnings of Equity-Method Entities	433	287	+50.9%
Other Non-Operating Items	(19)	53	n.s.
Pre-Tax Income	**8,334**	**6,721**	**+24.0%**
Income Attributable to Wealth and Asset Management	(334)	(275)	+21.6%
Pre-Tax Income of Commercial, Personal Banking & Services	**8,000**	**6,446**	**+24.1%**
Cost/Income	63.3%	65.3%	-2.0 pt
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in France, Belgium, Italy, Luxembourg, Poland, Türkiye, the United States and Germany)	47.4	43.3	+9.4%

Including 100% of Private Banking in France, Belgium, Italy, Luxembourg, Poland, Türkiye, the United States and Germany for the Revenues to Pre-tax income line items.

For the whole of 2022, CPBS results grew very strongly, driven up by strong business drive, along with a very positive jaws effect.

At EUR 671 billion, loans outstanding increased by 7.0% compared to 2021 and were up sharply in all business lines. At EUR 646 billion, deposits rose sharply by 6.6% compared to 2021 and were up across all customer segments. Private Banking achieved very strong net asset inflows of EUR 10.7 billion in 2022.

Revenues[1], at EUR 28,301 million, rose sharply by 9.3% compared to 2021. They were up sharply by 8.0% in Commercial & Personal Banking, driven by a strong growth in net interest income and by increased fees, and up very sharply by 12.0% at specialised businesses, driven up by Arval.

Operating expenses[(1)], at EUR 17,928 million, were up by 6.0% compared to 2021 (+4.2% at constant scope and exchange rates). The jaws effect was very positive (+3.3 points).

Gross operating income[(1)], at EUR 10,373 million, increased strongly by 15.5% compared to 2021.

At EUR 2,452 million, the cost of risk[(1)] decreased by 5.6% compared to 2021.

As a result, after allocating one-third of Private Banking's net income to Wealth Management (Investment & Protection Services division), CPBS achieved pre-tax income[2] of EUR 8,000 million, up very sharply by 24.1% compared to 2021.

[1] *Including 100% of Private Banking in Commercial & Personal Banking (including PEL/CEL effects in France on revenues).*

[2] *Including 2/3 of Private Banking in Commercial & Personal Banking (including PEL/CEL effects).*

COMMERCIAL & PERSONAL BANKING IN FRANCE (CPBF)

In millions of euros	2022	2021	2022/2021
Revenues	**6,680**	**6,269**	**+6.6%**
incl. net interest income	*3,568*	*3,401*	*+4.9%*
incl. fees	*3,112*	*2,869*	*+8.5%*
Operating Expenses and Dep.	(4,698)	(4,557)	+3.1%
Gross Operating Income	**1,982**	**1,712**	**+15.7%**
Cost of Risk	(237)	(441)	-46.2%
Operating Income	**1,745**	**1,271**	**+37.2%**
Share of Earnings of Equity-Method Entities	1	(1)	n.s.
Other Non-Operating Items	25	39	-34.6%
Pre-Tax Income	**1,771**	**1,309**	**+35.3%**
Income Attributable to Wealth and Asset Management	(158)	(127)	+24.0%
Pre-Tax Income of Commercial & Personal Banking in France	**1,613**	**1,181**	**+36.5%**
Cost/Income	70.3%	72.7%	-2.4 pt
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in France)	11.3	10.6	+6.0%

Including 100% of the Private Banking in France for the Revenues to Pre-tax income line items.

For the whole of 2022, results were up sharply and growth in business activity was robust. Loans outstanding rose by 4.8% compared to 2021 and were up across all customer segments. Deposits were up by 4.8% compared to 2021 with an increase in all customer segments. Off-balance sheet savings decreased by 3.8% compared to 31 December 2021 in an unfavourable market context. Private Banking attracted very strong net asset inflows of EUR 6.2 billion, mainly through external client acquisition and synergies with entrepreneurs.

Revenues[1] amounted to EUR 6,680 million, up strongly, by 6.6% compared to 2021. Net interest income(1) rose sharply, by 4.9%, driven by a favourable environment and the contribution of specialised subsidiaries. Fees(1) were up sharply by 8.5% compared to 2021, with an increase in all customer segments.

Operating expenses(1), at EUR 4,698 million, rose by 3.1% compared to 2021, in relation with the support for growth and the continued of cost management measures. The jaws effect was very positive (+3.5 points).

Gross operating income(1) came to EUR 1,982 million, up very sharply by 15.7% compared to 2021.

The cost of risk(1) came to EUR 237 million, an improvement of EUR 204 million compared to 2021. At 11 basis points of outstanding customer loans, it is at a low level with a decrease in the cost of risk on doubtful loans (stage 3) and a strong reversal of provisions on performing loans (stages 1 and 2) related in particular to the effect of a change in method in the fourth quarter of 2022 (-EUR 163 million) in order to align with European standards.

As a result, after allocating one-third of Private Banking's net income in France to Wealth Management (Investment & Protection Services division), CPBF achieved pre-tax income[2] of EUR 1,613 million up very sharply by 36.5% compared to 2021.

[1] *Including 100% of Private Banking, including PEL/CEL effects on revenues (+EUR 46 million in 2022, +EUR 29 million in 2021).*

[2] *Including 2/3 of Private Banking (including PEL/CEL effects).*

BNL BANCA COMMERCIALE (BNL BC)

In millions of euros	2022	2021	2022/2021
Revenues	**2,634**	**2,680**	**-1.7%**
incl. net interest income	*1,519*	*1,539*	*-1.3%*
incl. fees	*1,115*	*1,141*	*-2.2%*
Operating Expenses and Dep.	(1,735)	(1,780)	-2.5%
Gross Operating Income	**899**	**900**	**-0.1%**
Cost of Risk	(465)	(487)	-4.5%
Operating Income	**433**	**413**	**+5.0%**
Share of Earnings of Equity-Method Entities	0	0	n.s.
Other Non-Operating Items	2	0	n.s.
Pre-Tax Income	**436**	**413**	**+5.7%**
Income Attributable to Wealth and Asset Management	(26)	(35)	-27.8%
Pre-Tax Income of BNL bc	**410**	**377**	**+8.8%**
Cost/Income	65.9%	66.4%	-0.5 pt
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Italy)	6.0	5.3	+11.4%

Including 100% Private Banking in Italy for the Revenues to Pre-tax income line items.

For the whole of 2022, business activity of BNL bc was good and it saw the ongoing benefits from the transformation of its operating model. Loans outstanding were up by 2.1% compared to 2021 and by 4.1% when excluding non-performing loans, driven by the increase in mortgage loans and in factoring. Deposits rose by 8.5% compared to 2021 and were up sharply in all customer segments, corporates particularly. Off-balance sheet savings decreased by 8.6% compared to 31 December 2021 in an unfavourable market context.

At EUR 2,634 million, revenues[1] decreased by 1.7% compared to 2021 (-0.1% at constant scope[2]). Net interest income[(1)] was down by 1.3%. The positive impact of the interest-rate environment on deposits was offset by the gradual adjustment of loan margins. Fees[(1)] decreased by 2.2% but rose by 1.5% at constant scope[(2)], thanks to an increase in banking fees, particularly in corporates, offset partly by lower financial fees.

Operating expenses[(1)], at EUR 1,735 million, decreased by 2.5% compared to 2021 (-0.5% at constant scope and exchange rates), thanks to the impact of the transformation of the operating model and adaptation measures (the “Quota 100” retirement plan). The jaws effect was positive (+0.8 point).

Gross operating income[(1)] thus came to EUR 899 million, almost unchanged compared to 2021.

The cost of risk[(1)] stood at EUR 465 million, an improvement of EUR 22 million compared to 2021. At 58 basis points of customer loans outstanding, it was low and reflects lower provisions of non-performing loans (stage 3) compared to 2021.

As a result, after allocating one-third of Private Banking’s net income in Italy to Wealth Management (Investment & Protection Services division), BNL bc achieved pre-tax income[3] of EUR 410 million, up by 8.8% compared to 2021.

[1] *Including 100% of Private Banking.*

[2] *Divestment in a business on 02/01/2022.*

[3] *Including 2/3 of Private Banking.*

COMMERCIAL & PERSONAL BANKING IN BELGIUM (CPBB)

In millions of euros	2022	2021	2022/2021
Revenues	**3,764**	**3,509**	**+7.3%**
incl. net interest income	*2,618*	*2,404*	*+8.9%*
incl. fees	*1,146*	*1,106*	*+3.6%*
Operating Expenses and Dep.	(2,615)	(2,384)	+9.7%
Gross Operating Income	**1,149**	**1,125**	**+2.1%**
Cost of Risk	(36)	(99)	-63.9%
Operating Income	**1,113**	**1,026**	**+8.5%**
Share of Earnings of Equity-Method Entities	0	6	-91.9%
Other Non-Operating Items	10	13	-28.6%
Pre-Tax Income	**1,123**	**1,045**	**+7.5%**
Income Attributable to Wealth and Asset Management	(74)	(71)	+3.5%
Pre-Tax Income of Commercial & Personal Banking in Belgium	**1,049**	**973**	**+7.8%**
Cost/Income	69.5%	67.9%	+1.6 pt
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Belgium)	6.1	5.3	+16.1%

Including 100% of Private Banking in Belgium for the Revenues to Pre-tax income line items.

For the whole of 2022, CPBB achieved strong growth in its business activity. Loans outstanding increased by 14.8% compared to 2021 (+7.5% at constant scope[1]) driven by the steep rise in loans to individuals and particularly mortgage loans with the significant contribution of bpost bank (+EUR 8.4 billion). Corporate loans rose strongly (+12.7% compared to 2021). Growth in deposits accelerated with the consolidation of bpost bank (+EUR 11.3 billion), and deposits thus rose by 9.2% compared to 2021 (+1.2% at constant scope and exchange rates). Off-balance sheet savings decreased by 7.6% compared to 31 December 2021, in an unfavourable market context. Private Banking achieved good net asset inflows of EUR 2.1 billion.

At EUR 3,764 million, revenues[2] increased strongly by 7.3% compared to 2021. Net interest income[(2)] was up sharply, by 8.9%, supported by all customer segments. Fees[(2)] were up by 3.6% compared to 2021, driven by higher banking fees, which were supported, in turn, by transaction banking and corporate clients, and offset partly by the decrease in financial fees.

Operating expenses[(2)], at EUR 2,615 million, were up by 9.7% compared to 2021 (+4.0% at constant scope[(1)]), in relation with business development and the impact of inflation, partly offset by the impact of cost-savings and network-optimisation measures.

Gross operating income[(2)] totalled EUR 1,149 million, a 2.1% increase.

The cost of risk[(2)] improved by EUR 63 million in 2022, to EUR 36 million, or 3 basis points of customer loans outstanding, a very low level.

After allocating one-third of Private Banking income in Belgium to Wealth Management (Investment & Protection Services division), pre-tax income[3] at CPBB rose by 7.8% compared to 2021 and stood at EUR 1,049 million.

1 *Consolidation of bpost bank, effective 01/01/2022.*

2 *Including 100% of Private Banking.*

3 *Including 2/3 of Private Banking.*

COMMERCIAL & PERSONAL BANKING IN LUXEMBOURG (CPBL)

In millions of euros	2022	2021	2022/2021
Revenues	**475**	**427**	**+11.2%**
incl. net interest income	*377*	*339*	*+11.3%*
incl. fees	*97*	*88*	*+10.8%*
Operating Expenses and Dep.	(275)	(268)	+2.4%
Gross Operating Income	**200**	**158**	**+26.1%**
Cost of Risk	19	(2)	n.s.
Operating Income	**219**	**156**	**+40.1%**
Share of Earnings of Equity-Method Entities	0	0	+11.7%
Other Non-Operating Items	3	0	n.s.
Pre-Tax Income	**222**	**156**	**+42.3%**
Income Attributable to Wealth and Asset Management	(6)	(6)	+5.8%
Pre-Tax Income of Commercial & Personal Banking in Luxembourg	**216**	**150**	**+43.7%**
Cost/Income	57.9%	62.9%	-5.0 pt
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Luxembourg)	0.8	0.7	+13.4%

Including 100% of Private Banking in Luxembourg for the Revenues to Pre-tax income line items.

For the whole of 2022, business drive was very good. Loans outstanding increased by 6.4% compared to 2021 and were up in all customer segments. Deposits rose by 7.2% compared to 2021. Off-balance sheet savings were down by 14.4% compared to 31 December 2021, due to market performances.

At EUR 475 million, revenues[1] increased strongly by 11.2% compared to 2021. Net interest income[(1)] was up sharply by 11.3%, driven by increased volumes and solid margins on deposits with corporate clients. Fees[(1)] were up by 10.8% compared to 2021, driven by banking fees and corporate clients.

Operating expenses[(1)], at EUR 275 million, were kept under control (+2.4% compared to 2021). The jaws effect was very positive (+8.8 points).

Gross operating income[(1)], at EUR 200 million, was up sharply by 26.1% compared to 2021.

The cost of risk[(1)] had a release of EUR 19 million in 2022 and a release of EUR 2 million in 2021.

As a result, after allocating one-third of Private Banking's net income in Luxembourg to Wealth Management (Investment & Protection Services division), pre-tax income[2] at CPBL was up very sharply by 43.7% compared to 2021 and reached EUR 216 million.

[1] *Including 100% of Private Banking.*

[2] *Including 2/3 of Private Banking.*

EUROPE-MEDITERRANEAN

In millions of euros	2022	2021	2022/2021
Revenues	**2,346**	**1,941**	**+20.9%**
incl. net interest income	*1,895*	*1,470*	*+28.9%*
incl. fees	*451*	*471*	*-4.1%*
Operating Expenses and Dep.	(1,649)	(1,606)	+2.7%
Gross Operating Income	**697**	**335**	**n.s.**
Cost of Risk	(153)	(144)	+5.9%
Operating Income	**544**	**190**	**n.s.**
Share of Earnings of Equity-Method Entities	376	234	+60.6%
Other Non-Operating Items	(87)	(53)	+65.7%
Pre-Tax Income	**833**	**372**	**n.s.**
Income Attributable to Wealth and Asset Management	(16)	(8)	n.s.
Pre-Tax Income of Europe-Mediterranean	**817**	**364**	**n.s.**
Cost/Income	70.3%	82.8%	-12.5 pt
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Poland and Türkiye)	5.5	5.0	+8.6%

Including 100% of Private Banking in Poland and in Türkiye for the Revenues to Pre-tax income line items.

For the whole of 2022, Europe-Mediterranean's business drive was good. Loans outstanding increased by 17.7%[1] compared to 2021, driven particularly by higher volumes in corporate clients, particularly in Poland. Origination was prudent particularly in individual customers in Poland and Türkiye. Deposits rose by 21.8%[(1)] compared to 2021 and were up in Poland and Türkiye, particularly from corporate clients. Europe-Mediterranean continued its digtalisation drive and its transformation. Sales of its businesses in sub-Saharan Africa are in the process of closing.

At EUR 2,346 million, revenues[2], rose sharply, by 32.5%[3] compared to 2021, driven by a strong increase in net interest income[(2)] on deposits despite the impact of negative items linked to loans in the fourth quarter 2021 and in the fourth quarter 2022 in Poland.

Operating expenses[(1)], at EUR 1,649 million, increased by 11.3%[(3)] compared to 2021, driven particularly by high wage inflation. The jaws effect was very positive (+21.2 points[(3)]).

Gross operating income[(2)], at EUR 697 million, rose by 139.4%[(3)] compared to 2021.

At EUR 153 million, the cost of risk[(2)] increased by EUR 9 million compared to 2021. It stood at 41 basis points of customer loans outstanding, a low level that reflects the decrease in provisions on non-performing loans (stage 3).

After allocating one-third of Private Banking income in Türkiye and in Poland to Wealth Management (Investment & Protection Services division), Europe-Mediterranean thus achieved pre-tax income[4] of EUR 817 million, more than doubling[(3)] compared to 2021. In 2022 it achieved an overall positive impact from the effects induced by the hyperinflation situation in Türkiye[5] (-EUR 6 million).

1 *At constant scope and exchange rates.*

2 *Including 100% of Private Banking.*

3 *At constant scope and exchange rates excluding Türkiye at historical exchange rates in accordance with IAS 29.*

4 *Including 2/3 of Private Banking.*

5 *Application of IAS 29 standards "Financial Reporting in Hyperinflationary Economies" and efficiency of the hedging with CPI linkers taken into account and recognised in "Other non-operating items".*

BANCWEST

In millions of euros	2022	2021	2022/2021
Revenues	**2,731**	**2,426**	**+12.6%**
incl. net interest income	*2,282*	*2,026*	*+12.6%*
incl. fees	*450*	*400*	*+12.4%*
Operating Expenses and Dep.	(2,061)	(1,697)	+21.4%
Gross Operating Income	**670**	**729**	**-8.1%**
Cost of Risk	39	45	-14.1%
Operating Income	**709**	**774**	**-8.4%**
Share of Earnings of Equity-Method Entities	0	0	n.s.
Other Non-Operating Items	4	19	-81.1%
Pre-Tax Income	**713**	**794**	**-10.2%**
Income Attributable to Wealth and Asset Management	(52)	(25)	n.s.
Pre-Tax Income of BancWest	**660**	**769**	**-14.1%**
Cost/Income	75.5%	70.0%	+5.5 pt
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in the United States)	5.6	5.0	+13.5%

Including 100% of Private Banking in the United States for the Revenues to Pre-tax income line items.

For the whole of 2022, BancWest maintained good business drive. Loans outstanding were up by 3.8%[1] compared to 2021, driven by a strong increase in mortgage and corporate loans. Deposits were down by 6.0%(1), including a decrease in customer deposits[2] (-6.0%(1)) and a decline in money-market deposits. Assets under management in Private Banking reached USD 18.7 billion as at 31 December 2022.

The Group announced the closing of the sale of Bank of the West, Inc. to BMO Financial Group on 1 February 2023.

Revenues[3], at EUR 2,731 million, increased by 0.2%(1) compared to 2021, due to an increase in net interest income, driven by an improvement in the margin and increased volumes and a good performance in banking fees.

Operating expenses(3) grew by 8.5%(1), to EUR 2,061 million, in connection with targeted projects.

Gross operating income(3), at EUR 670 million, decreased by 18.7%(1) compared to 2021.

The cost of risk(3) had a release of EUR 39 million, or -7 basis points of customer loans outstanding, due to releases of provisions (stages 1 and 2) particularly in the first quarter 2022.

As a result, after allocating one-third of Private Banking's net income in the United States to Wealth Management (Investment & Protection Services division), BancWest achieved pre-tax income[4] of EUR 660 million, down by 24.1%(1) compared to 2021.

1 *At constant scope and exchange rates.*

2 *Deposits excluding treasury activities.*

3 *Including 100% of Private Banking.*

4 *Including 2/3 of Private Banking.*

SPECIALISED BUSINESSES – PERSONAL FINANCE

In millions of euros	2022	2021	2022/2021
Revenues	**5,387**	**5,216**	**+3.3%**
Operating Expenses and Dep.	(2,922)	(2,804)	+4.2%
Gross Operating Income	**2,465**	**2,412**	**+2.2%**
Cost of Risk	(1,373)	(1,314)	+4.5%
Operating Income	**1,092**	**1,097**	**-0.5%**
Share of Earnings of Equity-Method Entities	57	53	+8.4%
Other Non-Operating Items	(29)	25	n.s.
Pre-Tax Income	**1,121**	**1,175**	**-4.6%**
Cost/Income	54.2%	53.8%	+0.4 pt
Allocated Equity (€bn, year to date)	8.1	7.7	+5.4%

For the whole of 2022, loans outstanding rose by 3.5% compared to 2021 (after including 50% of Floa's loan outstandings, in the amount of EUR 1 billion, effective 1 February 2022) and by 2.5% otherwise. Personal Finance is transforming and adapting its activities.

Revenues, at EUR 5,387 million, rose by 3.3% compared to 2021 (+0.3% at constant scope and exchange rates), driven by increased volumes, offset partly by strong pressure on margins.

Operating expenses, at EUR 2,922 million, rose by 4.2% compared to 2021 (+1.4% at constant scope and exchange rates), driven by targeted projects and support of business development.

Gross operating income came to EUR 2,465 million (+2.2% compared to 2021).

At EUR 1,373 million, the cost of risk increased by EUR 59 million compared to 2021. At 143 basis points of customer loans outstanding, the cost of risk was low. It registered a decrease in provisions on non-performing loans (stage 3) and benefited from the structural improvement of the risk profile linked to the change in the product mix, particularly the increase in the share of auto loans.

Pre-tax income at Personal Finance thus came to EUR 1,121 million, down by 4.6% compared to 2021.

SPECIALISED BUSINESSES – ARVAL & LEASING SOLUTIONS

In millions of euros	2022	2021	2022/2021
Revenues	**3,438**	**2,675**	**+28.5%**
Operating Expenses and Dep.	(1,395)	(1,298)	+7.4%
Gross Operating Income	**2,043**	**1,377**	**+48.4%**
Cost of Risk	(146)	(150)	-2.6%
Operating Income	**1,897**	**1,227**	**+54.6%**
Share of Earnings of Equity-Method Entities	8	7	+12.0%
Other Non-Operating Items	52	0	n.s.
Pre-Tax Income	**1,957**	**1,235**	**+58.5%**
Cost/Income	40.6%	48.5%	-7.9 pt
Allocated Equity (€bn, year to date)	3.5	3.2	+7.0%

For the whole of 2022, the specialised businesses Arval and Leasing Solutions achieved a very strong performance.

Arval's financed fleet expanded by 8.3%[1] compared to 2021. Used car prices remained at a very high level. Leasing Solutions' outstandings increased by 3.9%[2] compared to 2021 with good resiliency in commercial momentum.

Revenues rose very strongly, by 28.5% compared to 2021, at EUR 3,438 million, on the back of Arval's very good performance, driven by very high used car prices and growth at Leasing Solutions with higher outstandings.

Operating expenses increased by 7.4% compared to 2021, to EUR 1,395 million. The jaws effect was very positive (+21.1 points).

Gross operating income rose very sharply, by 48.4% compared to 2021, at EUR 2,043 million.

Pre-tax income rose 1.6-fold compared to 2021, to EUR 1,957 million.

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1 *Increase in the fleet at the end of the period in thousands of vehicles, +5.5% excluding the acquisition of Terberg Business Lease and BCR.*

2 *At constant scope and exchange rates.*

SPECIALISED BUSINESSES – NEW DIGITAL BUSINESSES (NICKEL, FLOA, LYF) AND PERSONAL INVESTORS

In millions of euros	2022	2021	2022/2021
Revenues	**846**	**744**	**+13.7%**
Operating Expenses and Dep.	(578)	(513)	+12.8%
Gross Operating Income	**268**	**231**	**+15.9%**
Cost of Risk	(100)	(5)	n.s.
Operating Income	**168**	**226**	**-25.8%**
Share of Earnings of Equity-Method Entities	(10)	(11)	-13.7%
Other Non-Operating Items	1	9	-90.9%
Pre-Tax Income	**159**	**224**	**-29.1%**
Income Attributable to Wealth and Asset Management	(2)	(2)	+0.1%
Pre-Tax Income of New Digital Businesses & Personal Investors	**157**	**222**	**-29.4%**
Cost/Income	68.3%	68.9%	-0.6 pt
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Germany)	0.5	0.4	+40.8%

Including 100% of Private Banking in Germany for the Revenues to Pre-tax income line items.

For the whole of 2022, New Digital Businesses and Personal Investors achieved good performances on the whole. Nickel continued its rollout in Europe, with the 2022 launch of its offering in Belgium and Portugal and had reached almost 3.0 million accounts opened as at 31 December 2022[1]. Floa, the French leader in Buy Now Pay Later solutions, the acquisition of which the Group closed on 31 January 2022, had 4.0 million customers. Personal Investors continued to show a high number of orders in an unfavourable market context.

Revenues[2] amounted to EUR 846 million, up very strongly, by 13.7% compared to 2021. They also rose strongly in New Digital Businesses, driven by business development. Revenues[(2)] at Personal Investors were down in an unfavourable market context.

At EUR 578 million, operating expenses[(2)] were up sharply, by 12.8% compared to 2021, driven by the development strategy. The jaws effect was positive (+1.0 point).

Gross operating income[(2)] rose sharply, by 15.9% compared to 2021, to EUR 268 million.

The cost of risk[(2)] stood at EUR 100 million (EUR 5 million in 2021) and increased in connection with the consolidation of 50% of Floa's contribution, effective 1 February 2022.

As a result, after allocating one-third of Private Banking's net income in Germany to Wealth Management (Investment & Protection Services division), pre-tax income[3] of New Digital Businesses and Personal Investors taken together, decreased by 29.4% compared to 2021, to EUR 157 million.

1 *Since inception, total for all countries.*

2 *Including 100% of Private Banking in Germany.*

3 *Including 2/3 of Private Banking in Germany.*

INVESTMENT & PROTECTION SERVICES (IPS)

In millions of euros	2022	2021	2022/2021
Revenues	**6,670**	**6,476**	**+3.0%**
Operating Expenses and Dep.	(4,363)	(4,218)	+3.5%
Gross Operating Income	**2,307**	**2,258**	**+2.2%**
Cost of Risk	3	(7)	n.s.
Operating Income	**2,309**	**2,251**	**+2.6%**
Share of Earnings of Equity-Method Entities	223	157	+41.7%
Other Non-Operating Items	88	92	-4.1%
Pre-Tax Income	**2,620**	**2,499**	**+4.8%**
Cost/Income	65.4%	65.1%	+0.3 pt
Allocated Equity (€bn, year to date)	10.0	12.0	-16.8%

For the whole of 2022, IPS's results were up strongly, driven by a strong level of activity in spite of a lacklustre environment. Net asset inflows were good (+EUR 31.9 billion) driven particularly by Wealth Management and by positive net inflows into Asset Management. Real Estate and Insurance held up well, driven by good momentum in Savings in France.

Revenues, at EUR 6,670 million, increased by 3.0% compared to 2021, driven by the strong increase in revenues in Wealth Management and good growth in Real Estate. Revenues at Asset Management and Insurance were impacted by the market environment.

Operating expenses, at EUR 4,363 million, were up by 3.5% compared to 2021, in support of business development and in connection with targeted initiatives. At constant scope and exchange rates, the jaws effect was close to 0.

Gross operating income came to EUR 2,307 million, up by 2.2% compared to 2021.

Pre-tax income at IPS thus came to EUR 2,620 million, up by 4.8% compared to 2021. In 2022 and 2021, this included the positive impact of capital gains on sales and a good contribution from associates in 2022.

INSURANCE AND WEALTH MANAGEMENT

INSURANCE

In millions of euros	2022	2021	2022/2021
Revenues	**2,774**	**2,827**	**-1.9%**
Operating Expenses and Dep.	(1,558)	(1,536)	+1.4%
Gross Operating Income	**1,216**	**1,291**	**-5.8%**
Cost of Risk	(2)	(1)	+40.3%
Operating Income	**1,214**	**1,289**	**-5.8%**
Share of Earnings of Equity-Method Entities	149	86	+74.0%
Other Non-Operating Items	12	(6)	n.s.
Pre-Tax Income	**1,376**	**1,368**	**+0.5%**
Cost/Income	56.2%	54.3%	+1.9 pt
Allocated Equity (€bn, year to date)	7.1	9.4	-24.9%

WEALTH & ASSET MANAGEMENT

In millions of euros	2022	2021	2022/2021
Revenues	**3,896**	**3,649**	**+6.8%**
Operating Expenses and Dep.	(2,806)	(2,682)	+4.6%
Gross Operating Income	**1,091**	**967**	**+12.8%**
Cost of Risk	5	(6)	n.s.
Operating Income	**1,095**	**962**	**+13.9%**
Share of Earnings of Equity-Method Entities	74	72	+3.0%
Other Non-Operating Items	75	98	-23.0%
Pre-Tax Income	**1,244**	**1,131**	**+10.0%**
Cost/Income	72.0%	73.5%	-1.5 pt
Allocated Equity (€bn, year to date)	2.9	2.6	+12.5%

Inflows and assets under management

As of 31 December 2022, assets under management[1] came to EUR 1,189 billion. They decreased by 6.9% compared to 31 December 2021, due mainly to a very unfavourable market performance of -EUR 129.9 billion, offset partly by net asset inflows of EUR 31.9 billion and a favourable exchange-rate effect of +EUR 9.3 billion. The other effects were positive (+EUR 1.2 billion).

In 2022, total net asset inflows reached +EUR 31.9 billion. Net asset inflows in Wealth Management were very high, driven by Commercial & Personal Banking activity in Europe and particularly in France as well as by activity in Germany and Asia. Inflows into Asset Management were good, thanks to net asset inflows in medium- and long-term vehicles and the rebound in net asset inflows into money-market funds in the fourth quarter 2022. Net asset inflows into Insurance were solid, particularly in unit-linked accounts, as were gross inflows, particularly in France.

As of 31 December 2022, assets under management(1) broke down as follows: EUR 532 billion in asset management (Asset Management, Real Estate Investment Management and Principal Investments), EUR 411 billion in Wealth Management and EUR 247 billion in Insurance.

Insurance

For the whole of 2022, in an unfavourable market environment, Insurance held up well and its business drive was solid. Gross inflows into Savings reached EUR 22.8 billion in 2022, with the vast majority of net asset inflows in unit-linked accounts. Protection continued its growth in France, with a good performance by borrowers' insurance and a strong increase in individual protection and property & casualty. Internationally, Latin America rebounded strongly.

Revenues decreased by 1.9% compared to 2021 to EUR 2,774 million, due to the decrease in the financial result in connection with the more pronounced decline in the markets in 2022, despite growth in Savings and Protection.

At EUR 1,558 million, operating expenses rose by 1.4% compared to 2021, in support for business development and targeted projects.

At EUR 1,376 million, pre-tax income rose by 0.5% compared to 2021, driven by an increase in the contribution by associates compared to a low level in 2021.

Wealth and Asset Management (WAM)[2]

For the whole of 2022, Wealth and Asset Management businesses performed well. Wealth Management achieved strong net asset inflows particularly in Commercial & Personal Banking and with high-net-worth clients. Asset Management also attracted strong net asset inflows, driven by inflows in medium- and long-term vehicles and into money-market funds, with late-year rebound. Real Estate performed well, particularly in Investment Management, Property Management and Advisory in France.

At EUR 3,896 million, revenues rose by 6.8% compared to 2021, driven by an increase in Wealth Management, in connection with the growth in net interest income, by the strong increase at Principal Investments revenues, and by increased revenues at Real Estate. Asset Management revenues were impacted by a highly unfavourable market environment.

1 *Including distributed assets.*

2 *Asset Management, Wealth Management, Real Estate and Principal Investments.*

At EUR 2,806 million, operating expenses were up by 4.6% compared to 2021, driven by support for business development at Wealth Management and Real Estate.

Pre-tax income at Wealth and Asset Management thus came to EUR 1,244 million, a 10.0% increase compared to 2021. This included the impact of lower capital gains on sales made in 2022, compared to 2021.

CORPORATE CENTRE

In millions of euros	**2022**	**2021**	**2022/2021**
Revenues	**(279)**	**308**	**n.s.**
Operating Expenses and Dep.	(1,067)	(903)	+18.2%
Incl. Restructuring, IT Reinforcement and Adaptation Costs	*(503)*	*(292)*	*+72.1%*
Gross Operating Income	**(1,346)**	**(595)**	**n.s.**
Cost of Risk	(185)	(159)	+16.4%
Operating Income	**(1,531)**	**(754)**	**n.s.**
Share of Earnings of Equity-Method Entities	23	16	+41.1%
Other Non-Operating Items	(59)	775	n.s.
Pre-Tax Income	**(1,567)**	**38**	**n.s.**
Allocated Equity (€bn, year to date)	3.7	4.3	-13.8%

Corporate Centre's scope now excludes Principal Investments, which has been integrated into Investment & Protection Services.

For the whole of 2022, revenues amounted to -EUR 279 million in 2022 (EUR 308 million in 2021). In 2021, they had included a high level of positive non-recurring items and, in particular the +EUR 58 million positive impact from the capital gain realised on the sale of a 4.99% stake in SBI Life, the +EUR 86 million cumulative accounting impact of a swap set up for the transfer of a business in 2020 and the +EUR 91 million impact of a positive, non-recurring item. In 2022, they included the positive +EUR 185 million impact of the revaluation of proprietary credit risk included in derivatives (DVA), offset by a negative non-recurring item in the first quarter 2022.

Operating expenses came to EUR 1,067 million in 2022, an increase compared to 2021 (EUR 903 million). In 2022 they included an increase in taxes subject to IFRIC 21, as well as the exceptional impact of restructuring and adaptation costs in the amount of EUR 188 million (EUR 164 million in 2021) and IT reinforcement costs at EUR 314 million (EUR 128 million in 2021).

The cost of risk, at EUR 185 million, rose by EUR 26 million compared to 2021. It included in the third quarter 2022, the EUR 204 million exceptional impact of the "Act on assistance to borrowers" in Poland.

Other non-operating items came to -EUR 59 million in 2022 (EUR 775 million in 2021). They reflect the -EUR 159 million impairment of Ukrsibbank shares and the negative -EUR 274 million impact of the reclassification to profit-and-loss of exchange differences[1], offset partly by the positive impact of badwill related to bpost bank amounting to +EUR 244 million and a +EUR 204 million capital gain on the sale of a stake. In 2021, they included the exceptional impact of +EUR 486 million in capital gains realised on the sale of buildings, a +EUR 444 million capital gain on the sale of Allfunds shares[2] and -EUR 74 million in total impairments.

Pre-tax income at Corporate Centre thus came to -EUR 1,567 million (+EUR 38 million in 2021) reflecting the decrease in exceptional items in 2022.

[1] *Previously recorded in Consolidated equity.*

[2] *Disposal of 8.69% stake in Allfunds.*

3.3 Balance sheet

ASSETS

OVERVIEW

At 31 December 2022, the total consolidated balance sheet of the BNP Paribas Group amounted to EUR 2,666.4 billion, up by 1% from 31 December 2021 (EUR 2,634.4 billion). The Group's main assets include cash and balances at central banks, financial instruments at fair value through profit or loss, loans and advances to customers, debt securities at amortised cost, financial investments and other assets related to insurance activities and accrued income and other assets, which, together, accounted for 91% of total assets at 31 December 2022 (92% at 31 December 2021). The 1% increase in assets is mainly due to the evolution of:

- derivatives used for hedging purposes which increased by 193% (+ EUR 16.7 billion, or EUR 25.4 billion at 31 December 2022);
- loans and advances to credit institutions which increased by 50% (+EUR 10.9 billion, or EUR 32.6 billion at 31 December 2022);
- loans and advances to customers which increased by 5% (+EUR 43 billion, or EUR 857 billion at 31 December 2022);
- accrued income and other assets which increased by 17% (+EUR 30 billion, or 209.1 billion at 31 December 2022).

CASH AND BALANCES AT CENTRAL BANKS

Cash and central banks accounted for EUR 318.6 billion at 31 December 2022, decreased by 8.4% from 31 December 2021 (EUR 347.9 billion).

FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets recognised at market or model value through profit or loss are composed of trading portfolios, financial derivatives and certain assets not held for trading purposes, whose characteristics do not permit recognition at amortised cost or at fair value through equity. Financial assets in the trading portfolio include securities, loans and repurchase agreements.

These assets are measured at market or model value at each balance sheet date.

Total financial instruments at market value by profit and loss increased by +0.5% (+EUR 3.4 billion) compared to 31 December 2021.

This increase is mainly due to the +36.4% increase in derivative financial instruments (+EUR 87.5 billion to EUR 327.9 billion at 31 December 2022), partially offset by the -23.5% decrease in loans and repurchase agreements (-EUR 58.7 billion to EUR 191.1 billion at 31 December 2022), and by the -13.3% decrease in securities (-EUR 25.4 billion to EUR 166.1 billion at 31 December 2022).

LOANS AND ADVANCES TO CREDIT INSTITUTIONS

Loans and advances to credit institutions (net of impairment) amounted to EUR 32.6 billion at 31 December 2022, an increase of EUR 10.9 billion compared to 31 December 2021, and are split between on demand accounts, loans to credit institutions and repurchase agreements.

Repurchase agreements were up by 170% for a total of EUR 5.9 billion at 31 December 2022, compared with EUR 2.2 billion at 31 December 2021. Loans to credit institutions rose by 48% to EUR 15.7 billion at 31 December 2022, compared with EUR 10.6 billion at 31 December 2021. Impairment provisions were stable and amounted to EUR 100 million at 31 December 2022.

LOANS AND ADVANCES TO CUSTOMERS

Loans and advances to customers are divided into ordinary accounts, loans to customers, reverse repurchase agreements and finance leases.

Loans and advances to customers (net of impairment) amounted to EUR 857 billion at 31 December 2022, compared to EUR 814 billion at 31 December 2021, increasing by +5.3%. This is due to the increase in loans to customers which amounted to EUR 774.6 billion at 31 December 2022, increasing by +6.9% compared to 2021, offset by the decrease in on demand accounts (-18.7%, or EUR 40.1 billion at 31 December 2022, compared to EUR 49.3 billion at 31 December 2021). Impairment provisions were down to EUR 18.3 billion at 31 December 2022, compared to EUR 19.9 billion at 31 December 2021.

DEBT SECURITIES AT AMORTISED COST OR AT MARKET OR MODEL VALUE THROUGH EQUITY

Debt securities that are not held for trading purposes and which meet the cash flow criterion established by IFRS 9 are recognised:

- at amortised cost if managed to collect cash flows by collecting contractual payments over the life of the instrument; or
- at fair value through equity if held in a business model whose objective is achieved through both the collection of contractual cash flows and the sale of financial assets.

Debt securities at amortised cost

Debt securities at amortised cost are measured using the effective interest rate method. They totalled EUR 114 billion at 31 December 2022 (net of impairment), compared with EUR 108.5 billion at 31 December 2021, thus increasing by 5%.

Debt securities at fair value through equity

These assets are measured at market or model value through equity at each balance sheet date. They decreased by EUR 3 billion between 31 December 2021 and 31 December 2022, amounting to EUR 35.9 billion.

Debt securities at fair value through equity posted an unrealised loss of -EUR 866 million at 31 December 2022, compared with an unrealised loss of -EUR 1 million at 31 December 2021, a decrease in value of EUR 865 billion.

FINANCIAL INVESTMENTS AND OTHER ASSETS RELATED TO INSURANCE ACTIVITIES

Financial investments and other assets related to insurance activities include:

- financial instruments that remain recognised in accordance with IAS 39 (note 1.f to the consolidated financial statements); they include investments in representation of the technical reserves of insurance activities, including unit-linked insurance policies;
- derivatives used for hedging purposes with a positive market value;
- investment property;
- equity-method investments;
- share of reinsurers in liabilities related to insurance and investment contracts; and
- policyholders' surplus reserve assets.

Financial investments and other assets related to insurance activities amounted to EUR 247.3 billion at 31 December 2022, a decrease of 11.9% compared to 31 December 2021. This decrease is mainly due to a decrease of 10.1% in financial instruments designated at fair value through profit or loss (EUR 124.0 billion at 31 December 2022, compared with EUR 138.0 billion at 31 December 2021), and to a decrease of 17.6% in available-for-sale financial assets (EUR 105.0 billion at 31 December 2022, compared to an unrealised loss of EUR 127.4 billion at 31 December 2021).

Financial assets available for sale have an unrealised loss of -EUR 9.7 billion at 31 December 2022, compared with EUR 12.7 billion at 31 December 2021, a decrease of EUR 22.4 billion.

ACCRUED INCOME AND OTHER ASSETS

Accrued income and other assets are divided between guarantee deposits and bank guarantees paid, collection accounts, accrued income and prepaid expenses, other debtors and miscellaneous assets.

Accrued income and other assets amounted to EUR 209.1 billion at 31 December 2022, compared with EUR 179.1 billion at 31 December 2021, up 16.7%. This increase is in particular related to guarantee deposits and bank guarantees paid, up by EUR 19 billion (+14%).

LIABILITIES

OVERVIEW

The Group's liabilities (excluding equity) amounted to EUR 2,539.8 billion at 31 December 2022, up by 1% from 31 December 2020 (EUR 2,511.9 billion). The Group's main liabilities consist of financial instruments at fair value through profit or loss, deposits from customers and from credit institutions, debt securities, accrued expenses and other liabilities, and technical reserves and other insurance liabilities, which, together, accounted for 95% of the Group's total liabilities (excluding shareholders' equity) at 31 December 2022, unchanged from 31 December 2021. The 1% increase in liabilities is mainly due to the evolution of:

- derivatives used for hedging purposes which increased by +297% (+EUR 29.9 billion, or EUR 40 billion at 31 December 2022);
- loans and advances to customers which increased by +5% (+EUR 50.4 billion, or EUR 1,008.1 billion at 31 December 2022);
- accrued expenses and other liabilities which increased by +28% (+EUR 40.1 billion, or EUR 185.5 billion at 31 December 2022);

FINANCIAL INSTRUMENTS AT FAIR OR MODEL VALUE THROUGH PROFIT OR LOSS

The trading portfolio consists mainly of sales of borrowed securities, repurchase agreements and financial derivatives. Financial liabilities designated as at fair or model value through profit or loss are mainly composed of issues originated and structured on behalf of clients, where the risk exposure is managed in combination with the hedging strategy. These types of issues contain significant embedded derivatives, whose changes in value are offset by changes in value of the hedging instrument.

Total financial instruments at fair or model value through profit or loss decreased by -1.4% (-EUR 9.8 billion) compared to 31 December 2021, related mainly to the -20.2% decrease in repurchase agreement operations (-EUR 59.4 billion to EUR 234.1 billion at 31 December 2022) and the -11.7% decrease in securities (-EUR 13.2 billion to EUR 99.2 billion in 31 December 2022), partially offset by the +26.4% increase in financial derivatives (+EUR 62.7 billion to EUR 300.1 billion at 31 December 2022).

DEPOSITS FROM CREDIT INSTITUTIONS

Amounts due to credit institutions consist primarily of interbank borrowings, demand deposits and repurchase agreements. Amounts due to credit institutions decreased by -24.7% or EUR -41 billion to EUR 124.7 billion at 31 December 2022. This decrease mainly results from the -29.5% decrease in interbank borrowings (EUR 147.6 billion at 31 December 2021 compared to EUR 104.1 billion at 31 December 2022).

DEPOSITS FROM CUSTOMERS

Deposits from customers consist primarily of on-demand deposits, term accounts, savings accounts and repurchase agreements. Deposits from customers amounted to EUR 1,008.1 billion, up by EUR 50.3 billion from 31 December 2021. This is due to the +54.9% increase term accounts and short-term notes (a EUR 89.8 billion rise, to EUR 253.2 billion at 31 December 2022).

DEBT SECURITIES

This category includes negotiable certificates of deposit and bond issues but does not include debt securities classified as financial liabilities at fair or model value through profit or loss (see note 4.h to the consolidated financial statements). Debt securities rose from EUR 149.7 billion at 31 December 2021 to EUR 154.1 billion at 31 December 2022.

ACCRUED EXPENSE AND OTHER LIABILITIES

Accrued expense and other liabilities consist of guarantee deposits received, collection accounts, accrued expense and deferred income, lease liabilities, as well as other creditors and miscellaneous liabilities.

Accrued expense and other liabilities amounted to EUR 185.5 billion at 31 December 2022, compared with EUR 145.4 billion at 31 December 2021, an increase of +27.5%. This increase is mainly due to guarantee deposits received (up by EUR 22.1 billion, or +21.7%) and other creditors and miscellaneous liabilities (up by EUR 14.9 billion, or +50.4%).

TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES

Technical reserves of insurance companies decreased by -11.1% compared to 31 December 2021 and amounted to EUR 226.5 billion at 31 December 2022 (EUR 254.8 billion at 31 December 2021), mainly due to the decrease in liabilities related to policyholder's surplus reserve.

MINORITY INTERESTS

Minority interests amounted to EUR 4.8 billion at 31 December 2022, compared with EUR 4.6 billion at 31 December 2021.

SHAREHOLDERS' EQUITY

Shareholders' equity (before dividend payout) amounted to EUR 121.8 billion at 31 December 2022, compared with EUR 117.9 billion at 31 December 2021. This EUR 3.9 billion increase is mainly attributable to the profit of the period which amounted to EUR 10.2 billion, to changes in the revaluation of financial investments of insurance activities of – EUR 3.2 billion and to the appropriation of net income for 2021 of -EUR 4.5 billion.

FINANCING AND GUARANTEE COMMITMENTS

FINANCING COMMITMENTS

Financing commitments given mainly consist mostly of documentary credit, other credit confirmations and other commitments. They rose by EUR 20.5 billion compared to 31 December 2021, to EUR 387 billion at 31 December 2022.

Financing commitments given to customers rose by +5% to EUR 382.7 billion at 31 December 2022 and those given to credit institutions increased by EUR 0.7 billion to EUR 4.2 billion at 31 December 2022.

Financing commitments received consist mainly of financing commitments received from credit institutions in the context of refinancing from central banks. Financing commitments received increased by +51.1%, to EUR 68.8 billion at 31 December 2022, compared with EUR 45.4 billion at 31 December 2021.

GUARANTEE COMMITMENTS

Guarantee commitments given rose by +4.3% to EUR 178.8 billion at 31 December 2022 (compared with EUR 171.2 billion at 31 December 2021); this increase comes from the guarantee commitments given to credit institutions (an increase of +99.7% to EUR 60.4 billion at 31 December 2022), while guarantee commitments to customers decreased by -16% to EUR 118.4 billion at 31 December 2022 (compared with EUR 141 billion at 31 December 2021).

3.4 Profit and loss account

The information and financial elements contained in this note reflect an operational view and include BancWest's activity within the various income statement aggregates.

REVENUES

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021	Change (2022/2021)
Net interest income	23,168	21,209	+9.2%
Net commission income	10,570	10,717	-1.4%
Net gain on financial instruments at fair value through profit or loss	9,375	7,681	+22.1%
Net gain on financial instruments at fair value through equity	154	181	-14.9%
Net gain on derecognised financial assets at amortised cost	(41)	36	ns
Net income from insurance activities	4,296	4,332	-0.8%
Net income from other activities	2,897	2,079	+39.3%
REVENUES	**50,419**	**46,235**	**+9.0%**

OVERVIEW

The increase of +EUR 4.2 billion in the Group's revenues between 2021 and 2022 was mainly due to the increase of +EUR 2 billion in net interest income and +EUR 1.7 billion in net gain on financial instruments at fair value through profit or loss.

NET INTEREST INCOME

This line item includes net interest income and expense related to customer transactions, interbank transactions, debt instruments issued by the Group, cash flow hedge instruments, derivatives used for interest-rate portfolio hedge, debt securities at amortised cost or at fair value through equity, and non-trading instruments at fair value through profit or loss.

More specifically, the "Net interest income" line item includes:

- net interest income from loans and advances, including interest, transaction costs, fees and commissions included in the initial value of the loan. These items are calculated using the effective interest method, and recognised in the profit and loss account over the life of the loan;
- net interest income from debt securities held by the Group, which are measured at amortised cost or at fair value through equity (for the interest calculated using the effective interest method), and from non-trading debt securities at fair value through profit or loss (for the contractual accrued interest);
- net interest income from cash flow hedges, which are used in particular to hedge the interest rate risk on variable-rate assets and liabilities. Changes in the fair value of cash flow hedges are recorded in equity. The amounts recorded in equity over the life of the hedge are transferred to "Net interest income" as and when the cash flows from the hedged item are recognised as profit or loss in the income statement.

Interest income and expense on fair value hedge derivatives are included with the interest generated by the hedged item. Similarly, interest income and expense arising from derivatives used for economic hedge of transactions designated as at fair value through profit or loss are allocated to the same line items as the interest income and expense relating to the underlying transactions.

The main factors affecting the level of net interest income are the relative volumes of interest-earning assets and interest-bearing liabilities and the spread between lending and funding rates. Net interest income is also affected by the impact of hedging transactions, and, to a lesser extent, exchange rate fluctuations.

Volumes of interest-earning assets and interest-bearing liabilities can be affected by various factors, in addition to general market conditions and growth in the Group's lending activities (either organically or through acquisitions). One such factor is the

Group's business mix, such as the relative proportion of capital allocated to interest-generating as opposed to fee-generating businesses.

The other principal factor affecting net interest income is the spread between lending and funding rates, which itself is influenced by several factors. These include central bank funding rates (which affect both the yield on interest-earning assets and the rates paid on sources of funding, although not always in a linear and simultaneous manner), the proportion of funding sources represented by non-interest bearing customer deposits, government decisions to raise or lower interest rates on regulated savings accounts, the competitive environment, the relative weight of the Group's various interest-bearing products, which have different margins as a result of different competitive environments, and the Bank's hedging strategy and accounting treatment of hedging transactions.

In 2022, net interest income rose by 9.2% compared to 2021 to EUR 23,168 million. This variation is mainly attributable to the increase in net income from debt securities at amortised cost (EUR 2,321 million in 2022, compared with EUR 1,078 million in 2021), the increase in net expense on debt issued by the Group (-EUR 3,613 million for the year ended 31 December 2022, compared with -EUR 1,863 million for the year ended 31 December 2021), and the increase in income from loans, deposits and borrowings (EUR 20,982 million for the year ended 31 December 2022, compared with EUR 18,065 million for the year ended 31 December 2021).

Moreover, net income on financial instruments designated as cash flow hedge instruments increased from EUR 966 million in 2021 to EUR 1,553 million in 2022, net revenues of interest rate portfolio hedge instruments decreased by -EUR 996 million compared with the year ended 31 December 2021.

NET COMMISSION INCOME

Net commission income includes commissions on customer transactions, securities and derivatives transactions, financing and guarantee commitments, and asset management and other services. Net commission income decreased by -1.4%, from EUR 10,717 million in 2021 to EUR 10,570 million in 2022.

Insurance activity fees are included in "Net income from insurance activities".

NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR OR MODEL VALUE THROUGH PROFIT OR LOSS

This line item includes all profit and loss items relating to financial instruments managed in the trading book, to financial instruments designated as at fair value through profit or loss by the Group under the fair value option and to non-trading debt securities that do not meet the criteria required to be recognised at amortised cost or at fair value through equity (other than interest income and expense on the last two categories, which are recognised under "Net interest income" as presented above). It also includes gains and losses on non-trading equity instruments that the Group did not choose to measure at fair value through equity. This includes both capital gains and losses on the sale and the marking to fair value of these instruments, along with dividends from equity securities.

This line item also includes gains and losses due to the ineffectiveness of fair value hedges, cash flow hedges, and net foreign investment hedges.

The gains and losses resulting from cash flows and the remeasurement of financial instruments, either cash or derivatives, must be appreciated as a whole in order to give a fair representation of the profit or loss resulting from trading activities.

Net gains on financial instruments as at fair or model value through profit or loss increased by +22% from EUR 7,681 million in 2021 to EUR 9,375 million in 2022.

The income from items designated as at fair value through profit or loss are partly offset by changes in value of the derivative instruments hedging these assets.

NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY

Net gains on financial instruments at fair value through equity correspond to gains and losses realised on debt securities recognised at fair value through equity and to dividends from equity securities that the Group chose to recognise at fair value through equity.

Changes in fair value of these assets are initially recognised under "Changes in assets and liabilities recognised directly in equity". Upon sale of these assets, realised gains or losses are recognised in the profit or loss account under "Net gains on financial instruments at fair value through equity" for debt securities, or transferred to retained earnings for equity securities.

Net gains on financial instruments at fair value through equity amounted to EUR 154 million in 2022 and EUR 181 million in 2021.

NET INCOME FROM INSURANCE ACTIVITIES

Net income from insurance activities is stable compared to 2021, amounting to EUR 4,296 million. Its main components are: gross written premiums, net income from financial investments, technical charges related to contracts, policy benefit expenses and net charges from ceded reinsurance.

The change in net income from insurance activities is due to a decrease in net gains and expenses from financial investments, which correspond to a net expense of -EUR 9,280 million in 2022 and to a net gain of EUR 14,503 million in 2021, offset by a decrease in technical charges amounting to -EUR 10,008 million in 2022, compared to -EUR 35,848 million in 2021.

NET INCOME FROM OTHER ACTIVITIES

This item includes, among other things, net income from investment property, assets held under operating lease and property development activities. Net income from other activities increased by 39.3%, from EUR 2,079 million in 2021 to EUR 2,897 million in 2022. This change is mainly due to a EUR 868 million increase in Net income from assets held under operating leases.

OPERATING EXPENSES, DEPRECIATION AND AMORTISATION

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021	Change (2022/2021)
Salary and employee benefit expense	(18,783)	(17,377)	+8%
Other operating expenses	(12,347)	(11,234)	+10%
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	(2,572)	(2,500)	+3%
TOTAL OPERATING EXPENSES, DEPRECIATION, AND AMORTISATION	**(33,702)**	**(31,111)**	**+8%**

Operating expenses, depreciation and amortisation increased by 8%, from EUR 31,111 million in 2021 to EUR 33,702 million in 2022.

GROSS OPERATING INCOME

The Group’s gross operating income rose by 11% to EUR 16,717 million for the year ended 31 December 2022 (compared with EUR 15,124 million for the year ended 31 December 2021), mainly due to the increase in revenues (+9%).

COST OF RISK

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021	Change (2022/2021)
Net allowances to impairment	(2,461)	(2,620)	-6%
Recoveries on loans and receivables previously written off	422	406	+4%
Irrecoverable loans and receivables not covered by impairment provisions	(737)	(711)	+4%
Act on assistance to borrowers in Poland	(189)		n/a
TOTAL COST OF RISK FOR THE PERIOD	**(2,965)**	**(2,925)**	**+1%**

This line item represents the net amount of impairment losses recognised for credit risks inherent in the Group's intermediation activities, as well as any impairment loss relating to counterparty risks on over-the-counter derivative instruments.

The Group's cost of risk amounted to EUR 2,965 million in 2022, an increase of 1% compared to 2021.

The increase in cost of risk in 2022 is mainly due to the EUR 541 million increase in cost of risk related to assets and commitments classified in stage 1 and 2 (of which EUR 189 million in losses related to the act on assistance to borrowers in Poland and a provision reversal of -EUR 251 million related to the change in the significant increase in credit risk assessment criteria) offset by a decrease of EUR 501 million in cost of risk related to impaired assets and commitments (stage 3).

At 31 December 2022, the total amount of doubtful loans, securities and commitments, net of collateral, amounted to EUR 19.3 billion (compared with EUR 21.8 billion at 31 December 2021), and the related impairment amounted to EUR 14 billion (compared with EUR 16.1 billion at 31 December 2021). The coverage ratio was at 73% at 31 December 2022, compared to 74% at 31 December 2021.

A breakdown of the cost of risk per business line is available in chapter 4, note 3. *Segment Information,* paragraph *Income by business segment.*

OPERATING INCOME

In total, operating income increased by 13%, from EUR 12,199 million for the year ended 31 December 2021 to EUR 13,752 million for the year ended 31 December 2022. This increase mainly resulted from the increase in revenues (+9%).

NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021	Change (2022/2021)
OPERATING INCOME	**13,752**	**12,199**	**+13%**
Share of earnings of equity-method entities	699	494	+41%
Net gain on non-current assets	(250)	853	ns
Goodwill	249	91	x2.7
Corporate income tax	(3,853)	(3,757)	+3%
Net income attributable to minority interests	(401)	(392)	+2%
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS	**10,196**	**9,488**	**+7%**

SHARE OF EARNINGS OF EQUITY-METHOD ENTITIES

The share of earnings of equity method entities increased from EUR 494 million in 2021 to EUR 699 million in 2022.

NET GAIN ON NON-CURRENT ASSETS

This item includes net realised gains or losses on sales of tangible and intangible assets used in operations and on sales of investments in consolidated undertakings.

In 2022, net gains on non-current assets decreased by -EUR 1,103 million (-EUR 250 million in 2022 compared with EUR 853 million in 2021). The main capital gains and losses realised relate in 2022 to the effect of the loss of control of Ukrsibbank for -EUR 433 million and the disposal of Axepta in Italy for EUR 204 million in 2022, and gain and losses of partial disposal of Allfunds for EUR 444 million and to disposals on operating building in 2021 for EUR 486 million.

CHANGE IN VALUE OF GOODWILL

Changes in the value of goodwill amounted to EUR 249 million in 2022 (including EUR 245 million of badwill on the take of exclusive control on bpost bank), compared with EUR 91 million in 2021.

INCOME TAX EXPENSE

The Group recorded an income tax expense of EUR 3,853 million in 2022, an increase compared with the income tax expense of EUR 3,757 million recorded in 2021.

MINORITY INTERESTS

The share of earnings attributable to minority interests in consolidated companies increased by EUR 9 million (to EUR 401 million in 2022 compared with EUR 392 million in 2021).

3.5 Recent events

PRODUCTS AND SERVICES

BNP Paribas regularly introduces new products and services for its customers. More information is available on the Group's websites, including in the press releases available at https://invest.bnpparibas.com/en.

ACQUISITIONS AND PARTNERSHIPS

No significant event has occurred since the third amendment to the 2021 universal registration document issued on 2 June 2023 that should be mentioned in this section.

3.6 Outlook

2023 TREND

On 8 February 2022[1], the Group presented the main axes and priorities of its strategic plan for 2025 as well as its financial ambitions. This presentation is available on the investors website https://invest.bnpparibas.com.

On 7 February 2023, on the strength of this performance and with additional growth potential stemming from the redeployment of capital released by the sale of Bank of the West, combined with the positive impact of the rise in interest rates in 2022, the Group reaffirms the importance and relevance of the pillars of its Growth, Technology & Sustainability 2025 strategic plan and is revising upward[2] its ambitions.

The overall financial targets for 2025 are as follows:

- the Group is targeting an average growth in net income (Group share) of more than 9% per year over the whole period to step-up ROTE to around 12% while maintaining a CET1 ratio target of 12% by 2025;
- the Group's ordinary distribution rate target is 60% with a minimum cash rate of 50%[3];
- the Group expects average earnings per share growth of more than 12%, a 40% increase over the 2022-2025 period.

2022-2025 STRATEGIC PLAN

Growth, Technology & Sustainability 2025

The BNP Paribas Group has built up a model, integrated and diversified, that has proven its performance in all environments. It endows the Group with a clear competitive advantage and a unique positioning.

BNP Paribas has built up leading positions, in particular in Europe, with solid client franchises and powerful platforms, which are strategically aligned to better serve clients and partners over the long term.

[1] *As presented on 8 February 2022.*

[2] *As presented on 7 February 2023.*

[3] *Upon customary conditions precedent, including ECB authorisations.*

BNP Paribas relies on leading platforms, notably in Europe: in flow businesses (cash management, trade finance and factoring); in capital market businesses; in specialised businesses, for instance in full-service leasing with Arval, or in sustainable investment management. These fully integrated platforms provide the ability to serve clients in a comprehensive and unique way in Europe and internationally and hence to develop strong client franchises, in particular in the corporate, institutional, Private Banking and affluent segments.

This approach, global and complete, thus enables to build up strong relationships with clients, accompanying their development throughout economic cycles, creating multiple and diversified growth opportunities. It also provides stronger earnings stability in all environments, and ensures growth at marginal cost.

This distinctive model translates in an organisation based on three solid pillars, fully integrated focussing on the needs of clients and partners: Corporate & Institutional Banking (CIB); Commercial & Personal Banking and Services (CPBS), which encompasses all the Group's Commercial and Personal Banking[1] as well as Specialised Businesses[2] such as BNP Paribas Personal Finance or Arval; and Investment & Protection Services (IPS), which brings together Wealth and Asset Management businesses[3] and Insurance.

This model has proven its ability to grow as well as the strength of its integration. The balance of the Group in terms of P&L is maintained with Corporate & Institutional Banking representing 35% of operating income of the operating divisions in 2022, Commercial and Personal Banking and the specialised businesses of CPBS 50% of the operating income of the operating divisions in 2022, and IPS 15% of the operating income of the operating divisions in 2022.

Leveraging on the strengths of its platforms and favourably positioned client franchises with the full benefit of its integrated and transformed operating model, the Group is ideally placed to deliver profitable growth, while making technology and industrialisation a hallmark of its development, scaling up sustainable finance and social and environmental responsibility as well as developing its employees' potential and engagement.

Accordingly, and building on the strength of its model, the Group shall maintain a disciplined organic growth while gaining market share at marginal cost, thus generating new growth opportunities and substantial economies of scale.

The plan takes into account the achievement of the ramp-up of the Single Resolution Fund in 2023. It nonetheless includes an assumption of a stabilisation of similar contributions to local levies at EUR 200 million annually from 2024.

Following the upward revision of the strategic plan objectives, the Group is thus targeting average annual growth in net income (Group share) of more than 9% between 2022 and 2025. Complemented by the execution of share buybacks each year and particularly in 2023, the Group anticipates strong and steady average annual growth in earnings per share of more than 12%, or a 40% increase during the 2022-2025 period.

The Group reaffirms its objective of generating a positive jaws effect each year and for an average of more than 2 points[4]. It reinforces its targeted cumulative recurring cost savings and now aims for EUR 2.3 billion by 2025. The Group thus targets a stepped-up return on tangible equity (ROTE) of around 12% in 2025.

On 1 February 2023, the Group announced the closing of the sale of its Bank of the West, Inc. subsidiary to BMO Financial Group for total consideration of USD 16.3 billion. The transaction generated an exceptional (after-tax) capital gain of about EUR 2.9 billion, as well as a positive impact on the Group's Common Equity Tier 1 (CET1) ratio of about 170 basis points, or approximatively EUR 11.6 billion in Common Equity Tier 1 capital release. The Group intends to redeploy over time and in a very disciplined way the equivalent of approximately EUR 7.6 billion in Common Equity Tier 1 capital release with the aim of improving long-term value creation through acceleration of organic growth, targeted investments in technologies and innovative and sustainable business models, and bolt-on acquisitions in value-added businesses, and to launch EUR 4.04 billion in extraordinary share buybacks in 2023[(5)] related to the sale of Bank of the West.

Technology and industrialisation at the heart of our model

The Group has implemented a transformation plan in all its businesses, aiming to establish a new customer and employee experience, to accelerate digitalisation, and to improve operational efficiency. The successful 2017-2020 plan resulted in a decrease of the cost-income ratio by more than 2 points between 2017 and 2021 and recurring cost savings of almost EUR 3.1 billion (*vs.* an initial objective of EUR 2.7 billion).

Industrialisation of processes combined with strong digitalisation of customer interactions, (digital interactions tripled at Domestic Markets between 2017 and 2021), a gradual deployment of smart sourcing with now more than 18,000 employees in shared service centres, an intense use of artificial intelligence, with more than half of use cases dedicated to operating efficiency in 2021, have been key levers contributing structurally to the Group's operational efficiency and enhancing customer and employee experience.

Technology and industrialisation continue to serve as the foundation of the Group's model, increasing its operational efficiency, enhancing customer efficiency and ability to better serve clients and partners.

1 Commercial & Personal Banking in France, Commercial & Personal Banking in Belgium, BNL banca commerciale, Commercial & Personal Banking in Luxembourg, Europe-Mediterranean and BancWest.

2 Arval & Leasing Solutions, BNP Paribas Personal Finance, New Digital Businesses (including Nickel and Floa) and Personal Investors.

3 Wealth Management, Asset Management, Real Estate and Principal Investments.

4 CAGR 2022-2025 Revenues minus CAGR 2022-2025 Operating Expenses, excluding the positive impact of the change of accounting standard (application of IFRS 17 effective 01/01/2023).

Six levers will contribute to delivering positive jaws effects throughout the period of the plan. These are: intensive use of artificial intelligence, data and robotics; a strong deployment of a secured use of cloud technologies; a broad *APIsation* of the IT system; the use of smart sourcing and the roll-out of pooled service centres; an amplification of the "make/buy/share" strategy; and an accelerated convergence of European technological platforms.

These initiatives, implemented by all divisions, will sustain the ability of the Group to deliver an average positive jaws effect[1] of more than 2 points and an improvement in the cost/income ratio of all divisions. They will also sustain the creation of enough manoeuvring room to self-fund the transformation of activities and investments tied to business lines.

Scaling up sustainable finance and social and environmental responsibility

The Group is guided by three major strategic paths in accelerating its commitments to sustainable finance and social and environmental responsibility, along with the five priority areas aligned with the customer objectives and the United Nations' Sustainable Development Goals – savings, investments and sustainable financing; transition towards carbon neutrality; circular economy; natural capital & biodiversity; and combatting exclusion.

It has undertaken an alignment of portfolios to achieve carbon-neutrality objectives while laying out a CO_2 emissions reduction trajectory corresponding to financing of the sectors with the highest levels of emissions and aligning business lines with shared objectives taking into account client transitions.

The integrated model and all businesses are fully mobilised and committed to supporting clients in the transition towards a sustainable and low-carbon economy through, in particular, the Low-Carbon Transition Group, an organisation of 250 professionals dedicated to support clients in accelerating their transition.

Lastly, the Group strengthens its processes and steering tools to support evolving needs and standards, and will strengthen its governance.

Hence, the Group aims to mobilise EUR 350 billion by 2025 through loans and bond issues covering environmental and social topics[2], as well as to reach 300 billion in sustainable and responsible investments by 2025[3].

Development strategies individualised by division

On the back of performing and nimble bank and services, trusted companions, *"for & beyond Banking",* **Commercial, Personal Banking and Services (CPBS)** further improves the recommendation from customers and employees, simplifies and broadens its offering of products and services through an industrialised and resilient operating model combined with client relationships supported by a new balance between human and digital.

CPBS strengthens its leadership in Europe in corporate and Private Banking and accelerates the profitable growth of its specialised businesses at marginal cost. As Retail Banking activities are still facing headwinds, the division undertakes a strategic repositioning through more intense segmentation and changes in operating models.

CPBS has revised its objectives in targeting average annual revenue growth of around 5.5% per year by 2025[4]. This growth target will be driven by an average annual growth in Commercial & Personal Banking revenues of around 6%[(3)] and an average annual growth in Specialised Business[(3)] revenues of around 4.5%[5]; CPBS maintains an average jaws effect target of 3 points[(4)].

Investment & Protection Services (IPS) aims to become a reference European player in protection, savings and sustainable investments by strengthening its offering of products and services and its distribution network and by consolidating its leadership in social and environmental responsibility with the full backing of businesses that are digital, efficient and tech-savvy.

IPS relies on three strategic pillars to foster growth, fortifies its positions and captures new growth opportunities: the acceleration of development of financial savings, the roll-out of a transversal franchise in private assets, and the strengthening of its leadership in sustainable financing. It builds up on four key levers making the most of the integrated model, moving to the next level on digitalisation, data and artificial intelligence, deploying new ways of working while optimising the operating model.

IPS has revised its objectives in targeting average annual growth for its Gross Operating Income (GOI) of around 6% over the period 2021 to 2025[6]. This GOI target will be driven by the average annual growth rate of the Insurance's GOI by 4% over the same period and the Wealth & Asset Management's GOI by about 9% over the same period.

With the ambition of being the Europe-based partner of corporate and institutional clients on the long term, **Corporate & Institutional Banking (CIB)** pursues a strategy that is more relevant than ever, with the goal of becoming the first Europe-based CIB among global players while consolidating its Top 3 position in EMEA[7]. CIB builds on the strength of BNP Paribas' integrated model, technological platforms and sustainability leadership strengthening its capacity to connect the needs of corporate and institutional clients, while continuing to win market share in a consolidating sector.

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1 *Upon customary conditions precedent, including ECB authorisations.*

2 *Corporate, institutional and individual loans tied to environmental and social issues and annual sustainable bonds issuances.*

3 *BNP Paribas Asset Management open funds distributed in Europe classified open articles 8 and 9 as defined by SFDR.*

4 *Including 100% of Private Banking in Commercial & Personal Banking and Personal Investors in Germany, excluding Bank of the West – excluding the positive impact of the redeployment of the capital released by the sale of Bank of the West from 2023.*

5 *CAGR 21-25 Revenues minus CAGR21-25 Operating expenses.*

6 *Excluding Bank of the West and the positive impact of the redeployment of capital released by the sale of Bank of the West from 2023.*

7 *Europe, Middle-East, Africa.*

CIB continues to build on its core assets, supporting clients in their transition towards a sustainable and low-carbon economy and moving technological platforms to the next level to serve clients. It pursues and deepens on key structural levers with the full backing of the integrated model and enhances its operating model and efficiency. Lastly, CIB steps up with key transforming initiatives in particular the development of a solid equity franchise and the acceleration of interregional dynamics.

CIB unlocks the full potential of its distinctive, sustainable and integrated model, with above-market growth in its revenues.

CIB has revised its objectives in targeting average annual revenue growth of more than 5% by 2025[1]. This growth target will be driven by average annual revenue growth of around 4.5% for Global Banking, around 6.0% for Global Markets and around 5.5% for Securities Services. CIB maintains an average jaws effect target of 2 points[2].

Event subsequent to the Board of directors' meeting of 6 February 2023

The Group confirms that the Board of directors will propose to the Shareholders' Annual General Meeting on 16 May 2023 the distribution of a dividend of EUR 3.90 in cash, equivalent to a 50% pay-out ratio of 2022 distributable income, including Bank of the West's contribution in 2022. This distribution will be raised to 60% of 2022 distributable income, including Bank of the West's 2022 contribution, with the launch of a EUR 962 million buyback programme[3]. The Group announced that a request for a first, EUR 2.54 billion tranche of the total EUR 5 billion share buyback programme had been submitted to the European Central Bank (EUR 962 million related to the ordinary distribution and EUR 1.54 billion related to the extraordinary distribution in connection with the sale of Bank of the West).

INFORMATION ON TRENDS

Information on trends (Macroeconomic conditions and Legislation and regulations applicable to financial institutions) are described in the section on *Principal and Emerging Risks for the year* in the *Risks and Capital Adequacy* chapter.

3.7 Financial structure

The Group has a very solid financial structure.

The Common Equity Tier 1 ratio stood at 12.3%[4] as at 31 December 2022, up by 20 basis points compared to 30 September 2022, due mainly to the placing of the 2022 fourth quarter's results into reserves after taking a 60% pay-out ratio into account (including BancWest's contribution for 2022), net of changes in risk-weighted assets (+20 bps). The impact of other effects on the ratio were limited overall.

Since 31 December 2021, the Common Equity Tier 1 ratio has changed mainly due to:

- the placing of the 2022 results into reserves after taking a 60% pay-out ratio into account, net of organic growth in risk-weighted assets (+30 bps);
- the effect of acceleration in growth (-20 bps);
- the impact on Other Comprehensive Income (OCI) of market prices (-40 bps);
- the impacts of the updating of models and regulations[5] (-30 bps).

The leverage ratio[6] stood at 4.4% as at 31 December 2022.

The immediately available liquidity reserve amounted to EUR 461 billion as at 31 December 2022, equivalent to more than one year of room to manoeuvre compared to market resources.

1 *Excluding the positive impact of the redeployment of the capital released by the sale of Bank of the West from 2023.*

2 *CAGR 21-25 Revenues minus CAGR 21-25 Operating Expenses.*

3 *Upon customary conditions precedent, including ECB authorisations.*

4 *CRD 4, including transitional arrangements.*

5 *In particular IRB Repair and application of new regulation on currency risk in structural positions and including the effects of the hyperinflation situation in Türkiye.*

6 *Calculated in accordance with Regulation (EU) 2019/876.*

3.8 Alternative Performance Measures (APM) – Article 223-1 of the AMF's General regulation

Alternative Performance Measures	Definition	Reason for use
Operating division profit and loss account aggregates (revenues, operating expenses, gross operating income, operating income, pre-tax income)	Sum of CPBS' profit and loss account aggregates (with Commercial & Personal Banking' profit and loss account aggregates, including 2/3 of Private Banking in France, Italy, Belgium, Luxembourg, Germany, Poland, Türkiye and the United States), IPS and CIB BNP Paribas Group profit and loss account aggregates = operating division profit and loss account aggregates + Corporate Centre profit and loss account aggregates Reconciliation with Group profit and loss account aggregates is provided in the tables "Results by Core businesses"	Representative measure of the BNP Paribas Group's operating performance
Profit and loss account aggregates, excluding PEL/CEL effect (revenues, gross operating income, operating income, pre-tax income)	Profit and loss account aggregates, excluding PEL/CEL effect Reconciliation with Group profit and loss account aggregates is provided in the tables "Quarterly series"	Representative measure of the aggregates of the period excluding changes in the provision that accounts for the risk generated by PEL and CEL accounts during their lifetime
Profit and loss account aggregates of Commercial & Personal Banking activity with 100% of Private Banking	Profit and loss account aggregate of a Commercial & Personal Banking activity including the whole profit and loss account of Private Banking Reconciliation with Group profit and loss account aggregates is provided in the tables "Quarterly series"	Representative measure of the performance of Commercial & Personal Banking activity including the total performance of Private Banking (before sharing the profit & loss account with the Wealth Management business, Private Banking being under a joint responsibility of Commercial & Personal Banking (2/3) and Wealth Management business (1/3))
Evolution of operating expenses excluding IFRIC 21	Change in operating expenses excluding taxes and contributions subject to IFRIC 21.	Representative measure of the change in operating expenses' excluding the taxes and contributions subject to IFRIC 21 booked almost entirely in the first quarter for the whole year, given in order to avoid any confusion compared to other quarters
Cost/income ratio	Costs to income ratio	Measure of operational efficiency in the banking sector
Cost of risk/Customer loans at the beginning of the period (in basis points)	Cost of risk (in €m) divided by customer loans at the beginning of the period Details of the calculation are disclosed in the Appendix "Cost of risk on Outstandings" of the Results' presentation	Measure of the risk level by business in percentage of the volume of outstanding loans

Alternative Performance Measures	Definition	Reason for use
Doubtful loans' coverage ratio	Relationship between level 3 provisions and impaired outstandings (level 3), balance sheet and off-balance sheet, netted for collateral received, for customers and credit institutions, including liabilities at amortised cost and debt securities at fair value through equity (excluding insurance business)	Measure of provisioning for doubtful loans
Net income Group share excluding exceptional items	Net income attributable to equity holders excluding exceptional items Details of exceptional items are disclosed in the slide "Main Exceptional Items" of the results' presentation	Measure of BNP Paribas Group's net income excluding non-recurring items of a significant amount or items that do not reflect the underlying operating performance, notably restructuring, adaptation, IT reinforcement and transformation costs.
Return on Equity (ROE)	Details of the ROE calculation are disclosed in the Appendix "Return on Equity and Permanent Shareholders' Equity" of the results' presentation	Measure of the BNP Paribas Group's return on equity
Return on Tangible Equity (ROTE)	Details of the ROTE calculation are disclosed in the Appendix "Return on Equity and Permanent Shareholders' Equity" of the results' presentation	Measure of the BNP Paribas Group's return on tangible equity

METHODOLOGY – COMPARATIVE ANALYSIS AT CONSTANT SCOPE AND EXCHANGE RATES

The method used to determine the effect of changes in scope of consolidation depends on the type of transaction (acquisition, sale, *etc.*). The underlying purpose of the calculation is to facilitate period-on-period comparisons.

In case of acquired or created entity, the results of the new entity are eliminated from the constant scope results of current-year periods corresponding to the periods when the entity was not owned in the prior-year.

In case of divested entities, the entity's results are excluded symmetrically for the prior year for quarters when the entity was not owned.

In case of change of consolidation method, the policy is to use the lowest consolidation percentage over the two years (current and prior) for results of quarters adjusted on a like-for-like basis.

Comparative analysis at constant exchange rates are prepared by restating results for the prior-year quarter (reference quarter) at the current quarter exchange rate (analysed quarter). All of these calculations are performed by reference to the entity's reporting currency.

REMINDER

Operating expenses: sum of salary and employee benefit expenses, other operating expenses and depreciation, amortisation and impairment of property, plant and equipment. In the whole document, the terms operating expenses or costs can be used indifferently.

Operating divisions: they consist of 3 divisions:

- **Corporate and Institutional Banking (CIB)** including: Global Banking, Global Markets, and Securities Services.
- **Commercial, Personal Banking and Services (CPBS)** including:
  - Commercial & Personal Banking in France, in Belgium, in Italy, in Luxembourg, in Germany, in Europe-Mediterranean, in the United-States and in Germany,
  - Specialised businesses, with Arval & Leasing Solutions; BNP Paribas Personal Finance; New Digital Businesses (including Nickel, Lyf, Floa…) & Personal Investors;
- **Investment & Protection Services (IPS)** including: Insurance, Wealth and Asset Management, that includes Wealth Management, Asset Management, Real Estate and Principal Investments

RECONCILIATION OF PROFIT & LOSS WITH THE ALTERNATIVE PERFORMANCE MEASURES

2022 – Results by Core businesses

In millions of euros		Commercial, Personal Banking & Services (2/3 of Private Banking)	Investment & Protection Services	CIB	Operating divisions	Others activities	Group
Revenues		**27,563**	**6,670**	**16,465**	**50,698**	**(279)**	**50,419**
	% Change 2021	+9.3%	+3.0%	+15.7%	+10.4%	n.s.	+9.0%
Operating Expenses and Dep.		(17,518)	(4,363)	(10,753)	(32,635)	(1,067)	(33,702)
	% Change 2021	+6.0%	+3.5%	+13.6%	+8.0%	+18.2%	+8.3%
Gross Operating Income		**10,044**	**2,307**	**5,712**	**18,063**	**(1,346)**	**16,717**
	% Change 2021	+15.5%	+2.2%	+19.8%	+14.9%	n.s.	+10.5%
Cost of Risk		(2,458)	3	(325)	(2,780)	(185)	(2,965)
	% Change 2021	-5.0%	n.s.	+88.2%	+0.5%	+16.4%	+1.4%
Operating Income		**7,586**	**2,309**	**5,387**	**15,283**	**(1,531)**	**13,752**
	% Change 2021	+24.2%	+2.6%	+17.2%	+18.0%	n.s.	+12.7%
Share of Earnings of Equity-Method Entities		433	223	20	676	23	699
Other Non-Operating Items		(19)	88	(10)	58	(59)	(1)
Pre-Tax Income		**8,000**	**2,620**	**5,398**	**16,018**	**(1,567)**	**14,450**
	% Change 2021	+24.1%	+4.8%	+16.0%	+17.8%	n.s.	+6.0%
Corporate Income Tax							(3,853)
Net Income Attributable to Minority Interests							(401)
Net Income Attributable to Equity Holders							**10,196**

Reconciliation with profit and loss account aggregates of Commercial & Personal Banking activity, excluding PEL/CEL effect and with 100% Private Banking

In millions of euros	2022	2021
Commercial, Personal Banking & Services (including 100% of Private Banking in France, Belgium, Italy, Luxembourg, Poland, Türkiye, the United States and Germany)[1]		
Revenues	**28,301**	**25,888**
Operating Expenses and Dep.	(17,928)	(16,909)
Gross Operating Income	**10,373**	**8,979**
Cost of Risk	(2,452)	(2,598)
Operating Income	**7,920**	**6,381**
Share of Earnings of Equity-Method Entities	433	287
Other Non-Operating Items	(19)	53
Pre-Tax Income	**8,334**	**6,721**
Income Attributable to Wealth and Asset Management	(334)	(275)
Pre-Tax Income of Commercial, Personal Banking & Services	**8,000**	**6,446**
Cost/Income	63.3%	65.3%
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in France, Belgium, Italy, Luxembourg, Poland, Türkiye, the United States and Germany)	47.4	43.3

In millions of euros	2022	2021
Commercial, Personal Banking & Services (including 2/3 of Private Banking in France, Belgium, Italy, Luxembourg, Poland, Türkiye, the United States and Germany)		
Revenues	**27,563**	**25,216**
Operating Expenses and Dep.	(17,518)	(16,523)
Gross Operating Income	**10,044**	**8,693**
Cost of Risk	(2,458)	(2,586)
Operating Income	**7,586**	**6,106**
Share of Earnings of Equity-Method Entities	433	287
Other Non-Operating Items	(19)	53
Pre-Tax Income	**8,000**	**6,446**
Cost/Income	63.6%	65.5%
Allocated Equity (€bn, year to date)	47.4	43.3

[1] *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2022	2021
Commercial & Personal Banking in France (including 100% of Private Banking in France)[1]		
Revenues	**6,680**	**6,269**
incl. net interest income	*3,568*	*3,401*
incl. fees	*3,112*	*2,869*
Operating Expenses and Dep.	(4,698)	(4,557)
Gross Operating Income	**1,982**	**1,712**
Cost of Risk	(237)	(441)
Operating Income	**1,745**	**1,271**
Share of Earnings of Equity-Method Entities	1	(1)
Other Non-Operating Items	25	39
Pre-Tax Income	**1,771**	**1,309**
Income Attributable to Wealth and Asset Management	(158)	(127)
Pre-Tax Income of Commercial & Personal Banking in France	**1,613**	**1,181**
Cost/Income	70.3%	72.7%
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in France)	11.3	10.6

Reminder on PEL/CEL provision: this provision, accounted for in the revenues of CPB in France, takes into account the risk generated by *Plans Épargne Logement* (PEL) and *Comptes Épargne Logement* (CEL) during their whole lifetime.

In millions of euros	2022	2021
PEL/CEL effects 100% of Private Banking in France	**46**	**29**

[1] *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2022	2021
Commercial & Personal Banking in France (including 2/3 of Private Banking in France)		
Revenues	**6,361**	**5,966**
Operating Expenses and Dep.	(4,530)	(4,395)
Gross Operating Income	**1,831**	**1,572**
Cost of Risk	(245)	(428)
Operating Income	**1,587**	**1,144**
Non-Operating Items	26	37
Pre-Tax Income	**1,613**	**1,181**
Cost/Income	71.2%	73.7%
Allocated Equity (€bn, year to date)	11.3	10.6

In millions of euros	2022	2021
BNL bc (including 100% of Private Banking in Italy)[1]		
Revenues	**2,634**	**2,680**
incl. net interest income	*1,519*	*1,539*
incl. fees	*1,115*	*1,141*
Operating Expenses and Dep.	(1,735)	(1,780)
Gross Operating Income	**899**	**900**
Cost of Risk	(465)	(487)
Operating Income	**433**	**413**
Share of Earnings of Equity-Method Entities	0	0
Other Non-Operating Items	2	0
Pre-Tax Income	**436**	**413**
Income Attributable to Wealth and Asset Management	(26)	(35)
Pre-Tax Income of BNL bc	**410**	**377**
Cost/Income	65.9%	66.4%
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Italy)	6.0	5.3

[1] *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2022	2021
BNL bc (including 2/3 of Private Banking in Italy)		
Revenues	**2,548**	**2,591**
Operating Expenses and Dep.	(1,676)	(1,726)
Gross Operating Income	**872**	**865**
Cost of Risk	(464)	(488)
Operating Income	**408**	**377**
Share of Earnings of Equity-Method Entities	0	0
Other Non-Operating Items	2	0
Pre-Tax Income	**410**	**377**
Cost/Income	65.8%	66.6%
Allocated Equity (€bn, year to date)	6.0	5.3

In millions of euros	2022	2021
Commercial & Personal Banking in Belgium (including 100% of Private Banking in Belgium)[1]		
Revenues	**3,764**	**3,509**
incl. net interest income	*2,618*	*2,404*
incl. fees	*1,146*	*1,106*
Operating Expenses and Dep.	(2,615)	(2,384)
Gross Operating Income	**1,149**	**1,125**
Cost of Risk	(36)	(99)
Operating Income	**1,113**	**1,026**
Share of Earnings of Equity-Method Entities	0	6
Other Non-Operating Items	10	13
Pre-Tax Income	**1,123**	**1,045**
Income Attributable to Wealth and Asset Management	(74)	(71)
Pre-Tax Income of Commercial & Personal Banking in Belgium	**1,049**	**973**
Cost/Income	69.5%	67.9%
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Belgium)	6.1	5.3

[1] *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2022	2021
Commercial & Personal Banking in Belgium (including 2/3 of Private Banking in Belgium)		
Revenues	**3,577**	**3,332**
Operating Expenses and Dep.	(2,502)	(2,277)
Gross Operating Income	**1,075**	**1,055**
Cost of Risk	(36)	(100)
Operating Income	**1,039**	**954**
Share of Earnings of Equity-Method Entities	0	6
Other Non-Operating Items	10	13
Pre-Tax Income	**1,049**	**973**
Cost/Income	69.9%	68.3%
Allocated Equity (€bn, year to date)	6.1	5.3

In millions of euros	2022	2021
Commercial & Personal Banking in Luxembourg (including 100% of Private Banking in Luxembourg)[1]		
Revenues	**475**	**427**
incl. net interest income	*377*	*339*
incl. fees	*97*	*88*
Operating Expenses and Dep.	(275)	(268)
Gross Operating Income	**200**	**158**
Cost of Risk	19	(2)
Operating Income	**219**	**156**
Share of Earnings of Equity-Method Entities	0	0
Other Non-Operating Items	3	0
Pre-Tax Income	**222**	**156**
Income Attributable to Wealth and Asset Management	(6)	(6)
Pre-Tax Income of Commercial & Personal Banking in Luxembourg	**216**	**150**
Cost/Income	57.9%	62.9%
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Luxembourg)	0.8	0.7

[1] *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2022	2021
Commercial & Personal Banking in Luxembourg (including 2/3 of Private Banking in Luxembourg)		
Revenues	**461**	**414**
Operating Expenses and Dep.	(268)	(262)
Gross Operating Income	**193**	**153**
Cost of Risk	19	(2)
Operating Income	**213**	**150**
Share of Earnings of Equity-Method Entities	0	0
Other Non-Operating Items	3	0
Pre-Tax Income	**216**	**150**
Cost/Income	58.1%	63.2%
Allocated Equity (€bn, year to date)	0.8	0.7

In millions of euros	2022	2021
Europe-Mediterranean (including 100% of Private Banking in Poland and Türkiye)[1]		
Revenues	**2,346**	**1,941**
incl. net interest income	*1,895*	*1,470*
incl. fees	*451*	*471*
Operating Expenses and Dep.	(1,649)	(1,606)
Gross Operating Income	**697**	**335**
Cost of Risk	(153)	(144)
Operating Income	**544**	**190**
Share of Earnings of Equity-Method Entities	376	234
Other Non-Operating Items	(87)	(53)
Pre-Tax Income	**833**	**372**
Income Attributable to Wealth and Asset Management	(16)	(8)
Pre-Tax Income of Europe-Mediterranean	**817**	**364**
Cost/Income	70.3%	82.8%
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Poland and Türkiye)	5.5	5.0

[1] *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2022	2021
Europe-Mediterranean (including 2/3 of Private Banking in Poland and Türkiye)		
Revenues	**2,321**	**1,926**
Operating Expenses and Dep.	(1,641)	(1,598)
Gross Operating Income	**680**	**327**
Cost of Risk	(152)	(145)
Operating Income	**528**	**182**
Share of Earnings of Equity-Method Entities	376	234
Other Non-Operating Items	(87)	(53)
Pre-Tax Income	**817**	**364**
Cost/Income	70.7%	83.0%
Allocated Equity (€bn, year to date)	5.5	5.0

In millions of euros	2022	2021
BancWest (including 100% of Private Banking in the United States)[1]		
Revenues	**2,731**	**2,426**
incl. net interest income	*2,282*	*2,026*
incl. fees	*450*	*400*
Operating Expenses and Dep.	(2,061)	(1,697)
Gross Operating Income	**670**	**729**
Cost of Risk	39	45
Operating Income	**709**	**774**
Share of Earnings of Equity-Method Entities	0	0
Other Non-Operating Items	4	19
Pre-Tax Income	**713**	**794**
Income Attributable to Wealth and Asset Management	(52)	(25)
Pre-Tax Income of BancWest	**660**	**769**
Cost/Income	75.5%	70.0%
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in the United States)	5.6	5.0

[1] *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

In millions of euros	2022	2021
BancWest (including 2/3 of Private Banking in the United States)		
Revenues	**2,632**	**2,361**
Operating Expenses and Dep.	(2,014)	(1,656)
Gross Operating Income	**618**	**704**
Cost of Risk	39	45
Operating Income	**657**	**750**
Share of Earnings of Equity-Method Entities	0	0
Other Non-Operating Items	4	19
Pre-Tax Income	**660**	**769**
Cost/Income	76.5%	70.2%
Allocated Equity (€bn, year to date)	5.6	5.0

In millions of euros	2022	2021
New Digital Businesses & Personal Investors (including 100% of Private Banking in Germany)[1]		
Revenues	**846**	**744**
Operating Expenses and Dep.	(578)	(513)
Gross Operating Income	**268**	**231**
Cost of Risk	(100)	(5)
Operating Income	**168**	**226**
Share of Earnings of Equity-Method Entities	(10)	(11)
Other Non-Operating Items	1	9
Pre-Tax Income	**159**	**224**
Income Attributable to Wealth and Asset Management	(2)	(2)
Pre-Tax Income of New Digital Businesses & Personal Investors	**157**	**222**
Cost/Income	68.3%	68.9%
Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Germany)	0.5	0.4

In millions of euros	2022	2021
New Digital Businesses and Personal Investors (including 2/3 of Private Banking in Germany)		
Revenues	**837**	**735**
Operating Expenses and Dep.	(571)	(506)
Gross Operating Income	**266**	**229**
Cost of Risk	(100)	(5)
Operating Income	**166**	**224**
Share of Earnings of Equity-Method Entities	(10)	(11)
Other Non-Operating Items	1	9
Pre-Tax Income	**157**	**222**
Cost/Income	68.2%	68.9%

[1] *Including 100% of Private Banking for the Revenues to Pre-tax income items.*

Allocated Equity (€bn, year to date; including 2/3 of Private Banking in Germany)	0.5	0.4

Reconciliation with the aggregate cost of risk on outstanding (cost of risk/customer loans at the beginning of the period, in annualised bps)

	2022	**2021**
Commercial, Personal Banking & Services(1)		
Loan outstandings as of the beg. of the quarter *(€bn)*	666.1	628.2
Cost of risk *(€m)*	2,452	2,598
Cost of risk *(in annualised bp)*	37	41
Commercial & Personal Banking in the eurozone(1)		
Loan outstandings as of the beg. of the quarter *(€bn)*	452.2	424.6
Cost of risk *(€m)*	719	1,030
Cost of risk *(in annualised bp)*	16	24
CPBF(1)		
Loan outstandings as of the beg. of the quarter *(€bn)*	223.5	214.0
Cost of risk *(€m)*	237	441
Cost of risk *(in annualised bp)*	11	21
BNL bc(1)		
Loan outstandings as of the beg. of the quarter *(€bn)*	80.3	78.8
Cost of risk *(€m)*	465	487
Cost of risk *(in annualised bp)*	58	62
CPBB(1)		
Loan outstandings as of the beg. of the quarter *(€bn)*	135.4	119.8
Cost of risk *(€m)*	36	99
Cost of risk *(in annualised bp)*	3	8

(1) Including 100% of Private Banking.

	2022	2021
Commercial & Personal Banking outside the eurozone[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	92.4	86.7
Cost of risk *(€m)*	114	99
Cost of risk *(in annualised bp)*	12	11
BancWest[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	55.2	49.8
Cost of risk *(€m)*	(39)	(45)
Cost of risk *(in annualised bp)*	(7)	(9)
Europe-Mediterranean[1]		
Loan outstandings as of the beg. of the quarter *(€bn)*	37.2	36.9
Cost of risk *(€m)*	153	144
Cost of risk *(in annualised bp)*	41	39
Personal Finance		
Loan outstandings as of the beg. of the quarter *(€bn)*	96.0	93.1
Cost of risk *(€m)*	1,373	1,314
Cost of risk *(in annualised bp)*	143	141
CIB – Global Banking		
Loan outstandings as of the beg. of the quarter *(€bn)*	175.0	152.1
Cost of risk *(€m)*	336	201
Cost of risk *(in annualised bp)*	19	13
Group[2]		
Loan outstandings as of the beg. of the quarter *(€bn)*	949.6	867.7
Cost of risk *(€m)*	2,965	2,925
Cost of risk *(in annualised bp)*	31	34

(1) Including 100% of Private Banking.
(2) Including cost of risk of market activities.

NET EARNINGS PER SHARE

In millions	31 December 2022	31 December 2021	31 December 2020	31 December 2019	31 December 2018
Average number of shares outstanding excluding Treasury shares	**1,233**	**1,247**	**1,248**	**1,248**	**1,248**
Net income attributable to equity holders	10,196	9,488	7,067	8,173	7,526
Remuneration net of tax of Undated Super Subordinated Notes	(452)	(418)	(436)	(414)	(367)
Exchange rate effect on reimbursed Undated Super Subordinated Notes	(123)	(18)	(5)	(14)	0
Net income attributable to equity holders, after remuneration and exchange rate effect on Undated Super Subordinated Notes	**9,621**	**9,052**	**6,626**	**7,745**	**7,159**
NET EARNINGS PER SHARE (EPS) *(in euros)*	**7.80**	**7.26**	**5.31**	**6.21**	**5.73**

RETURN ON EQUITY

In millions of euros	31 December 2022	31 December 2021
Net income Group share	**10,196**	**9,488**
Remuneration net of tax of Undated Super Subordinated Notes and exchange effect	(575)	(436)
Net income Group share used for the calculation of ROE/ROTE	**9,621**	**9,052**
Average permanent shareholders' equity, not revaluated, used for the ROE calculation (1)	**105,707**	**101,882**
Return on Equity (ROE)	**9.1%**	**8.9%**
Average tangible permanent shareholders' equity, not revaluated, used for the ROTE calculation (2)	**93,937**	**90,412**
Return on Tangible Equity (ROTE)	**10.20%**	**10.00%**

(1) Average Permanent shareholders' equity: average of beginning of the year and end of the period (Permanent shareholders' equity = Shareholders' equity attributable to shareholders – changes in assets and liabilities recognised directly in equity – Undated Super Subordinated Notes – remuneration net of tax payable to holders of Undated Super Subordinated Notes – distribution assumption).

(2) Average Tangible permanent shareholders' equity: average of beginning of the year and end of the period (Tangible permanent shareholders' equity = permanent shareholders' equity – intangible assets – goodwill).

MAIN EXCEPTIONAL ITEMS

In millions of euros	**2022**	**2021**
Operating expenses		
Restructuring costs and adaptation costs (Corporate Centre)	(188)	(164)
IT reinforcement costs (Corporate Centre)	(314)	(128)
Total exceptional operating expenses	**(502)**	**(292)**
Cost of Risk		
Impact of the “Act on assistance to borrowers” in Poland (Corporate Centre)	(204)	
Total exceptional cost of risk	**(204)**	
Other non-operating items		
Badwill (bpost bank) (Corporate Centre)	244	
Capital gain on the sale of a stake (Corporate Centre)	204	
Impairment (Ukrsibbank) (Corporate Centre)	(159)	
Reclassification to profit-and-loss of exchange differences[1] (Ukrsibbank) (Corporate Centre)	(274)	
Capital gain on the sale of buildings (Corporate Centre)		486
Capital gain on the sale of Allfunds shares[2] (Corporate Centre)		444
Goodwill Impairments (Corporate Centre)		(74)
Capital gain on the sale of a BNP Paribas Asset Management stake in a JV (Wealth and Asset Management)		96
Total exceptional other non-operating items	**15**	**952**
TOTAL EXCEPTIONAL ITEMS (PRE-TAX)	**(691)**	**+660**
TOTAL EXCEPTIONAL ITEMS (AFTER TAX)[3]	**(521)**	**+479**

(1) Previously recorded in Consolidated Equity.
(2) Disposal of 8.69% stake in Allfunds.
(3) Group share.

APPLICATION OF IFRS 5 – RECONCILIATION TABLES

On 20 December 2021, the Group announced the conclusion of an agreement with BMO Financial Group for the sale of 100% of its commercial banking activities in the United States operated by BancWest. The terms of this transaction fall within the scope of application of IFRS 5 relating to groups of assets and liabilities held for sale (see note 7.d *Discontinued activities* of the consolidated financial statements as at 31/12/2022).

The closing of the sale of Bank of the West to BMO Financial Group was made on 1 February 2023.

Unless otherwise mentioned, the financial information and items include the activity related to BancWest reflecting an operational view. Such financial information and items therefore do not reflect the effects produced by applying IFRS 5, which pertains to non-current assets and liabilities held for sale. The press release includes hereafter a reconciliation between the operational view presented without applying IFRS 5 and the consolidated financial statements based on an application of IFRS 5.

CONSOLIDATED PROFIT AND LOSS ACCOUNT AS AT 31 DECEMBER 2022 – RECONCILIATION TABLE IFRS 5

In millions of euros	**Year to 31 Dec. 2022** *before IFRS 5*	**Year to 31 Dec. 2022** *IFRS 5 impact*	**Year to 31 Dec. 2022** *according to IFRS 5*	**Year to 31 Dec. 2021** *before IFRS 5*	**Year to 31 Dec. 2021** *IFRS 5 impact*	**Year to 31 Dec. 2021** *according to IFRS 5*
Net interest income	23,168	(2,337)	20,831	21,209	(1,971)	19,238
Net commission income	10,570	(392)	10,178	10,717	(355)	10,362
Net gain on financial instruments at fair value through profit or loss	9,375	(17)	9,358	7,681	(66)	7,615
Net gain on financial instruments at fair value through equity	154	(16)	138	181	(17)	164
Net gain on derecognised financial assets at amortised cost	(41)	-	(41)	36	(38)	(2)
Net income from insurance activities	4,296	-	4,296	4,332	-	4,332
Net income from other activities	2,897	(26)	2,871	2,079	(26)	2,053
Revenues	**50,419**	**(2,788)**	**47,631**	**46,235**	**(2,473)**	**43,762**
Salary and employee benefit expense	(18,783)	1,178	(17,605)	(17,377)	960	(16,417)
Other operating expenses	(12,347)	651	(11,696)	(11,234)	529	(10,705)
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	(2,572)	178	(2,394)	(2,500)	156	(2,344)
Gross operating income	**16,717**	**(781)**	**15,936**	**15,124**	**(828)**	**14,296**
Cost of risk	(2,965)	(39)	(3,004)	(2,925)	(46)	(2,971)
Operating income	**13,752**	**(820)**	**12,932**	**12,199**	**(874)**	**11,325**
Share of earnings of equity-method entities	699	-	699	494	-	494
Net gain on non-current assets	(250)	(3)	(253)	853	(19)	834
Goodwill	249	-	249	91	-	91
Pre-tax income	**14,450**	**(823)**	**13,627**	**13,637**	**(893)**	**12,744**
Corporate income tax	(3,853)	137	(3,716)	(3,757)	173	(3,584)
Net income from discontinued activities		**686**	**686**		**720**	**720**
Net income attributable to minority interests	(401)	-	(401)	(392)	-	(392)

NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS	**10,196**	**-**	**10,196**	**9,488**	**-**	**9,488**

BALANCE SHEET AS AT 31 DECEMBER 2022 – RECONCILIATION TABLE IFRS 5

In millions of euros	**31/12/2022** *before IFRS 5*	**IFRS 5 Impact**	**31/12/2022** *according to IFRS 5*	**31/12/2021** *according to IFRS 5*
ASSETS				
Cash and balances at central banks	321,310	(2,750)	318,560	347,883
Financial instruments at fair value through profit or loss				
Securities	166,918	(841)	166,077	191,507
Loans and repurchase agreements	191,132	(7)	191,125	249,808
Derivative financial Instruments	328,281	(349)	327,932	240,423
Derivatives used for hedging purposes	25,406	(5)	25,401	8,680
Financial assets at fair value through equity				
Debt securities	40,381	(4,503)	35,878	38,906
Equity securities	2,188	-	2,188	2,558
Financial assets at amortised cost				
Loans and advances	945,864	(56,228)	889,636	835,751
Loans and advances to credit institutions	32,760	(144)	32,616	21,751
Loans and advances to customers	913,104	(56,084)	857,020	814,000
Debt securities	130,793	(16,779)	114,014	108,510
Remeasurement adjustment on interest-rate risk hedged portfolios	(7,477)	-	(7,477)	3,005
Financial investments of insurance activities	247,403	-	247,403	280,766
Current and deferred tax assets	6,301	(408)	5,893	5,866
Accrued income and other assets	210,698	(1,606)	209,092	179,123
Policyholders’ surplus reserve	-	-	-	0
Equity-method investments	6,263	-	6,263	6,528
Property, plant and equipment and investment property	38,921	(453)	38,468	35,083
Intangible assets	4,005	(215)	3,790	3,659
Goodwill	7,989	(2,695)	5,294	5,121
Assets held for sale	-	86,839	86,839	91,267
TOTAL ASSETS	**2,666,376**	**-**	**2,666,376**	**2,634,444**

In millions of euros	**31/12/2022** *before IFRS 5*	**IFRS 5 Impact**	**31/12/2022** *according to IFRS 5*	**31/12/2021** *according to IFRS 5*
LIABILITIES				
Deposits from central banks	3,054	-	3,054	1,244
Financial instruments at fair value through profit or loss				
Securities	99,155	-	99,155	112,338
Deposits and repurchase agreements	234,076	-	234,076	293,456
Issued debt securities	70,460	-	70,460	70,383
Derivative financial instruments	300,582	(461)	300,121	237,397
Derivatives used for hedging purposes	40,308	(307)	40,001	10,076
Financial liabilities at amortised cost				
Deposits	1,207,234	(74,462)	1,132,772	1,123,383
Deposits from credit institutions	124,978	(260)	124,718	165,699
Deposits from customers	1,082,256	(74,202)	1,008,054	957,684
Debt securities	154,244	(101)	154,143	149,723
Subordinated debt	24,156	-	24,156	24,720
Remeasurement adjustment on interest-rate risk hedged portfolios	(20,201)	-	(20,201)	1,367
Current and deferred tax liabilities	3,138	(84)	3,054	3,103
Accrued expenses and other liabilities	186,842	(1,386)	185,456	145,399
Technical reserves and other insurance liabilities	226,532	-	226,532	254,795
Provisions for contingencies and charges	10,241	(201)	10,040	10,187
Liabilities associated with assets held for sale	-	77,002	77,002	74,366
TOTAL LIABILITIES	**2,539,821**	**-**	**2,539,821**	**2,511,937**
EQUITY				
Share capital, additional paid-in capital and retained earnings	*115,149*	-	*115,149*	*108,176*
Net income for the period attributable to shareholders	*10,196*	-	*10,196*	*9,488*
Total capital, retained earnings and net income for the period attributable to shareholders	**125,345**	**-**	**125,345**	**117,664**
Changes in assets and liabilities recognised directly in equity	(3,553)	-	(3,553)	222
Shareholders' equity	**121,792**	**-**	**121,792**	**117,886**
Minority interests	**4,763**	**-**	**4,763**	**4,621**
TOTAL EQUITY	**126,555**	**-**	**126,555**	**122,507**
TOTAL LIABILITIES AND EQUITY	**2,666,376**	**-**	**2,666,376**	**2,634,444**

4 CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEAR ENDED 31 DECEMBER 2022

The Board of directors of BNP Paribas approved the Group consolidated financial statements on 6 February 2023.
The consolidated financial statements of the BNP Paribas Group are presented for the years ended 31 December 2022 and 31 December 2021. In accordance with Annex I of European Delegated Regulation (EU) 2019/980, the consolidated financial statements for the year ended 31 December 2020 are provided in the universal registration document filed with the Autorité des Marchés Financiers on 15 March 2022 under number D.22-0098.

On 18 December 2021, the Group concluded an agreement with BMO Financial Group for the sale of 100% of its retail and commercial banking activities in the United States operated by the BancWest cash-generating unit. The terms of this transaction fall within the scope of application of IFRS 5 relating to groups of assets and liabilities held for sale (see note 7.d *Discontinued activities*) leading to isolate the "Net income from discontinued activities" on a separate line. A similar reclassification is made in the statement of net income and changes in assets and liabilities recognised directly in equity and in the cash flow statement. The effect of this reclassification on the aggregates of the profit and loss statement is presented in note 3 *Segment Information*.
Following the receipt of regulatory approvals, the transaction was finalised on 1 February 2023.

4.1 Profit and loss account for the year ended 31 December 2022

In millions of euros	**Notes**	**Year to 31 Dec. 2022**	**Year to 31 Dec. 2021**
Interest income	2.a	41,082	29,518
Interest expense	2.a	(20,251)	(10,280)
Commission income	2.b	14,622	15,037
Commission expense	2.b	(4,444)	(4,675)
Net gain on financial instruments at fair value through profit or loss	2.c	9,358	7,615
Net gain on financial instruments at fair value through equity	2.d	138	164
Net gain on derecognised financial assets at amortised cost		(41)	(2)
Net income from insurance activities	2.e	4,296	4,332
Income from other activities	2.f	15,701	15,482
Expense on other activities	2.f	(12,830)	(13,429)
REVENUES FROM CONTINUING ACTIVITIES		**47,631**	**43,762**
Salary and employee benefit expense	6.a	(17,605)	(16,417)
Other operating expenses	2.g	(11,696)	(10,705)
Depreciation, amortisation and impairment of property, plant and equipment and intangible assets	4.n	(2,394)	(2,344)

In millions of euros	Notes	Year to 31 Dec. 2022	Year to 31 Dec. 2021
GROSS OPERATING INCOME FROM CONTINUING ACTIVITIES		**15,936**	**14,296**
Cost of risk	2.h	(3,004)	(2,971)
OPERATING INCOME FROM CONTINUING ACTIVITIES		**12,932**	**11,325**
Share of earnings of equity-method entities	4.m	699	494
Net gain on non-current assets	2.i	(253)	834
Goodwill	4.o	249	91
PRE-TAX INCOME FROM CONTINUING ACTIVITIES		**13,627**	**12,744**
Corporate income tax from continuing activities	2.j	(3,716)	(3,584)
NET INCOME FROM CONTINUING ACTIVITIES		**9,911**	**9,160**
Net income from discontinued activities	7.d	686	720
NET INCOME		**10,597**	**9,880**
Net income attributable to minority interests		401	392
NET INCOME ATTRIBUTABLE TO EQUITY HOLDERS		**10,196**	**9,488**
Basic earnings per share	7.a	7.80	7.26
Diluted earnings per share	7.a	7.80	7.26

4.2 Statement of net income and changes in assets and liabilities recognised directly in equity

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Net income for the period	**10,597**	**9,880**
Changes in assets and liabilities recognised directly in equity	**(3,593)**	**712**
Items that are or may be reclassified to profit or loss	**(3,953)**	**26**
Changes in exchange differences	1,041	481
Changes in fair value of financial assets at fair value through equity		
Changes in fair value recognised in equity	*(754)*	*(379)*
Changes in fair value reported in net income	*(120)*	*(115)*
Changes in fair value of investments of insurance activities		
Changes in fair value recognised in equity	*(2,513)*	*(387)*
Changes in fair value reported in net income	*(45)*	*(191)*
Changes in fair value of hedging instruments		
Changes in fair value recognised in equity	*(1,468)*	*(620)*
Changes in fair value reported in net income	*14*	*(31)*

Income tax	1,249	402
Changes in equity-method investments, after tax	(917)	295
Changes in discontinued activities, after tax	(440)	571
Items that will not be reclassified to profit or loss	**360**	**686**
Changes in fair value of equity instruments designated as at fair value through equity	(20)	413
Debt remeasurement effect arising from BNP Paribas Group issuer risk	515	25
Remeasurement gains (losses) related to post-employment benefit plans	(102)	347
Income tax	(96)	(125)
Changes in equity-method investments, after tax	57	17
Changes in discontinued activities, after tax	6	9
TOTAL	**7,004**	**10,592**
Attributable to equity shareholders	6,519	10,200
Attributable to minority interests	485	392

4.3 Balance sheet at 31 December 2022

In millions of euros	**Notes**	**31 December 2022**	**31 December 2021**
ASSETS			
Cash and balances at central banks		318,560	347,883
Financial instruments at fair value through profit or loss			
Securities	4.a	166,077	191,507
Loans and repurchase agreements	4.a	191,125	249,808
Derivative financial instruments	4.a	327,932	240,423
Derivatives used for hedging purposes	4.b	25,401	8,680
Financial assets at fair value through equity			
Debt securities	4.c	35,878	38,906
Equity securities	4.c	2,188	2,558
Financial assets at amortised cost			
Loans and advances to credit institutions	4.e	32,616	21,751
Loans and advances to customers	4.e	857,020	814,000
Debt securities	4.e	114,014	108,510
Remeasurement adjustment on interest-rate risk hedged portfolios		(7,477)	3,005
Financial investments and other assets related to insurance activities	4.i	247,403	280,766
Current and deferred tax assets	4.k	5,893	5,866
Accrued income and other assets	4.l	209,092	179,123
Equity-method investments	4.m	6,263	6,528
Property, plant and equipment and investment property	4.n	38,468	35,083
Intangible assets	4.n	3,790	3,659

In millions of euros	Notes	31 December 2022	31 December 2021
Goodwill	4.o	5,294	5,121
Assets held for sale	7.d	86,839	91,267
TOTAL ASSETS		**2,666,376**	**2,634,444**
LIABILITIES			
Deposits from central banks		3,054	1,244
Financial instruments at fair value through profit or loss			
Securities	4.a	99,155	112,338
Deposits and repurchase agreements	4.a	234,076	293,456
Issued debt securities	4.a	70,460	70,383
Derivative financial instruments	4.a	300,121	237,397
Derivatives used for hedging purposes	4.b	40,001	10,076
Financial liabilities at amortised cost			
Deposits from credit institutions	4.g	124,718	165,699
Deposits from customers	4.g	1,008,054	957,684
Debt securities	4.h	154,143	149,723
Subordinated debt	4.h	24,156	24,720
Remeasurement adjustment on interest-rate risk hedged portfolios		(20,201)	1,367
Current and deferred tax liabilities	4.k	3,054	3,103
Accrued expenses and other liabilities	4.l	185,456	145,399
Technical reserves and other insurance liabilities	4.j	226,532	254,795
Provisions for contingencies and charges	4.p	10,040	10,187
Liabilities associated with assets held for sale	7.d	77,002	74,366
TOTAL LIABILITIES		**2,539,821**	**2,511,937**
EQUITY			
Share capital, additional paid-in capital and retained earnings		*115,149*	*108,176*
Net income for the period attributable to shareholders		*10,196*	*9,488*
Total capital, retained earnings and net income for the period attributable to shareholders		**125,345**	**117,664**
Changes in assets and liabilities recognised directly in equity		(3,553)	222
Shareholders' equity		**121,792**	**117,886**
Minority interests	7.f	**4,763**	**4,621**
TOTAL EQUITY		**126,555**	**122,507**
TOTAL LIABILITIES AND EQUITY		**2,666,376**	**2,634,444**

4.4 Cash flow statement for the year ended 31 December 2022

In millions of euros	Notes	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Pre-tax income from continuing activities		**13,627**	**12,744**
Pre-tax income from discontinued activities		**823**	**893**
Non-monetary items included in pre-tax net income and other adjustments		**21,425**	**26,336**
Net depreciation/amortisation expense on property, plant and equipment and intangible assets		6,516	6,781
Impairment of goodwill and other non-current assets		91	22
Net addition to provisions		2,743	13,150
Share of earnings of equity-method entities		(699)	(494)
Net expense (income) from investing activities		265	(923)
Net (income) from financing activities		(1,192)	(1,105)
Other movements		13,701	8,905
Net decrease (increase) related to assets and liabilities generated by operating activities		**(88,712)**	**2,403**
Net decrease (increase) related to transactions with customers and credit institutions		(46,852)	39,029
Net decrease related to transactions involving other financial assets and liabilities		(29,798)	(24,497)
Net decrease related to transactions involving non-financial assets and liabilities		(10,063)	(9,773)
Taxes paid		(1,999)	(2,356)
NET DECREASE (INCREASE) IN CASH AND CASH EQUIVALENTS GENERATED BY OPERATING ACTIVITIES		**(52,837)**	**42,376**
Net increase related to acquisitions and disposals of consolidated entities		366	482
Net decrease related to property, plant and equipment and intangible assets		(2,529)	(1,664)
NET DECREASE IN CASH AND CASH EQUIVALENTS RELATED TO INVESTING ACTIVITIES		**(2,163)**	**(1,182)**
Decrease in cash and cash equivalents related to transactions with shareholders		(2,578)	(5,699)
Increase in cash and cash equivalents generated by other financing activities		11,828	20,215
NET INCREASE IN CASH AND CASH EQUIVALENTS RELATED TO FINANCING ACTIVITIES		**9,250**	**14,516**
EFFECT OF MOVEMENT IN EXCHANGE RATES ON CASH AND CASH EQUIVALENTS		**1,030**	**107**
NET DECREASE (INCREASE) IN CASH AND CASH EQUIVALENTS		**(44,720)**	**55,817**
of which net decrease (increase) in cash and cash equivalents from discontinued activities	7.d	(11,935)	10,739
Balance of cash and cash equivalent accounts at the start of the period		**362,418**	**306,601**
Cash and amounts due from central banks		347,901	308,721
Due to central banks		(1,244)	(1,594)
On demand deposits with credit institutions		10,156	8,380
On demand loans from credit institutions	4.g	(9,105)	(8,995)
Deduction of receivables and accrued interest on cash and cash equivalents		156	89
Cash and cash equivalent accounts classified as “Assets held for sale”		14,554	

In millions of euros	Notes	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Balance of cash and cash equivalent accounts at the end of the period		**317,698**	**362,418**
Cash and amounts due from central banks		318,581	347,901
Due to central banks		(3,054)	(1,244)
On demand deposits with credit institutions		11,927	10,156
On demand loans from credit institutions	4.g	(12,538)	(9,105)
Deduction of receivables and accrued interest on cash and cash equivalents		163	156
Cash and cash equivalent accounts classified as “Assets held for sale”		2,619	14,554
NET DECREASE (INCREASE) IN CASH AND CASH EQUIVALENTS		**(44,720)**	**55,817**

4.5 Statement of changes in shareholders' equity between 1 January 2021 and 31 December 2022

In millions of euros	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss			Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss								
	Share capital and addition al paid-in capital	Undated Super Subor dinated Notes	Non-distrib uted rese rves	Total	Financial assets designat ed as at fair value through equity	Own-credit valuation adjust tment of debt secu rities designat ed as at fair value through profit or loss	Remeasu rement gains (losses) related to post-employment benefit plans	Discon tinued activities	Total	Exc hange diffe rences	Finan cial assets at fair value through equity	Finan cial inves tments of insu rance activities	Derivativ es used for hedging pur poses	Discon tinued activities	Total	Total share holders' equity	Minority inte rests (note 7.f)	Total equity
Balance at 1 January 2021	**27,053**	**9,948**	**76,294**	**113,295**	**461**	**(303)**	**154**		**312**	**(5,033)**	**557**	**2,234**	**1,434**		**(808)**	**112,799**	**4,550**	**117,349**
Retrospective application of the change in method related to social commitments (note 6.b)			**74**	**74**					**-**						**-**	**74**		**74**
Appropriation of net income for 2020			**(3,323)**	**(3,323)**					**-**						**-**	**(3,323)**	**(221)**	**(3,544)**
Increases in capital and issues		1,026	(1)	1,025					-						-	1,025	10	1,035

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss			Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss								
In millions of euros	**Share capital and additional paid-in capital**	**Undated Super Subordinated Notes**	**Non-distributed reserves**	**Total**	**Financial assets designated as at fair value through equity**	**Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss**	**Remeasurement gains (losses) related to post-employment benefit plans**	**Discontinued activities**	**Total**	**Exchange differences**	**Financial assets at fair value through equity**	**Financial investments of insurance activities**	**Derivatives used for hedging purposes**	**Discontinued activities**	**Total**	**Total shareholders' equity**	**Minority interests (note 7.f)**	**Total equity**
Reduction or redemption of capital	(897)	(1,768)	(26)	(2,691)					-						-	(2,691)	(73)	(2,764)

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss			Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss								
In millions of euros	**Share capital and additional paid-in-capital**	**Undated Super Subordinated Notes**	**Non-distributed reserves**	**Total**	**Financial assets designated as at fair value through equity**	**Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss**	**Remeasurement gains (losses) related to post-employment benefit plans**	**Discontinued activities**	**Total**	**Exchange differences**	**Financial assets at fair value through equity**	**Financial investments of insurance activities**	**Derivatives used for hedging purposes**	**Discontinued activities**	**Total**	**Total shareholders' equity**	**Minority interests (note 7.f)**	**Total equity**
Movements in own equity instruments	191	1	18	210					-						-	210		210
Remuneration on preferred shares and undated super subordinated notes			(412)	(412)					-						-	(412)		(412)
Movements in consolidation scope impacting minority shareholders (note 7.f)				-					-						-		(139)	(139)
Acquisitions of additional interests or partial sales of interests (note 7.f)			8	8					-						-	8	55	63

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss			Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss								
In millions of euros	Share capital and additional paid-in-capital	Undated Super Subordinated Notes	Non-distributed reserves	Total	Financial assets designated as at fair value through equity	Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss	Remeasurement gains (losses) related to post-employment benefit plans	Discontinued activities	Total	Exchange differences	Financial assets at fair value through equity	Financial investments of insurance activities	Derivatives used for hedging purposes	Discontinued activities	Total	Total shareholders' equity	Minority interests (note 7.f)	Total equity
Change in commitments to repurchase minority shareholders' interests			5	5					-						-	5	38	43
Other movements			(9)	(9)					-						-	(9)	9	-
Realised gains or losses reclassified to retained earnings			(6)	(6)	(11)	17			6									
Changes in assets and liabilities recognised directly in equity				-	390	19	270		679	1,385	(476)	(423)	(453)		33	712		712
Net income for 2021			**9,488**	**9,488**					**-**						**-**	**9,488**	**392**	**9,880**

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss								
In millions of euros	**Share capital and additional paid-in-capital**	**Undated Super Subordinated Notes**	**Non-distributed reserves**	**Total**	**Financial assets designated as at fair value through equity**	**Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss**	**Remeasurement gains (losses) related to post-employment benefit plans**	**Discontinued activities**	**Total**	**Exchange differences**	**Financial assets at fair value through equity**	**Financial investments of insurance activities**	**Derivatives used for hedging purposes**	**Discontinued activities**	**Total**	**Total shareholders' equity**	**Minority interests (note 7.f)**	**Total equity**
Reclassification of discontinued activities				-			125	(125)	-	(687)	41		38	608	-	-		-
Balance at 31 December 2021	**26,347**	**9,207**	**82,110**	**117,664**	**840**	**(267)**	**549**	**(125)**	**997**	**(4,335)**	**122**	**1,811**	**1,019**	**608**	**(775)**	**117,886**	**4,621**	**122,507**
Impact of IAS 29 first time application in Türkiye			**(39)**	**(39)**					**-**	**165**					**165**	**126**	**48**	**174**
Balance at 1 January 2022	**26,347**	**9,207**	**82,071**	**117,625**	**840**	**(267)**	**549**	**(125)**	**997**	**(4,170)**	**122**	**1,811**	**1,019**	**608**	**(610)**	**118,012**	**4,669**	**122,681**
Appropriation of net income for 2021			**(4,527)**	**(4,527)**					**-**						-	(4,527)	(133)	(4,660)
Increases in capital and issues		5,024	(4)	5,020					-						-	5,020	34	5,054
Reduction or redemption of		(2,430)	(123)	(2,553)					-						-	(2,553)		(2,553)

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss			Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss								
In millions of euros	**Share capital and additional paid-in-capital**	**Undated Super Subordinated Notes**	**Non-distributed reserves**	**Total**	**Financial assets designated as at fair value through equity**	**Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss**	**Remeasurement gains (losses) related to post-employment benefit plans**	**Discontinued activities**	**Total**	**Exchange differences**	**Financial assets at fair value through equity**	**Financial investments of insurance activities**	**Derivatives used for hedging purposes**	**Discontinued activities**	**Total**	**Total shareholders' equity**	**Minority interests (note 7.f)**	**Total equity**
capital																		
Movements in own equity instruments	(157)	(1)	(151)	(309)					-						-	(309)		(309)
Remuneration on preferred shares and undated super subordinated notes			(374)	(374)					-						-	(374)		(374)
Movements in consolidation scope impacting minority shareholders (note 7.f)				-					-						-	-	(136)	(136)

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss			Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss								
In millions of euros	**Share capital and additional paid-in-capital**	**Undated Super Subordinated Notes**	**Non-distributed reserves**	**Total**	**Financial assets designated as at fair value through equity**	**Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss**	**Remeasurement gains (losses) related to post-employment benefit plans**	**Discontinued activities**	**Total**	**Exchange differences**	**Financial assets at fair value through equity**	**Financial investments of insurance activities**	**Derivatives used for hedging purposes**	**Discontinued activities**	**Total**	**Total shareholders' equity**	**Minority interests (note 7.f)**	**Total equity**
Change in commitments to repurchase minority shareholders' interests			1	1					-						-	1	(157)	(156)
Other movements			2	2					-						-	2	(1)	1
Realised gains or losses reclassified to retained earnings			263	263	(267)	3	1		(263)						-	-		-
Changes in assets and liabilities recognised directly in equity				-	(25)	383	(10)	6	354	976	(633)	(3,165)	(769)	(440)	(4,031)	(3,677)	84	(3,593)
Net income for 2022			**10,196**	**10,196**					**-**						**-**	**10,196**	**401**	**10,597**

	Capital and retained earnings				Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss			Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss		Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss								
In millions of euros	**Share capital and additional paid-in-capital**	**Undated Super Subordinated Notes**	**Non-distributed reserves**	**Total**	**Financial assets designated as at fair value through equity**	**Own-credit valuation adjustment of debt securities designated as at fair value through profit or loss**	**Remeasurement gains (losses) related to post-employment benefit plans**	**Discontinued activities**	**Total**	**Exchange differences**	**Financial assets at fair value through equity**	**Financial investments of insurance activities**	**Derivatives used for hedging purposes**	**Discontinued activities**	**Total**	**Total shareholders' equity**	**Minority interests (note 7.f)**	**Total equity**
Balance at 31 December 2022	**26,190**	**11,800**	**87,355**	**125,345**	**548**	**119**	**540**	**(119)**	**1,088**	**(3,194)**	**(511)**	**(1,354)**	**250**	**168**	**(4,641)**	**121,792**	**4,763**	**126,555**

4.6 Notes to the financial statements prepared in accordance with IFRS as adopted by the European Union

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES APPLIED BY THE GROUP

1.a ACCOUNTING STANDARDS

1.a.1 Applicable accounting standards

The consolidated financial statements of the BNP Paribas Group have been prepared in accordance with international accounting standards (International Financial Reporting Standards – IFRS), as adopted for use in the European Union[1]. Accordingly, certain provisions of IAS 39 on hedge accounting have been excluded.

Information on the nature and extent of risks relating to financial instruments as required by IFRS 7 "Financial Instruments: Disclosures" and to insurance contracts as required by IFRS 4 "Insurance Contracts", along with information on regulatory capital required by IAS 1 "Presentation of Financial Statements" are presented in chapter 5 of the Universal Registration Document. This information, which is an integral part of the notes to the consolidated financial statements of the BNP Paribas Group at 31 December 2022, is covered by the opinion of the Statutory Auditors on the financial statements and is identified in the management report by the word "Audited". Section 4 of chapter 5, paragraph *Exposures, provisions and cost of risk* provides, in particular, IFRS 7 information on credit risk exposures and related impairment broken down according to whether the underlying loans are performing or non-performing, by geographic area and by industry, as well as details of loans and advances subject to moratoria or to public guarantee schemes in response to the health crisis.

- In relation to the IBOR and Eonia rates reform, at the end of 2018 the Group launched a global programme, involving all business lines and functions. The aim of the programme is to manage and implement the transition from the old benchmark interest rates to the new ones in major jurisdictions and currencies (euro, pound sterling, US dollar, Swiss franc and Japanese yen), while reducing the risks associated with this transition and meeting the deadlines set by the competent authorities. The Group contributed to market-wide workshops with central banks and financial regulators.

  The announcements by public authorities in the United Kingdom and the United States and by the Libor rates administrator (ICE BA) at the end of November 2020 changed the transition phase, which was initially scheduled to be completed by the end of 2021. For the GBP and JPY Libor, synthetic Libor have been published beyond the end of 2021 for use in certain contracts known as "tough legacy" contracts, *i.e.* contracts that have not switched from Libor to a replacement index. Publication of GBP and JPY synthetic Libor was discontinued at the end of 2022. In the United States, the decision was taken to continue publishing the USD Libor until mid-2023, and a legislative solution was passed at the Federal level in the first quarter of 2022 to address legacy contracts. In addition, the United Kingdom's Financial Conduct Authority (FCA) launched a consultation during summer 2022 regarding a potential publication of synthetic USD Libor, which would be applicable for contracts governed by UK law.

  For contracts referencing the CHF Libor which could not be renegotiated before it was phased out at the end of 2021, the European Commission has provided a legislative solution replacing this rate with a daily capitalised Swiss Average Rate Overnight (SARON), plus a spread aimed at ensuring the economic neutrality of this change.

  In Europe, the Eonia-€STR transition, which is purely technical given the fixed link between these two indices, was finalised at the end of December 2021 while the maintenance of Euribor on a *sine die* basis was confirmed.

  Based on the progress made to date, notably with the definition of a detailed plan and its execution, the Bank is confident in its operational capacity to manage the transition process of large volumes of transactions to the new benchmark rates.

  The reform of IBOR rates exposes the Bank to various risks that the programme aims to manage closely, including in particular:

  - change management risks, but also litigation and conduct risks linked to negotiations with customers and market counterparties to amend existing contracts;
  - operational risks related to changes in the Bank's IT systems and processes;

[1] *The full set of standards adopted for use in the European Union can be found on the website of the European Commission at: https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting_en*

- economic risks in the event of financial market disturbances linked to the various transitions brought about by the IBOR reform;
- valuation risks in a scenario of reduced liquidity during the transition in certain derivative market segments.

In September 2019, the IASB published “Phase 1” amendments to IAS 39 and IFRS 7, amending the hedge accounting requirements so that hedges affected by the benchmark interest rate reform could continue despite the uncertainty during the transition of the hedged items or hedging instruments to the reformed benchmark rates. These amendments, endorsed by the European Commission on 15 January 2020, have been applied by the Group since 31 December 2019.

In August 2020, the IASB published “Phase 2” amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 introducing several changes applicable during the effective transition to the new benchmark interest rates. These amendments allow for changes in the contractual cash flows of financial instruments resulting from the IBOR rates reform to be treated as a simple reset of their variable interest rate, provided, however, that such changes are made on an economically equivalent basis. They also allow the continuation of hedging relationships, subject to amendments to their documentation to reflect changes in hedged instruments, hedging instruments, hedged risk, and/or the method for measuring effectiveness during the transition to the new benchmark rates. The measures introduced in this framework also include:

- the possibility of documenting an interest rate as a hedged risk component even if this rate is not immediately separately identifiable, provided that it can reasonably be expected to become so within 24 months;
- the possibility of resetting cumulative fair value changes to zero in the hedge ineffectiveness test; and
- the obligation, in the framework of portfolio hedges, to isolate in subgroups instruments referring to the new risk-free rates (RFR).

These amendments, adopted by the European Commission in December 2020, have been applied by the Group since 31 December 2020 to maintain its existing hedging relationships which have been modified as a result of the transition to the new RFRs.

The Group has documented hedging relationships in respect of the benchmark interest rates in the scope of the reform, mainly Eonia and Libor. For these hedging relationships, the hedged items and hedging instruments are progressively amended, where necessary, to incorporate the new rates. The “Phase 1” amendments to IAS 39 and IFRS 7 are applicable when the contractual terms of the hedged instruments or of the hedging instruments have not yet been amended (*i.e.* with the inclusion of a “fallback” clause), or, if they have been amended, when the terms and the date of the transition to the new benchmark interest rates have not been clearly stipulated. Conversely, the “Phase 2” amendments are applicable when the contractual terms of the hedged instruments or of the hedging instruments have been amended, and the terms and date of transition to the new benchmark interest rates have been clearly stipulated.

The notional amounts of hedging instruments documented in the hedging relationships impacted by the benchmark interest rate reform are presented in note 4.b *Derivative instruments used for hedging purposes*.

At 31 December 2022, 56,808 contracts remain backed by USD Libor, including 50,478 derivative contracts.

At 31 December 2021, 112,405 contracts remain backed by USD Libor, including 72,867 contracts with a maturity date beyond 30 June 2023, including 54,628 derivative contracts.

- On 16 March 2022, the International Practices Task Force (IPTF) of the Center for Audit Quality (CAQ) included Türkiye in its list of hyperinflationary economies, the cumulative inflation rate over three years having reached 100.6% at the end of February 2022. Consequently, the Group applies IAS 29 “Financial Reporting in Hyperinflationary Economies” for the presentation of the financial statements of its consolidated subsidiaries in Türkiye.

  Accordingly, for these subsidiaries, all non-monetary assets and liabilities, including shareholders’ equity, and all line items in the income statement, are revalued according to the change in of the Consumer Price Index (CPI). This revaluation between 1 January and the closing date resulted in the recognition of a gain or loss on the net monetary position, recorded under “Net gains on non-current assets” (see note 2.i). The financial statements of these subsidiaries were converted into euros at the closing rate, in accordance with the specific provisions of IAS 21 “The Effects of Changes in Foreign Exchange Rates” applicable to the translation of the financial statements of entities located in hyperinflationary economies.

  In accordance with the provisions of the IFRIC decision of March 2020 on the classification of the effects of the indexation and conversion of the financial statements of subsidiaries in hyperinflationary economies, the Group has opted to present these effects (including the effect on the net monetary position of the date of first application of IAS 29) as changes in assets and liabilities recognised directly in equity relative to exchange differences.

  At 1 January 2022, the first-time application of IAS 29 resulted in a EUR 174 million increase in equity, of which EUR 227 million was recorded in “Changes in assets and liabilities recognised directly in equity – exchange differences”.

The introduction of other standards, amendments and interpretations that are mandatory as from 1 January 2022 had no effect on the Group’s financial statements at 31 December 2022.

The Group did not early adopt any of the new standards, amendments, and interpretations adopted by the European Union, when the application in 2022 was optional.

1.a.2 New major accounting standards, published but not yet applicable

IFRS 17 “Insurance Contracts”, issued in May 2017 and amended in June 2020 will replace IFRS 4 “Insurance Contracts”. It was adopted by the European Union in November 2021, accompanied by an optional exemption from the application of the annual cohort grouping requirement for participating contracts based on intergenerational mutualisation of returns on the underlying assets of the technical commitments. It will be mandatory for financial periods beginning on or after 1 January 2023. The transition date for IFRS 17 will therefore be 1 January 2022 for the purposes of the opening balance sheet of the comparative period required by the standard.

As the Group has deferred the application of IFRS 9 for its insurance entities until the entry into force of IFRS 17, it will apply this standard from 1 January 2023.

The amendment to IFRS 17 relating to the presentation of the IFRS 9 and IFRS 17 comparative information, published by the IASB in December 2021, was adopted by the European Union on 8 September 2022[1] and will also be applied by the Group.

Scope

IFRS 17 applies to insurance contracts issued, reinsurance contracts issued and held and investment contracts with discretionary participation features issued (if the entity also issues insurance contracts). The definition of an insurance contract is unchanged from IFRS 4, with the exception of the assessment of the risk of loss for the insurer which must be performed on a present value basis.

Accounting and measurement

Insurance contracts are accounted and measured by groups of contracts within portfolios of contracts covering similar risks and managed together. Groups of contracts are determined according to their expected profitability at inception: onerous contracts, profitable contracts with a low risk of becoming onerous, and others. A group of contracts may contain only contracts issued no more than one year apart (corresponding to an annual “cohort”), except where the optional exemption provided for in the European regulation applies.

General measurement model (Building Block Approach – BBA)

The general model for the measurement of insurance contracts is the best estimate of the future cash flows to be paid or received necessary to meet contractual obligations. This estimate should reflect the different possible scenarios and the effect of the options and guarantees included in the contracts on the limit or “contract boundary” determined according to the standard. Cash flows are discounted to reflect the time value of money. They correspond only to cash flows attributable to insurance contracts either directly or through allocation methods: premiums, acquisition and contract management costs, claims and benefits, indirect costs, taxes and depreciation of tangible and intangible assets. The cash flows estimate is supplemented by an explicit risk adjustment to cover the uncertainty for non-financial risk. These two elements constitute the fulfilment cash flows of the contracts. A contractual service margin is added representing the expected gain or loss on future services related to a group of contracts.

If the contractual service margin is positive, it is shown on the balance sheet within the insurance contract’s measurement and amortised as the services are rendered; if negative, it is recognised immediately in the income statement and then reversed over the life of the contracts or when the contracts become profitable again. Acquisition costs paid prior to the initial recognition of a group of contracts are initially recognised in the balance sheet (and presented as a decrease in insurance liabilities or increase in insurance assets depending on the overall position of the portfolio) and then deducted from the contractual service margin of the group of contracts to which they relate at the time of initial recognition.

At each reporting date, the carrying amount of a group of insurance contracts is the sum of the liabilities for the remaining coverage (which include the fulfilment cash flows related to future services and the contractual service margin remaining at that date) and liabilities for incurred claims (which include only the fulfilment cash flows for claims incurred, without any contractual service margin). The assumptions used to estimate future cash flows and the non-financial risk adjustment are updated, as well as the discount rate, to reflect the situation at the reporting date. The contractual service margin is adjusted for changes in the estimates of non-financial assumptions related to future services and then amortised in the income statement for services rendered over the period. The release of the expected contractual cash flows for the period and changes in the estimates for past services are recorded in the income statement. The effect of unwinding the discount on the liabilities related to the passage of time is recorded in the income statement as well as the effect of the change in the discount rate. The latter effect may, however, be recognised in equity as an option.

Measurement model for contracts with direct participation features (Variable Fee Approach – VFA)

In the case of direct participating contracts, where the insurer has to pay the policyholder an amount corresponding to the market or model value of clearly identified underlying assets, less a variable compensation, a specific model (called the “Variable Fee Approach”) has been developed by adapting the general model.

At each reporting date, the liabilities related to these contracts are adjusted for the return earned and changes in the market or model value of the underlying assets: the policyholders’ share is recorded in the contract fulfilment cash flows against the profit or loss and the insurer’s share is included in the contractual service margin. The gain or loss of these contracts is therefore essentially represented by the release of the fulfilment cash flows and the amortisation of the contractual service margin. When the underlying assets fully match the liabilities and are measured at market value through profit or loss, the financial gain or loss

[1] *EU Regulation n°2022/1491 of 8 September 2022.*

of these contracts should be zero. If certain underlying assets are not measured at market value through profit or loss, the insurer may choose to reclassify the change in liabilities related to these assets to equity.

Simplified measurement model (Premium Allocation Approach – PAA)

Short-term contracts (less than one year) may be measured using a simplified approach known as the Premium Allocation Approach, also applicable to longer-term contracts if it leads to results similar to those of the general model in terms of liability for the remaining coverage. For profitable contracts, the liability for the remaining coverage is measured based on the deferral of premiums collected according to a logic similar to that used under IFRS 4. Onerous contracts and liabilities for incurred claims are valued according to the general model. Liabilities for incurred claims are discounted if the expected settlement of claims takes place one year after the date of occurrence. In this case, the option of classifying the effect of changes in the discount rate in equity is also applicable.

At each reporting date, the adjustment of liabilities for remaining coverage and for incurred claims is recognised in profit or loss.

Treatment of the reinsurance

Accepted reinsurance is treated as insurance contracts issued, either in the general model or in simplified model. The reinsurance ceded is also treated under the general model or simplified model, but the contractual service margin representing the expected reinsurance profit or loss may be negative, and the fulfilment cash flows includes the reinsurer's non-performance risk.

Presentation in the balance sheet and in the profit and loss

Pursuant to changes in IAS 1 resulting from IFRS 17:

- insurance (and reinsurance) contracts issued, and reinsurance contracts held are shown in the balance sheet as assets or liabilities according to the overall position of the portfolios to which they belong;
- the various income and expenses of insurance and reinsurance contracts are broken down in the profit and loss into:
  - insurance revenues: release of fulfilment cash flows for the expected amount over the period (excluding investment components[1]), change in the risk adjustment, amortisation of the contractual service margin for services rendered, amount allocated for the amortisation of acquisition cost, adjustments arising from premiums received,
  - insurance service expenses: actual charges attributable to insurance contracts incurred over the period (excluding repayments of investment components) and changes related to past service, amortisation of acquisition costs, and loss component on the initial recognition of onerous contracts as well as its amortisation,
  - insurance financial income or expenses: change in the carrying amount of insurance contracts resulting from the effect of the time value of money and the financial risk including changes in financial assumptions (except for those adjusting the contractual service margin in the case of direct participating contracts), for the portion that the Group has chosen not to include directly in equity;
- regarding the elements recognised in equity:
  - for contracts valued according to the general model or the simplified approach, the effects of changes in financial variables (in particular the discount rate) can be presented separately between the profit and loss account and changes in fair value recognised directly in equity that may be reclassified in profit or loss. This option can be exercised by portfolio,
  - for contracts valued using the variable fee method, the option to present separately financial income or expense between the income statement and shareholders' equity may be used to avoid an accounting mismatch with the income or expense recognised in the profit and loss account in respect of the underlying assets held.

Terms of application and main accounting options used by the Group for the transition

The main contracts in the scope of IFRS 17 issued by the Group are contracts covering risks related to persons or property and life savings contracts.

Creditor protection insurance (CPI), personal protection insurance and other non-life risks will be measured either according to the general model or, if the conditions are met, using the simplified approach. For the constitution of portfolios of similar contracts, BNP Paribas takes into account the following discriminatory criteria: legal entity, nature of risks and distribution partner. The discount rate is based on the risk-free rate adjusted for the illiquidity of the liabilities. The risk adjustment is determined using the quantile method. The coverage unit used to amortise the contractual service margin is derived from the risk premium earned during the period.

Life and savings contracts consist of single and "multi-support" contracts, with or without insurance risk, including a discretionary participation component backed by euro or foreign currency funds (generally financial and real estate assets), and unit-linked contracts with a minimum coverage in the event of death. These different types of contracts meet the definition of direct participating contracts and will therefore be valued using the variable fee approach. Where such contracts include a surrender value, this meets the definition of a non-distinct investment component. BNP Paribas takes into account the following criteria for life and savings portfolios: legal entity, product, and underlying asset. Savings and retirement activities have been classified in

[1] *A non-distinct investment component corresponds to the amount that would be paid to the policyholder in all cases, whether or not the covered event occurs.*

separate portfolios (including for the period prior to transition). The discount rate is based on the risk-free rate, extrapolated over a period exceeding the observable data and adjusted by a liquidity premium based on the underlying assets. The risk adjustment is determined using the cost of capital method. The coverage unit used to amortise the contractual service margin is the change in savings due to policyholders (determined at present value), adjusted to take into account the impact of the real return on financial assets compared to the actuarial neutral risk projection. The Group has chosen to apply the option introduced by the European Regulation not to divide by annual cohort the portfolios of participating contracts based on intergenerational mutualisation. This option should apply to insurance contracts and investment contracts with discretionary participation eligible for the variable fee approach, euro single or “multi-supports” including a euro fund, for which the policyholders’ participation in the returns is pooled among the different generations of policyholders in France, Italy and Luxembourg.

Financial income or expense from issued insurance contracts will be presented separately between the profit and loss account and shareholders’ equity for portfolios for which this breakdown has been deemed relevant, as allowed by the standard. For the Protection contracts measured under the general model and for the liabilities for incurred claims arising from contracts measured under the simplified model, the choice of portfolios was made by taking into account both the effects in the profit and loss account of the discount of the liabilities and the accounting treatment of the assets backing them. For contracts measured using the Variable Fee Approach, the choice was made to offset any accounting mismatch that may exist in the profit and loss account between the effect of changes in fair value on insurance or investment liabilities and that on the underlying assets when these are not recognised at fair value through profit or loss.

The Group has chosen to present its financial statements in the format proposed by the *Autorité des Normes Comptables* recommendation n°2022-01 of 8 April 2022. Under the option introduced by the recommendation, the Group intends to present the insurance activity investments and the related income separately from the banking activity financial assets and liabilities.

Insurance contracts may be distributed and managed by non-insurance entities of the Group that are remunerated as such by commissions paid by insurance entities. The new model for valuing insurance contracts requires projecting into the contract fulfilment cash flows the acquisition and management costs that will be paid in the future and presenting in the profit and loss account, the release of the estimated costs for the period on the one hand, and on the other, the actual costs. For commissions between consolidated companies of the Group, in accordance with the recommendations of ESMA (32-63-1320) and the AMF (DOC-2022-06), the Group will restate the internal margin on the balance sheet[1] and profit and loss account (in the breakdown of insurance liabilities and the related results between the fulfilment cash flows and contract services margin) by presenting as insurance service expenses the portion of the general expenses of banking entities that can be attributable to insurance activity. The restated internal margin is determined from normalised management data of each of the distribution networks.

Expected transition impacts

IFRS 17

Launched in 2017, the IFRS 17 implementation project comes to an end with the date of first application of the standard. The deployment of the new modelling and reporting tools took place according to the defined timetable. Some options remain likely to evolve in the future, depending on the normative interpretations that may occur, in particular at the level of IFRIC.

The transition from IFRS 4 to IFRS 17 will result in the offsetting in equity of assets and liabilities of insurance contracts recognised in accordance with the previous standard net of deferred taxes effects: insurance liabilities and reinsurance assets held, deferred policyholders’ participation arising from “shadow accounting” and intangible assets specific to insurance contracts when recognised. Receivables and liabilities related to insurance or reinsurance contracts must be included in the new valuation of insurance asset and liabilities.

IFRS 17 applies retroactively to all contracts outstanding at the transition date, *i.e.* 1 January 2022 due to the mandatory comparative period. Three transition methods may be used: a full retrospective approach and, if this cannot be implemented, a modified retrospective approach or an approach based on the market or model value of the contracts at the transition date.

The majority of entities controlled by the Group applied the modified retrospective approach and, more marginally, for some portfolios, an approach based on the market or model value of contracts at the transition date.

As a matter of fact, all the necessary information was not available or was not sufficiently granular, in particular due to systems migration and data retention requirements, to allow a full retrospective approach. This is the case for historical cash flows, discount rates and changes in assumptions and estimates that would have occurred in the period prior to the transition, especially changes in projection models occurred during this period. Moreover, the full retrospective approach would have required reconstituting management’s assumptions or intentions in previous periods.

The objective of the modified retrospective approach is to achieve a result that is as close as possible to the result that would have been obtained by the retrospective application of the standard, based on reasonable and justifiable information that can be obtained without incurring excessive costs or effort. The transitional provisions of IFRS 17 under this approach allow for different simplifications in the grouping of contracts, the reconstitution of contract valuations at initial recognition, the measurement of the contractual service margin (or loss element) and for financial products or insurance charges (for the part recorded in equity).

Thus, the concerned entities applied the modified retrospective approach to most portfolios of existing contracts, whether in Protection or Life/Savings. Simplifications used depended on the valuation models and the availability of the necessary information on the related portfolios.

[1] *This restatement was taken into account for the balance sheet at the transition date at 1 January 2022.*

For protection contracts valued according to the general model, the principle of the modified retrospective approach consists in reconstituting liabilities at the initial recognition date from their valuation at the transition date, by retroactively reconstituting movements between the two dates with simplifications:

- cash flows at inception are estimated by adding to the amount at the transition date the effective cash flows recorded between the two dates;
- the original discount rate can be determined with interest rate curves simulating those at the date of first recognition;
- the changes in the adjustment for non-financial risk between the inception date and the transition date can be estimated based on release pattern observed on similar contracts.

For liabilities for remaining coverage that are reconstituted in this way at the inception date, the contractual service margin at inception (if any), less any acquisition costs paid in the interim period, is amortised based on the services provided in the period prior to the transition, in order to determine the amount of the remaining contractual service margin at that date, less any remaining acquisition costs.

When contracts are grouped into a single group on the transition date, the discount rate on that date can be used.

When the option to disaggregate financial changes between profit and loss and shareholders' equity has been elected, it requires the amount taken to shareholders' equity at the transition date to be recalculated from the inception rate for the liability for remaining coverage and from the rate at the date of claims occurrence for the liability for incurred claims. Where such reconstitution is not possible, the amount shown in equity shall be zero.

For the purposes of this reconstitution, the simplifications mainly covered the following:

- reconstitution of the annual cohorts or consolidation into a single group of contracts at the transition date according to available data;
- the reconstitution of fulfilment cash flows and unamortised acquisition costs;
- the release of the risk adjustment between the date of issuance of the contracts and the transition date;
- discount rates (the rate at inception in the case of a reconstitution by annual cohorts or an average rate in the case of a consolidation into a single group of contracts at the transition date);
- the amount transferred to changes in equity that may be reclassified to profit or loss at the transition date in respect of changes in the discount rate, that has been reconstituted based on historical rates or reset to zero if such a reconstitution is not achievable.

For protection contracts valued according to the simplified method, the reserves for remaining coverage were generally determined at transition from the previous reserves for unearned premiums, net of acquisition costs. The incurred claims reserves arising from these contracts consist of expected cash flows and risk adjustments for non-financial risks at the transition date. When cash flows were discounted and for portfolios for which the disaggregation option of financial changes between profit and loss account and shareholders' equity has been chosen, the amount carried in changes in equity that may be reclassified to profit or loss at the transition date in relation to changes in the discount rate was reconstituted based on the historical rates or set to zero if such a reconstitution was not achievable.

For Life/Savings contracts valued under the variable fees model, the modified retrospective approach consists in reconstituting the liability at the original date from the liability at the transition date. However, for these contracts, the standard provides that the contractual services margin at the transition date is determined using the following approach:

- the realisable value of the underlying assets at the transition date is first diminished by the fulfilment cash flows (discounted cash flows and risk adjustment) at that date;
- to this amount are added the income paid by the policyholders, changes in the risk adjustment and are deducted the acquisition costs paid during the interim period;
- the contractual service margin net of the acquisition costs initially reconstituted in this way is then amortised until the transition date to reflect the services provided on that date, as well as the remaining acquisition costs to be amortised.

The main simplifications in implementing this approach were as follows:

- existing contracts have been grouped according to the planned post-transition segmentation, without annual cohorts breakdown, in line with the election of the exception provided for by the European regulation;
- for general funds common to participating and non-participating contracts and to equity, the underlying assets have been defined on the basis of the breakdown used in the statutory accounts to calculate policyholders' participation;
- the contractual services margin at the transition date has been reconstituted:
  - from the realisable value of the underlying assets (see above) less fulfilment cash flows on the transition date,
  - by adding the historical margins (obtained from accounting or management information), the total being amortised up to the transition date (using the same approach, taking into account the "over-performance on assets", as used after the transition), and
  - deducting any remaining acquisition costs;
- the amount recorded in changes in equity that may be reclassified to profit or loss at the transition date as an adjustment for accounting mismatch was determined using the realisable value of the underlying assets recognised in equity at the transition date, in accordance with the standard.

Finally, under the market value method, the contractual service margin at the transition date is determined as the difference at the transition date between the realisable value ("fair value, determined without taking into account the amount payable on demand") and the fulfilment cash flows. This approach was used on some non-material portfolios when the modified retrospective approach could not be implemented. For these portfolios, the fair value has been estimated based on a Solvency 2 valuation and, in the particular case of a recent business combination dating from 2018, based on the amount allocated to the contracts during the acquisition price allocation process.

IFRS 9

The IFRS 9 implementation project at the level of the Insurance activity built widely on the experience of other business lines in the Group already applying this standard, in particular to ensure consistency in classification.

Financial assets and liabilities of insurance entities are managed by portfolios corresponding to the insurance liabilities they back up or to the own funds. The business models were therefore determined according to these portfolios at the transition date to IFRS 9.

In accordance with the criteria of the business model and of the contractual cash flows, debt instruments will largely be classified under the "held to collect and sell" model, with the exception of those representing unit-linked contracts and debt instruments held by consolidated UCITS and managed at net asset value, which will be classified at fair value through profit or loss. Certain specific assets will be classified as at fair value on option. The majority of equity instruments will be measured at fair value through profit or loss, except in the case of certain assets backing up own funds and non-participating contracts portfolios, which will be measured at fair value through equity. Non-consolidated funds classified as available for sale under IAS 39 will be reclassified at fair value through profit or loss. The treatment of derivatives remains unchanged, including hedge accounting as IAS 39 rules have been maintained by the Group.

Since the beginning of 2022, financial assets have been monitored according to both IAS 39 and IFRS 9. The Group is planning to use the optional "overlay classification" approach introduced by the amendment to IFRS 17 relating to the presentation of IFRS 9 – IFRS 17 comparisons, which allows financial assets to be presented in the 2022 comparative as if IFRS 9 had been applicable at that date. This choice would apply to all financial instruments, including those derecognised in 2022, in terms of both classification and valuation (including impairment).

Amendments to other standards

The Group is also planning to apply the amendments to IAS 40 and IAS 16 resulting from IFRS 17, leading to the valuation at fair value through profit or loss of the buildings held as underlying components of direct participating contracts. The amendments to IAS 32 and IFRS 9 are expected to be applied, enabling the financial assets issued by the Group that are held as underlying items of direct participating contracts and are measured at fair value through profit or loss to be maintained in the balance sheet.

Impacts estimated at 1 January 2022

Regarding insurance contracts, a full valuation exercise was realised during 2022 to establish the opening balance sheet at 1 January 2022 and prepare the 2022 comparative period.

Based on this work, at 1 January 2022, the estimated impact on Group's shareholders' equity[1] of the application of IFRS 17 and IFRS 9 and of the various amendments to other standards amounted to -EUR 1.6 billion. This impact consists of EUR 0.5 billion related to the transition from IAS 39 to IFRS 9 and -EUR 2.1 billion related to the transition from IFRS 4 to IFRS 17[2].

At 1 January 2022, for controlled entities, liabilities related to insurance contracts, net of insurance portfolios in assets, amounted to EUR 239.3 billion, and consist of the following:

- EUR 219.2 billion for the best estimate of future cash flows;
- EUR 1.5 billion for the risk adjustment;
- EUR 18.6 billion for the contractual service margin.

1 Including change in assets and liabilities recognised in changes in equity that may be reclassified to profit or loss.

2 Including amendments to other standards related to the application of IFRS 17, of which the impact of the EUR 1.5 billion in relation to the revaluation of buildings at fair value, offset by the corresponding revaluation of liabilities in direct participating contracts.

1.b CONSOLIDATION

1.b.1 Scope of consolidation

The consolidated financial statements of BNP Paribas include entities that are controlled by the Group, jointly controlled, and under significant influence, with the exception of those entities whose consolidation is regarded as immaterial to the Group. Companies that hold shares in consolidated companies are also consolidated.

Subsidiaries are consolidated from the date on which the Group obtains effective control. Entities under temporary control are included in the consolidated financial statements until the date of disposal.

1.b.2 Consolidation methods

Exclusive control

Controlled enterprises are fully consolidated. The Group controls a subsidiary when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

For entities governed by voting rights, the Group generally controls the entity if it holds, directly or indirectly, the majority of the voting rights (and if there are no contractual provisions that alter the power of these voting rights) or if the power to direct the relevant activities of the entity is conferred on it by contractual agreements.

Structured entities are entities established so that they are not governed by voting rights, for instance when those voting rights relate to administrative tasks only, whereas the relevant activities are directed by means of contractual arrangements. They often have the following features or attributes: restricted activities, a narrow and well-defined objective and insufficient equity to permit them to finance their activities without subordinated financial support.

For these entities, the analysis of control shall consider the purpose and design of the entity, the risks to which the entity is designed to be exposed and to what extent the Group absorbs the related variability. The assessment of control shall consider all facts and circumstances able to determine the Group's practical ability to make decisions that could significantly affect its returns, even if such decisions are contingent on uncertain future events or circumstances.

In assessing whether it has power, the Group considers only substantive rights which it holds or which are held by third parties. For a right to be substantive, the holder must have the practical ability to exercise that right when decisions about the relevant activities of the entity need to be made.

Control is reassessed if facts and circumstances indicate that there are changes to one or more of the elements of control.

Where the Group contractually holds the decision-making power, for instance where the Group acts as fund manager, it shall determine whether it is acting as agent or principal. Indeed, when associated with a certain level of exposure to the variability of returns, this decision-making power may indicate that the Group is acting on its own account and that it thus has control over those entities.

Minority interests are presented separately in the consolidated profit and loss account and balance sheet within consolidated equity. The calculation of minority interests takes into account the outstanding cumulative preferred shares classified as equity instruments issued by subsidiaries, when such shares are held outside the Group.

As regards fully consolidated funds, units held by third-party investors are recognised as debts at fair value through profit or loss, inasmuch as they are redeemable at fair value at the subscriber's initiative.

For transactions resulting in a loss of control, any equity interest retained by the Group is remeasured at its fair value through profit or loss.

Joint control

Where the Group carries out an activity with one or more partners, sharing control by virtue of a contractual agreement which requires unanimous consent on relevant activities (those that significantly affect the entity's returns), the Group exercises joint control over the activity. Where the jointly controlled activity is structured through a separate vehicle in which the partners have rights to the net assets, this joint venture is accounted for using the equity method. Where the jointly controlled activity is not structured through a separate vehicle or where the partners have rights to the assets and obligations for the liabilities of the jointly controlled activity, the Group accounts for its share of the assets, liabilities, revenues and expenses in accordance with the applicable IFRS.

Significant influence

Companies over which the Group exercises significant influence or associates are accounted for by the equity method. Significant influence is the power to participate in the financial and operating policy decisions of a company without exercising control. Significant influence is presumed to exist when the Group holds, directly or indirectly, 20% or more of the voting rights of a company. Interests of less than 20% can be included in the consolidation scope if the Group effectively exercises significant influence. This is the case for example for entities developed in partnership with other associates, where the BNP Paribas Group participates in strategic decisions of the enterprise through representation on the Board of directors or equivalent governing body, or exercises influence over the enterprise's operational management by supplying management systems or senior managers, or provides technical assistance to support the enterprise's development.

Changes in the net assets of associates (companies accounted for under the equity method) are recognised on the assets side of the balance sheet under "Investments in equity-method entities" and in the relevant component of shareholders' equity. Goodwill recorded on associates is also included under "Equity-method investments".

Whenever there is an indication of impairment, the carrying amount of the investment consolidated under the equity method (including goodwill) is subjected to an impairment test, by comparing its recoverable value (the higher of value-in-use and market value less costs to sell) to its carrying amount. Where appropriate, impairment is recognised under "Share of earnings of equity-method entities" in the consolidated income statement and can be reversed at a later date.

If the Group's share of losses of an equity-method entity equals or exceeds the carrying amount of its investment in this entity, the Group discontinues including its share of further losses. The investment is reported at nil value. Additional losses of the equity-method entity are provided for only to the extent that the Group has contracted a legal or constructive obligation, or has made payments on behalf of this entity.

Where the Group holds an interest in an associate, directly or indirectly through an entity that is a venture capital organisation, a mutual fund, an open-ended investment company or similar entity such as an investment-related insurance fund, it may elect to measure that interest at fair value through profit or loss.

Realised gains and losses on investments in consolidated undertakings are recognised in the profit and loss account under "Net gain on non-current assets".

The consolidated financial statements are prepared using uniform accounting policies for similar transactions and other events occurring in similar circumstances.

1.b.3 Consolidation rules

Elimination of intragroup balances and transactions

Intragroup balances arising from transactions between consolidated enterprises, and the transactions themselves (including income, expenses and dividends), are eliminated. Profits and losses arising from intragroup sales of assets are eliminated, except where there is an indication that the asset sold is impaired. Unrealised gains and losses included in the value of financial instruments at fair value through equity and available-for-sale assets are maintained in the consolidated financial statements.

Translation of accounts expressed in foreign currencies

The consolidated financial statements of BNP Paribas are prepared in euros.

The financial statements of enterprises whose functional currency is not the euro are translated using the closing rate method. Under this method, all assets and liabilities, both monetary and non-monetary, are translated using the spot exchange rate at the balance sheet date. Income and expense items are translated at the average rate for the period.

Financial statements of the Group's subsidiaries located in hyperinflationary economies, previously adjusted for inflation by applying a general price index, are translated using the closing rate. This rate applies to the translation of assets and liabilities as well as income and expenses.

Differences arising from the translation of balance sheet items and profit and loss items are recorded in shareholders' equity under "Exchange differences", and in "Minority interests" for the portion attributable to outside investors. Under the optional treatment permitted by IFRS 1, the Group has reset to zero all translation differences, by booking all cumulative translation differences attributable to shareholders and to minority interests in the opening balance sheet at 1 January 2004 to retained earnings.

On liquidation or disposal of some or all of an interest held in a foreign enterprise located outside the eurozone, leading to a change in the nature of the investment (loss of control, loss of significant influence or loss of joint control without keeping a significant influence), the cumulative exchange difference at the date of liquidation or sale is recognised in the profit and loss account.

Should the percentage of interest change without leading to a modification in the nature of the investment, the exchange difference is reallocated between the portion attributable to shareholders and that attributable to minority interests if the entity is fully consolidated; if the entity is consolidated under the equity method, it is recorded in profit or loss for the portion related to the interest sold.

1.b.4 Business combination and measurement of goodwill

Business combinations

Business combinations are accounted for using the purchase method.

Under this method, the acquiree's identifiable assets and liabilities assumed are measured at fair value at the acquisition date except for non-current assets classified as assets held for sale which are accounted for at fair value less costs to sell.

The acquiree's contingent liabilities are not recognised in the consolidated balance sheet unless they represent a present obligation on the acquisition date and their fair value can be measured reliably.

The cost of a business combination is the fair value, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued to obtain control of the acquiree. Costs directly attributable to the business combination are treated as a separate transaction and recognised through profit or loss.

Any contingent consideration is included in the cost, as soon as control is obtained, at fair value on the date when control was acquired. Subsequent changes in the value of any contingent consideration recognised as a financial liability are recognised through profit or loss.

The Group may recognise any adjustments to the provisional accounting within 12 months of the acquisition date.

Goodwill represents the difference between the cost of the combination and the acquirer's interest in the net fair value of the identifiable assets and liabilities of the acquiree at the acquisition date. Positive goodwill is recognised in the acquirer's balance sheet, while negative goodwill is recognised immediately in profit or loss, on the acquisition date. Minority interests are measured at their share of the fair value of the acquiree's identifiable assets and liabilities. However, for each business combination, the Group can elect to measure minority interests at fair value, in which case a proportion of goodwill is allocated to them. To date, the Group has never used this latter option.

Goodwill is recognised in the functional currency of the acquiree and translated at the closing exchange rate.

On the acquisition date, any previously held equity interest in the acquiree is remeasured at its fair value through profit or loss. In the case of a step acquisition, the goodwill is therefore determined by reference to the acquisition-date fair value.

Since the revised IFRS 3 has been applied prospectively, business combinations completed prior to 1 January 2010 were not restated for the effects of changes to IFRS 3.

As permitted under IFRS 1, business combinations that took place before 1 January 2004 and were recorded in accordance with the previously applicable accounting standards (French GAAP), had not been restated in accordance with the principles of IFRS 3.

Measurement of goodwill

The BNP Paribas Group tests goodwill for impairment on a regular basis.

Cash-generating units

The BNP Paribas Group has split all its activities into cash-generating units[1] representing major business lines. This split is consistent with the Group's organisational structure and management methods, and reflects the independence of each unit in terms of results and management approach. It is reviewed on a regular basis in order to take account of events likely to affect the composition of cash-generating units, such as acquisitions, disposals and major reorganisations.

Testing cash-generating units for impairment

Goodwill allocated to cash-generating units is tested for impairment annually and whenever there is an indication that a unit may be impaired, by comparing the carrying amount of the unit with its recoverable amount. If the recoverable amount is less than the carrying amount, an irreversible impairment loss is recognised, and the goodwill is written down by the excess of the carrying amount of the unit over its recoverable amount.

Recoverable amount of a cash-generating unit

The recoverable amount of a cash-generating unit is the higher of the fair value of the unit less costs to sell, and its value in use.

Fair value is the price that would be obtained from selling the unit at the market conditions prevailing at the date of measurement, as determined mainly by reference to actual prices of recent transactions involving similar entities or on the basis of stock market multiples for comparable companies.

Value in use is based on an estimate of the future cash flows to be generated by the cash-generating unit, derived from the annual forecasts prepared by the unit's management and approved by Group Executive Management, and from analyses of changes in the relative positioning of the unit's activities on their market. These cash flows are discounted at a rate that reflects the return that investors would require from an investment in the business sector and region involved.

1.c TRANSLATION OF FOREIGN CURRENCY TRANSACTIONS

The methods used to account for assets and liabilities relating to foreign currency transactions entered into by the Group, and to measure the foreign exchange risk arising on such transactions, depend on whether the asset or liability in question is classified as a monetary or a non-monetary item.

[1] *As defined by IAS 36.*

Monetary assets and liabilities[1] expressed in foreign currencies

Monetary assets and liabilities expressed in foreign currencies are translated into the functional currency of the relevant Group entity at the closing rate. Foreign exchange differences are recognised in the profit and loss account, except for those arising from financial instruments designated as a cash flow hedge or a net foreign investment hedge, which are recognised in shareholders' equity.

Non-monetary assets and liabilities expressed in foreign currencies

Non-monetary assets may be measured either at historical cost or at fair value. Non-monetary assets expressed in foreign currencies are translated using the exchange rate at the date of the transaction (*i.e.* date of initial recognition of the non-monetary asset) if they are measured at historical cost, and at the closing rate if they are measured at fair value.

Foreign exchange differences relating to non-monetary assets denominated in foreign currencies and recognised at fair value (equity instruments) are recognised in profit or loss when the asset is classified in "Financial assets at fair value through profit or loss" and in equity when the asset is classified under "Financial assets at fair value through equity".

1.d NET INTEREST INCOME, COMMISSIONS AND INCOME FROM OTHER ACTIVITIES

1.d.1 Net interest income

Income and expenses relating to debt instruments measured at amortised cost and at fair value through shareholders' equity are recognised in the income statement using the effective interest rate method.

The effective interest rate is the rate that ensures the discounted value of estimated future cash flows through the expected life of the financial instrument or, when appropriate, a shorter period, is equal to the carrying amount of the asset or liability in the balance sheet. The effective interest rate measurement takes into account all fees received or paid that are an integral part of the effective interest rate of the contract, transaction costs, and premiums and discounts.

Commissions considered as an additional component of interest are included in the effective interest rate and are recognised in the profit and loss account in "Net interest income". This category includes notably commissions on financing commitments when it is considered that the setting up of a loan is more likely than unlikely. Commissions received in respect of financing commitments are deferred until they are drawn and then included in the effective interest rate calculation and amortised over the life of the loan. Syndication commissions are also included in this category for the portion of the commission equivalent to the remuneration of other syndication participants.

1.d.2 Commissions and income from other activities

Commissions received with regards to banking and similar services provided (except for those that are integral part of the effective interest rate), revenues from property development and revenues from services provided in connection with lease contracts fall within the scope of IFRS 15 "Revenue from Contracts with Customers".

This standard defines a single model for recognising revenue based on five-step principles. These five steps enable to identify the distinct performance obligations included in the contracts and allocate the transaction price among them. The income related to those performance obligations is recognised as revenue when the latter are satisfied, namely when the control of the promised goods or services has been transferred.

The price of a service may contain a variable component. Variable amounts may be recognised in the income statement only if it is highly probable that the amounts recorded will not result in a significant downward adjustment.

Commission

The Group records commission income and expense in profit or loss either:

- over time as the service is rendered when the client receives continuous service. These include, for example, certain commissions on transactions with customers when services are rendered on a continuous basis, commissions on financing commitments that are not included in the interest margin, because the probability that they give rise to the drawing up of a loan is low, commissions on financial collateral, clearing commissions on financial instruments, commissions related to trust and similar activities, securities custody fees, *etc*.

  Commissions received under financial guarantee commitments are deemed to represent the initial fair value of the commitment. The resulting liability is subsequently amortised over the term of the commitment, in Commission income; or
- at a point in time when the service is rendered, in other cases. These include, for example, distribution fees received, loan syndication fees remunerating the arrangement service, advisory fees, *etc*.

[1] *Monetary assets and liabilities are assets and liabilities to be received or paid in fixed or determinable amounts of cash.*

Income from other activities

Income from property development as well as income from services provided in connection with lease contracts is recorded under “income from other activities” in the income statement.

As regards property development income, the Group records it in profit or loss:

- over time, when the performance obligation creates or enhances an asset on which the customer obtains control as it is created or enhanced (*e.g.* work in progress controlled by the client on the land in which the asset is located, *etc.*), or where the service performed does not create an asset that the entity could otherwise use and gives it enforceable right to payment for performance completed to date. This is the case for contracts such as VEFA (sale in the future state of completion) in France;
- at completion in other cases.

Regarding income from services provided in connection with lease contracts, the Group records them in profit or loss as the service is rendered, *i.e.* in proportion to the costs incurred for maintenance contracts.

1.e FINANCIAL ASSETS AND LIABILITIES

Financial assets, except those relating to insurance activities (see note 1.f) are classified at amortised cost, at fair value through shareholders’ equity or at fair value through profit or loss depending on the business model and the contractual features of the instruments at initial recognition.

Financial liabilities are classified at amortised cost or at fair value through profit or loss at initial recognition.

Financial assets and liabilities are recognised in the balance sheet when the Group becomes a party to the contractual provisions of the instrument. Purchases and sales of financial assets made within a period established by the regulations or by a convention in the relevant marketplace are recognised in the balance sheet at the settlement date.

1.e.1 Financial assets at amortised cost

Financial assets are classified at amortised cost if the following two criteria are met: the business model objective is to hold the instrument in order to collect the contractual cash flows and the cash flows consist solely of payments relating to principal and interest on the principal.

Business model criterion

Financial assets are managed within a business model whose objective is to hold financial assets in order to collect cash flows through the collection of contractual payments over the life of the instrument.

The realisation of disposals close to the maturity of the instrument and for an amount close to the remaining contractual cash-flows, or due to an increase in the counterparty’s credit risk is consistent with a business model whose objective is to collect the contractual cash flows (“collect”). Sales imposed by regulatory requirements or to manage the concentration of credit risk (without an increase in the asset’s credit risk) are also consistent with this business model when they are infrequent or insignificant in value.

Cash flow criterion

The cash flow criterion is satisfied if the contractual terms of the debt instrument give rise, on specified dates, to cash flows that are solely repayments of principal and interest on the principal amount outstanding.

The criterion is not met in the event of a contractual characteristic that exposes the holder to risks or to the volatility of contractual cash flows that are inconsistent with those of a non-structured or “basic lending” arrangement. It is also not satisfied in the event of leverage that increases the variability of the contractual cash flows.

Interest consists of consideration for the time value of money, for the credit risk, and for the remuneration of other risks (*e.g.* liquidity risk), costs (*e.g.* administration fees), and a profit margin consistent with that of a basic lending arrangement. The existence of negative interest does not call into question the cash flow criterion.

The time value of money is the component of interest – usually referred to as the “rate” component – which provides consideration for only the passage of time. The relationship between the interest rate and the passage of time must not be modified by specific characteristics that could call into question the respect of the cash flow criterion.

Thus, when the variable interest rate of the financial asset is periodically reset at a frequency that does not match the duration for which the interest rate is established, the time value of money may be considered as modified and, depending on the significance of that modification, the cash flow criterion may not be met. Some financial assets held by the Group present a mismatch between the interest rate reset frequency and the maturity of the index, or interest rates indexed to an average of benchmark rate. The Group has developed a consistent methodology for analysing this alteration of the time value of money.

Regulated rates meet the cash flow criterion when they provide consideration that is broadly consistent with the passage of time and does not expose to risks or volatility in the contractual cash flows that would be inconsistent with those of a basic lending arrangement (example: loans granted in the context of *Livret A* savings accounts).

Some contractual clauses may change the timing or the amount of cash flows. Early redemption options do not call into question the cash flow criterion if the prepayment amount substantially represents the principal amount outstanding and the interest thereon, which may include reasonable compensation for the early termination of the contract. For example, as regards loans to retail customers, the compensation limited to 6 months of interest or 3% of the capital outstanding is considered reasonable. Actuarial penalties, corresponding to the discounted value of the difference between the residual contractual cash-flows of the loan, and their reinvestment in a loan to a similar counterparty or in the interbank market for a similar residual maturity are also considered as reasonable, even when the compensation can be positive or negative (*i.e.* "symmetric" compensation). An option that permits the issuer or the holder of a financial instrument to change the interest rate from floating to fixed rate does not breach the cash flow criterion if the fixed rate is determined at origination, or if it represents the time value of money for the residual maturity of the instrument at the date of exercise of the option. Clauses included in financing granted to encourage the sustainable development of companies which adjust the interest margin depending on the achievement of environmental, social or governance (ESG) objectives do not call into question the cash flow criterion when such an adjustment is considered to be minimal. Structured instruments indexed to ESG market indices do not meet the cash flow criterion.

In the particular case of financial assets contractually linked to payments received on a portfolio of underlying assets and which include a priority order for payment of cash flows between investors ("tranches"), thereby creating concentrations of credit risk, a specific analysis is carried out. The contractual characteristics of the tranche and those of the underlying financial instrument portfolios must meet the cash flow criterion and the credit risk exposure of the tranche must be equal to or lower than the exposure to credit risk of the underlying pool of financial instruments.

Certain loans may be "non-recourse", either contractually, or in substance when they are granted to a special purpose entity. That is in particular the case of numerous project financing or asset financing loans. The cash-flow criterion is met as long as these loans do not represent a direct exposure on the assets acting as collateral. In practice, the sole fact that the financial asset explicitly gives rise to cash flows that are consistent with payments of principal and interest is not sufficient to conclude that the instrument meets the cash flow criterion. In that case, the particular underlying assets to which there is limited recourse shall be analysed using the "look-through" approach. If those assets do not themselves meet the cash flow criterion, the existing credit enhancement is assessed. The following aspects are considered: structuring and sizing of the transaction, own funds level of the structure, expected source of repayment, price volatility of the underlying assets. This analysis is applied to "non-recourse" loans granted by the Group.

The "financial assets at amortised cost" category includes, in particular, loans granted by the Group, as well as reverse repurchase agreements and securities held by the Group ALM Treasury in order to collect contractual flows and meeting the cash flow criterion.

Recognition

On initial recognition, financial assets are recognised at fair value, including transaction costs directly attributable to the transaction as well as commissions related to the origination of the loans.

They are subsequently measured at amortised cost, including accrued interest and net of repayments of principal and interest during the past period. These financial assets are also subject from their initial recognition, to the measurement of a loss allowance for expected credit losses (note 1.e.5).

Interest is calculated using the effective interest method determined at inception of the contract.

1.e.2 Financial assets at fair value through shareholders' equity

Debt instruments

Debt instruments are classified at fair value through shareholders' equity if the following two criteria are met:

- business model criterion: Financial assets are held in a business model whose objective is achieved by both holding the financial assets in order to collect contractual cash flows and selling the financial assets ("collect and sale"). The latter is not incidental but is an integral part of the business model;
- cash flow criterion: The principles are identical to those applicable to financial assets at amortised cost.

The securities held by the Group ALM Treasury in order to collect contractual flows or to be sold and meeting the cash flow criterion are in particular classified in this category.

On initial recognition, financial assets are recognised at their fair value, including transaction costs directly attributable to the transaction. They are subsequently measured at fair value and changes in fair value are recognised, under a specific line of shareholders' equity entitled "Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss". These financial assets are also subject to the measurement of a loss allowance for expected credit losses on the same approach as for debt instruments at amortised cost. The counterparty of the related impact in cost of risk is recognised in the same specific line of shareholders' equity. On disposal, changes in fair value previously recognised in shareholders' equity are reclassified to profit or loss.

In addition, interest is recognised in the income statement using the effective interest method determined at the inception of the contract.

Equity instruments

Investments in equity instruments such as shares are classified on option, and on a case-by-case basis, at fair value through shareholders' equity (under a specific line). On disposal of the shares, changes in fair value previously recognised in equity are not recognised in profit or loss. Only dividends, if they represent remuneration for the investment and not repayment of capital, are recognised in profit or loss. These instruments are not subject to impairment.

Investments in mutual funds puttable to the issuer do not meet the definition of equity instruments. They do not meet the cash flow criterion either, and thus are recognised at fair value through profit or loss.

1.e.3 Financing and guarantee commitments

Financing and financial guarantee commitments that are not recognised at fair value through profit or loss are presented in the note relating to financing and guarantee commitments. They are subject to the measurement of a loss allowance for expected credit losses. These loss allowances are presented under "Provisions for contingencies and charges".

1.e.4 Regulated savings and loan contracts

Home savings accounts (*Comptes Épargne Logement* – "CEL") and home savings plans (*Plans d'Épargne Logement* – "PEL") are government-regulated retail products sold in France. They combine a savings phase and a loan phase which are inseparable, with the loan phase contingent upon the savings phase.

These products contain two types of obligations for BNP Paribas: an obligation to pay interest on the savings for an indefinite period, at a rate set by the government at the inception of the contract (in the case of PEL products) or at a rate reset every six months using an indexation formula set by law (in the case of CEL products); and an obligation to lend to the customer (at the customer's option) an amount contingent upon the rights acquired during the savings phase, at a rate set at the inception of the contract (in the case of PEL products) or at a rate contingent upon the savings phase (in the case of CEL products).

The Group's future obligations with respect to each generation (in the case of PEL products, a generation comprises all products with the same interest rate at inception; in the case of CEL products, all such products constitute a single generation) are measured by discounting potential future earnings from at-risk outstandings for that generation.

At-risk outstandings are estimated on the basis of a historical analysis of customer behaviour, and are equivalent to:

- for the loan phase: statistically probable loans outstanding and actual loans outstanding;
- for the savings phase: the difference between statistically probable outstandings and minimum expected outstandings, with minimum expected outstandings being deemed equivalent to unconditional term deposits.

Earnings for future periods from the savings phase are estimated as the difference between the reinvestment rate and the fixed savings interest rate on at-risk savings outstanding for the period in question. Earnings for future periods from the loan phase are estimated as the difference between the refinancing rate and the fixed loan interest rate on at-risk loans outstanding for the period in question.

The reinvestment rate for savings and the refinancing rate for loans are derived from the swap yield curve and from the spreads expected on financial instruments of similar type and maturity. Spreads are determined on the basis of actual spreads on fixed-rate home loans in the case of the loan phase and products offered to individual clients in the case of the savings phase. In order to reflect the uncertainty of future interest rate trends, and the impact of such trends on customer behaviour models and on at-risk outstandings, the obligations are estimated using the Monte-Carlo method.

Where the sum of the Group's estimated future obligations with respect to the savings and loan phases of any generation of contracts indicates a potentially unfavourable situation for the Group, a provision is recognised (with no offset between generations) in the balance sheet in "Provisions for contingencies and charges". Movements in this provision are recognised as interest income in the profit and loss account.

1.e.5 Impairment of financial assets measured at amortised cost and debt instruments measured at fair value through shareholders' equity

The impairment model for credit risk is based on expected losses.

This model applies to loans and debt instruments measured at amortised cost or at fair value through equity, to loan commitments and financial guarantee contracts that are not recognised at fair value, as well as to lease receivables, trade receivables and contract assets.

General model

The Group identifies three "stages" that each correspond to a specific status with regards to the evolution of counterparty credit risk since the initial recognition of the asset:

- 12-month expected credit losses (“stage 1”): If at the reporting date, the credit risk of the financial instrument has not increased significantly since its initial recognition, this instrument is impaired at an amount equal to 12-month expected credit losses (resulting from the risk of default within the next 12 months);
- Lifetime expected credit losses for non-impaired assets (“stage 2”): The loss allowance is measured at an amount equal to the lifetime expected credit losses if the credit risk of the financial instrument has increased significantly since initial recognition, but the financial asset is not considered credit-impaired or doubtful;
- Lifetime expected credit losses for credit-impaired or doubtful financial assets (“stage 3”): The loss allowance is also measured for an amount equal to the lifetime expected credit losses.

This general model is applied to all instruments within the scope of IFRS 9 impairment, except for purchased or originated credit-impaired financial assets and instruments for which a simplified model is used (see below).

The IFRS 9 expected credit loss approach is symmetrical, *i.e.* if lifetime expected credit losses have been recognised in a previous reporting period, and if it is assessed in the current reporting period that there is no longer any significant increase in credit risk since initial recognition, the loss allowance reverts to a 12-months expected credit loss.

As regards interest income, under “stages 1 and 2”, it is calculated on the gross carrying amount. Under “stage 3”, interest income is calculated on the amortised cost (*i.e.* the gross carrying amount adjusted for the loss allowance).

Definition of default

The definition of default is aligned with the Basel regulatory default definition, with a rebuttable presumption that the default occurs no later than 90 days past due. This definition takes into account the EBA guidelines of 28 September 2016, notably those regarding the thresholds applicable for the counting of past-due and probation periods.

The definition of default is used consistently for assessing the increase in credit risk and measuring expected credit losses.

Credit-impaired or doubtful financial assets

Definition

A financial asset is considered credit-impaired or doubtful and classified in “stage 3” when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred.

At an individual level, objective evidence that a financial asset is credit-impaired includes observable data regarding the following events: the existence of accounts that are more than 90 days past due; knowledge or indications that the borrower is experiencing significant financial difficulties, such that a risk can be considered to have arisen regardless of whether the borrower has missed any payments; concessions with respect to the credit terms granted to the borrower that the lender would not have considered had the borrower not been in financial difficulty (see section *Restructuring of financial assets for financial difficulties*).

Specific cases of purchased or originated credit-impaired assets

In some cases, financial assets are credit-impaired at initial recognition.

For these assets, no loss allowance is recorded on initial recognition. The effective interest rate is calculated taking into account the lifetime expected credit losses in the initial estimated cash flows. Any change in lifetime expected credit losses since initial recognition, positive or negative, is recognised as a loss allowance adjustment in profit or loss.

Simplified model

The simplified approach consists in accounting for a loss allowance corresponding to lifetime expected credit losses since initial recognition, and at each reporting date.

The Group applies this model to trade receivables with a maturity shorter than 12 months.

Significant increase in credit risk

A significant increase in credit risk may be assessed on an individual basis or on a collective basis (by grouping financial instruments according to common credit risk characteristics), taking into account all reasonable and supportable information and comparing the risk of default of the financial instrument at the reporting date with the risk of default of the financial instrument at the date of initial recognition.

Assessment of deterioration is based on the comparison of the probabilities of default derived from the ratings on the date of initial recognition with those existing at the reporting date.

There is also, according to the standard, a rebuttable presumption that the credit risk of an instrument has significantly increased since initial recognition when the contractual payments are more than 30 days past due.

In the consumer credit specialist business, a significant increase in credit risk is also considered when a past due event has occurred within the last 12 months, even if it has since been regularised.

In the context of the health crisis, the granting of moratoria that meet the criteria defined in the EBA guidelines published on 2 April 2020, and amended on 2 December 2020, has not been considered, in isolation, as an indicator of a significant increase in credit risk leading to an automatic transfer to stage 2. The granting of “private” moratoria that meet equivalent criteria to those defined in the EBA guidelines has followed the same treatment. Moratoria do not trigger the counting of past-due days as long as the new payment schedule is respected.

The principles applied to assess the significant increase in credit risk are detailed in note 2.h *Cost of risk*.

Measurement of expected credit losses

Expected credit losses are defined as an estimate of credit losses (*i.e.* the present value of all cash shortfalls) weighted by the probability of occurrence of these losses over the expected life of the financial instruments. They are measured on an individual basis, for all exposures.

In practice, for exposures classified in stage 1 and stage 2, expected credit losses are measured as the product of the probability of default (“PD”), Loss Given Default (“LGD”) and exposure at default (“EAD”), discounted at the effective interest rate of the exposure (EIR). They result from the risk of default within the next 12 months (stage 1), or from the risk of default over the maturity of the facility (stage 2). In the consumer credit specialist business, because of the specificity of credit exposures, the methodology used is based on the probability of transition to term forfeiture, and on discounted loss rates after term forfeiture. These parameters are measured on a statistical basis for homogeneous populations.

For exposures classified in stage 3, expected credit losses are measured as the value, discounted at the effective interest rate, of all cash shortfalls over the life of the financial instrument. Cash shortfalls represent the difference between the cash-flows that are due in accordance with the contract, and the cash-flows that are expected to be received. Where appropriate, the estimate of expected cash flows takes into account a cash flow scenario arising from the sale of the defaulted loans or groups of loans. Proceeds from the sale are recorded net of costs to sell.

The methodology developed is based on existing concepts and methods (in particular the Basel framework) on exposures for which capital requirement for credit risk is measured according to the IRBA methodology. This method is also applied to portfolios for which capital requirement for credit risk is measured according to the standardised approach. Besides, the Basel framework has been adjusted in order to be compliant with IFRS 9 requirements, in particular the use of forward-looking information.

Maturity

All contractual terms of the financial instrument are taken into account, including prepayment, extension and similar options. In the rare cases where the expected life of the financial instrument cannot be estimated reliably, the residual contractual term is used. The standard specifies that the maximum period to consider when measuring expected credit losses is the maximum contractual period. However, for revolving credit cards and overdrafts, in accordance with the exception provided by IFRS 9 for these products, the maturity considered for measuring expected credit losses is the period over which the entity is exposed to credit risk, which may extend beyond the contractual maturity (notice period). For revolving credits and overdrafts to non-retail counterparties, the contractual maturity can be used, for example if the next review date is the contractual maturity as they are individually managed.

Probabilities of Default (PD)

Probability of Default is an estimate of the likelihood of default over a given time horizon.

The determination of the PD is based on the Group’s internal rating system, which is described in chapter 5 of the Universal Registration Document (section 5.4 *Credit risk – Credit risk management policy*). This section describes how environmental, social and governance (ESG) risks are taken into account in credit and rating policies, notably with the introduction of a new tool: the *ESG Assessment*.

The measurement of expected credit losses requires the estimation of both 1-year probabilities of default and lifetime probabilities of default.

1-year PDs are derived from long term average regulatory “through the cycle” PDs to reflect the current situation (“Point in Time” or “PIT”).

Lifetime PDs are determined based on the rating migration matrices reflecting the expected changes in the rating of the exposure until maturity, and the associated probabilities of default.

Loss Given Default (LGD)

Loss Given Default is the difference between contractual cash-flows and expected cash-flows, discounted using the effective interest rate (or an approximation thereof) at the default date. LGD is expressed as a percentage of the Exposure At Default (EAD).

The estimate of expected cash flows takes into account cash flows resulting from the sale of collateral held or other credit enhancements if they are part of the contractual terms and are not accounted for separately by the entity (for example, a mortgage associated with a residential loan), net of the costs of obtaining and selling the collateral.

For guaranteed loans, the guarantee is considered as integral to the loan agreement if it is embedded in the contractual clauses of the loan, or if it was granted concomitantly to the loan, and if the expected reimbursement amount can be attached to a loan in particular (*i.e.* absence of pooling effect by means of a tranching mechanism, or the existence of a global cap for a whole portfolio). In such case, the guarantee is taken into account when measuring the expected credit losses. Otherwise, it is accounted for as a separate reimbursement asset.

The LGD used for IFRS 9 purposes is derived from the Basel LGD parameters. It is adjusted for downturn and conservatism margins (in particular regulatory margins), except for margins for model uncertainties.

Exposure At Default (EAD)

Exposure At Default (EAD) of an instrument is the anticipated outstanding amount owed by the obligor at the time of default. It is determined by the expected payment profile taking into account, depending on the product type: the contractual repayment schedule, expected early repayments and expected future drawings for revolving facilities.

Forward-looking information

The amount of expected credit losses is measured on the basis of probability-weighted scenarios, in view of past events, current conditions and reasonable and supportable economic forecasts.

The principles applied to take into account forward-looking information when measuring expected credit losses are detailed in note 2.h *Cost of risk*.

Write-offs

A write-off consists in reducing the gross carrying amount of a financial asset when there are no longer reasonable expectations of recovering that financial asset in its entirety or a portion thereof, or when it has been fully or partially forgiven. The write-off is recorded when all other means available to the Bank for recovering the receivables or guarantees have failed, and also generally depends on the context specific to each jurisdiction.

If the amount of loss on write-off is greater than the accumulated loss allowance, the difference is recognised as an additional impairment loss in "Cost of risk". For any recovery once the financial asset (or part thereof) is no longer recognised on the balance sheet, the amount received is recorded as a gain in "Cost of risk".

Recoveries through the repossession of the collateral

When a loan is secured by a financial or a non-financial asset serving as a guarantee and the counterparty is in default, the Group may decide to exercise the guarantee and, depending on the jurisdiction, it may then become owner of the asset. In such a situation, the loan is written-off against the asset received as collateral.

Once ownership of the asset is effective, it is recognised at fair value and classified according to the intent of use.

Restructuring of financial assets for financial difficulties

A restructuring due to the borrower's financial difficulties is defined as a change in the terms and conditions of the initial transaction that the Group is considering only for economic or legal reasons related to the borrower's financial difficulties.

For restructurings not resulting in derecognition of the financial asset, the restructured asset's gross carrying amount is reduced to the discounted amount, using the original effective interest rate of the asset, of the new expected future flows. The change in the gross carrying amount of the asset is recorded in the income statement in "Cost of risk".

The existence of a significant increase in credit risk for the financial instrument is then assessed by comparing the risk of default after the restructuring (under the revised contractual terms) and the risk of default at the initial recognition date (under the original contractual terms). In order to demonstrate that the criteria for recognising lifetime expected credit losses are no longer met, good payment behaviour will have to be observed over a certain period of time.

When the restructuring consists of a partial or total exchange against other substantially different assets (for example, the exchange of a debt instrument against an equity instrument), it results in the extinction of the original asset and the recognition of the assets remitted in exchange, measured at their fair value at the date of exchange. The difference in value is recorded in the income statement in "Cost of risk".

As a reminder, in response to the health crisis, several moratoria have been granted to clients. These moratoria mostly consisted in payment suspension of a few months, with additional interest that may or not continue to accrue during the suspension period. Accordingly, the modification was generally considered as not substantial. The associated discount (linked to the absence of interest accruing, or interest accruing at a rate that was lower than the EIR of the loan) was therefore recognised in NBI, subject to meeting certain criteria[1]. In such cases, the moratorium was considered as not being granted in response to the borrower's financial difficulties, but in response to a temporary liquidity crisis and the credit risk was not considered to have significantly increased.

Modifications to financial assets that are not due to a borrower's financial difficulties, or granted in the context of a moratorium (*i.e.* commercial renegotiations) are generally analysed as the early repayment of the former loan, which is then derecognised, followed by the set-up of a new loan at market conditions. They consist in resetting the interest rate of the loan at market conditions, with the client being in a position to change lender and not encountering any financial difficulties.

[1] *Moratoria qualified as "Covid-19 General moratorium Measure" (i.e. meeting the criteria defined in EBA Guidelines published on 2 April 2020 and amended on 2 December 2020) or similar measures that do not lead to a transfer to stage 3.*

Probation periods

The Group applies observation periods to assess the possible return to a better stage. Accordingly, a 3-month probation period is observed for the transition from stage 3 to stage 2, which is extended to 12 months in the event of restructuring due to financial difficulties.

For the transition from stage 2 to stage 1, a probation period of two years is observed for loans that have been restructured due to financial difficulties.

1.e.6 Cost of risk

Cost of risk includes the following items of profit or loss:

- impairment gains and losses resulting from the accounting of loss allowances for 12-month expected credit losses and lifetime expected credit losses ("stage 1" and "stage 2") relating to debt instruments measured at amortised cost or at fair value through shareholders' equity, loan commitments and financial guarantee contracts that are not recognised at fair value as well as lease receivables, contract assets and trade receivables;
- impairment gains and losses resulting from the accounting of loss allowances relating to financial assets (including those at fair value through profit or loss) for which there is objective evidence of impairment ("stage 3"), write-offs on irrecoverable loans and amounts recovered on loans written-off;
- impairment gains and losses relating to fixed-income securities of insurance entities that are individually impaired (which fall under IAS 39).

It also includes expenses relating to fraud and to disputes inherent to the financing activity.

1.e.7 Financial instruments at fair value through profit or loss

Trading portfolio and other financial assets measured at fair value through profit or loss

The trading portfolio includes instruments held for trading (trading transactions), including derivatives.

Other financial assets measured at fair value through profit or loss include debt instruments that do not meet the "collect" or "collect and sale" business model criterion or that do not meet the cash flow criterion, as well as equity instruments for which the fair value through shareholders' equity option has not been retained.

All those financial instruments are measured at fair value at initial recognition, with transaction costs directly posted in profit or loss. At the reporting date, they are measured at fair value, with changes presented in "Net gain/loss on financial instruments at fair value through profit or loss". Income, dividends, and realised gains and losses on disposal related to held-for-trading transactions are accounted for in the same profit or loss account.

Financial liabilities designated as at fair value through profit or loss

Financial liabilities are recognised under option in this category in the two following situations:

- for hybrid financial instruments containing one or more embedded derivatives which otherwise would have been separated and accounted for separately. An embedded derivative is such that its economic characteristics and risks are not closely related to those of the host contract;
- when using the option enables the entity to eliminate or significantly reduce a mismatch in the measurement and accounting treatment of assets and liabilities that would otherwise arise if they were to be classified in separate categories.

Changes in fair value due to the own credit risk are recognised under a specific heading of shareholders' equity.

1.e.8 Financial liabilities and equity instruments

A financial instrument issued or its various components are classified as a financial liability or equity instrument, in accordance with the economic substance of the legal contract.

Financial instruments issued by the Group are qualified as debt instruments if the entity in the Group issuing the instruments has a contractual obligation to deliver cash or another financial asset to the holder of the instrument. The same applies if the Group is required to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the Group, or to deliver a variable number of the Group's own equity instruments.

Equity instruments result from contracts evidencing a residual interest in an entity's assets after deducting all of its liabilities.

Debt securities and subordinated debt

Debt securities and subordinated debt are measured at amortised cost unless they are recognised at fair value through profit or loss.

Debt securities are initially recognised at the issue value including transaction costs and are subsequently measured at amortised cost using the effective interest method.

Bonds redeemable or convertible into own equity are hybrid instruments that may contain a debt component and an equity component, determined upon initial recognition of the transaction.

Equity instruments

The term "own equity instruments" refers to shares issued by the parent company (BNP Paribas SA) and by its fully consolidated subsidiaries. External costs that are directly attributable to an issue of new shares are deducted from equity net of all related taxes.

Own equity instruments held by the Group, also known as treasury shares, are deducted from consolidated shareholders' equity irrespective of the purpose for which they are held. Gains and losses arising on such instruments are eliminated from the consolidated profit and loss account.

When the Group acquires equity instruments issued by subsidiaries under the exclusive control of BNP Paribas, the difference between the acquisition price and the share of net assets acquired is recorded in retained earnings attributable to BNP Paribas shareholders. Similarly, the liability corresponding to put options granted to minority shareholders in such subsidiaries, and changes in the value of that liability, are offset against minority interests, with any surplus offset against retained earnings attributable to BNP Paribas shareholders. Until these options have been exercised, the portion of net income attributable to minority interests is allocated to minority interests in the profit and loss account. A decrease in the Group's interest in a fully consolidated subsidiary is recognised in the Group's accounts as a change in shareholders' equity.

Financial instruments issued by the Group and classified as equity instruments (*e.g.* Undated Super Subordinated Notes) are presented in the balance sheet in "Capital and retained earnings".

Distributions from a financial instrument classified as an equity instrument are recognised directly as a deduction from equity. Similarly, the transaction costs of an instrument classified as equity are recognised as a deduction from shareholders' equity.

Own equity instrument derivatives are treated as follows, depending on the method of settlement:

- as equity instruments if they are settled by physical delivery of a fixed number of own equity instruments for a fixed amount of cash or other financial asset. Such instruments are not revalued;
- as derivatives if they are settled in cash or by choice by physical delivery of the shares or in cash. Changes in value of such instruments are taken to the profit and loss account.

If the contract includes an obligation, whether contingent or not, for the bank to repurchase its own shares, the bank recognises the debt at its present value with an offsetting entry in shareholders' equity.

1.e.9 Hedge accounting

The Group retained the option provided by the standard to maintain the hedge accounting requirements of IAS 39 until the future standard on macro-hedging is entered into force. Furthermore, IFRS 9 does not explicitly address the fair value hedge of the interest rate risk on a portfolio of financial assets or liabilities. The provisions in IAS 39 for these portfolio hedges, as adopted by the European Union, continue to apply.

Derivatives contracted as part of a hedging relationship are designated according to the purpose of the hedge.

Fair value hedges are particularly used to hedge interest rate risk on fixed-rate assets and liabilities, both for identified financial instruments (securities, debt issues, loans, borrowings) and for portfolios of financial instruments (in particular, demand deposits and fixed-rate loans).

Cash flow hedges are particularly used to hedge interest rate risk on floating-rate assets and liabilities, including rollovers, and foreign exchange risks on highly probable forecast foreign currency revenues.

At the inception of the hedge, the Group prepares formal documentation which details the hedging relationship, identifying the instrument, or portion of the instrument, or portion of risk that is being hedged, the hedging strategy and the type of risk hedged, the hedging instrument, and the methods used to assess the effectiveness of the hedging relationship.

On inception and at least quarterly, the Group assesses, in consistency with the original documentation, the actual (retrospective) and expected (prospective) effectiveness of the hedging relationship. Retrospective effectiveness tests are designed to assess whether the ratio of actual changes in the fair value or cash flows of the hedging instrument to those in the hedged item is within a range of 80% to 125%. Prospective effectiveness tests are designed to ensure that expected changes in the fair value or cash flows of the derivative over the residual life of the hedge adequately offset those of the hedged item. For highly probable forecast transactions, effectiveness is assessed largely on the basis of historical data for similar transactions.

Under IAS 39 as adopted by the European Union, which excludes certain provisions on portfolio hedging, interest rate risk hedging relationships based on portfolios of assets or liabilities qualify for fair value hedge accounting as follows:

- the risk designated as being hedged is the interest rate risk associated with the interbank rate component of interest rates on commercial banking transactions (loans to customers, savings accounts and demand deposits);
- the instruments designated as being hedged correspond, for each maturity band, to a portion of the interest rate gap associated with the hedged underlying;
- the hedging instruments used consist exclusively of "plain vanilla" swaps;

- prospective hedge effectiveness is established by the fact that all derivatives must, on inception, have the effect of reducing interest rate risk in the portfolio of hedged underlying. Retrospectively, a hedge will be disqualified from hedge accounting once a shortfall arises in the underlying specifically associated with that hedge for each maturity band (due to prepayment of loans or withdrawals of deposits).

The accounting treatment of derivatives and hedged items depends on the hedging strategy.

In a fair value hedging relationship, the derivative instrument is remeasured at fair value in the balance sheet, with changes in fair value recognised in profit or loss in “Net gain/loss on financial instruments at fair value through profit or loss”, symmetrically with the remeasurement of the hedged item to reflect the hedged risk. In the balance sheet, the fair value remeasurement of the hedged component is recognised in accordance with the classification of the hedged item in the case of a hedge of identified assets and liabilities, or under “Remeasurement adjustment on interest rate risk hedged portfolios” in the case of a portfolio hedging relationship.

If a hedging relationship ceases or no longer fulfils the effectiveness criteria, the hedging instrument is transferred to the trading book and accounted for using the treatment applied to this category. In the case of identified fixed-income instruments, the remeasurement adjustment recognised in the balance sheet is amortised at the effective interest rate over the remaining life of the instrument. In the case of interest rate risk hedged fixed-income portfolios, the adjustment is amortised on a straight-line basis over the remainder of the original term of the hedge. If the hedged item no longer appears in the balance sheet, in particular due to prepayments, the adjustment is taken to the profit and loss account immediately.

In a cash flow hedging relationship, the derivative is measured at fair value in the balance sheet, with changes in fair value taken to shareholders’ equity on a separate line, “Changes in fair value recognised directly in equity”. The amounts taken to shareholders’ equity over the life of the hedge are transferred to the profit and loss account under “Net interest income” as and when the cash flows from the hedged item impact profit or loss. The hedged items continue to be accounted for using the treatment specific to the category to which they belong.

If the hedging relationship ceases or no longer fulfils the effectiveness criteria, the cumulative amounts recognised in shareholders’ equity as a result of the remeasurement of the hedging instrument remain in equity until the hedged transaction itself impacts profit or loss, or until it becomes clear that the transaction will not occur, at which point they are transferred to the profit and loss account.

If the hedged item ceases to exist, the cumulative amounts recognised in shareholders’ equity are immediately taken to the profit and loss account.

Whatever the hedging strategy used, any ineffective portion of the hedge is recognised in the profit and loss account under “Net gain/loss on financial instruments at fair value through profit or loss”.

Hedges of net foreign currency investments in subsidiaries and branches are accounted for in the same way as cash flow hedges. Hedging instruments may be foreign exchange derivatives or any other non-derivative financial instrument.

1.e.10 Determination of fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants in the principal market or most advantageous market, at the measurement date.

The Group determines the fair value of financial instruments either by using prices obtained directly from external data or by using valuation techniques. These valuation techniques are primarily market and income approaches encompassing generally accepted models (*e.g.* discounted cash flows, Black-Scholes model, and interpolation techniques). They maximise the use of observable inputs and minimise the use of unobservable inputs. They are calibrated to reflect current market conditions and valuation adjustments are applied as appropriate, when some factors such as model, liquidity and credit risks are not captured by the models or their underlying inputs but are nevertheless considered by market participants when setting the exit price.

The unit of measurement is the individual financial asset or financial liability but a portfolio-based measurement can be elected, subject to certain conditions. Accordingly, the Group retains this portfolio-based measurement exception to determine the fair value when some group of financial assets and financial liabilities and other contracts within the scope of the standard relating to financial instruments with substantially similar and offsetting market risks or credit risks are managed on the basis of a net exposure, in accordance with the documented risk management strategy.

Assets and liabilities measured or disclosed at fair value are categorised into the three following levels of the fair value hierarchy:

- Level 1: fair values are determined using directly quoted prices in active markets for identical assets and liabilities. Characteristics of an active market include the existence of a sufficient frequency and volume of activity and of readily available prices;
- Level 2: fair values are determined based on valuation techniques for which significant inputs are observable market data, either directly or indirectly. These techniques are regularly calibrated and the inputs are corroborated with information from active markets;
- Level 3: fair values are determined using valuation techniques for which significant inputs are unobservable or cannot be corroborated by market-based observations, due for instance to illiquidity of the instrument and significant model risk. An unobservable input is a parameter for which there are no market data available and that is therefore derived from proprietary assumptions about what other market participants would consider when assessing fair value. The assessment of whether a product is illiquid or subject to significant model risks is a matter of judgment.

The level in the fair value hierarchy within which the asset or liability is categorised in its entirety is based upon the lowest level input that is significant to the entire fair value.

For financial instruments disclosed in Level 3 of the fair value hierarchy, and marginally some instruments disclosed in Level 2, a difference between the transaction price and the fair value may arise at initial recognition. This “Day One Profit” is deferred and released to the profit and loss account over the period during which the valuation parameters are expected to remain non-observable. When parameters that were originally non-observable become observable, or when the valuation can be substantiated in comparison with recent similar transactions in an active market, the unrecognised portion of the day one profit is released to the profit and loss account.

1.e.11 Derecognition of financial assets and financial liabilities

Derecognition of financial assets

The Group derecognises all or part of a financial asset when the contractual rights to the cash flows of the asset expire, or when the Group transfers the asset – either on the basis of a transfer of the contractual rights to its cash flows, or by retaining the contractual rights to receive the cash flows of the asset while assuming an obligation to pay the cash flows of the asset under an eligible pass-through arrangement – as well as substantially all the risks and rewards of the asset.

Where the Group has transferred the cash flows of a financial asset but has neither transferred nor retained substantially all the risks and rewards of ownership of the financial asset and has not in practice retained control of the financial asset, the Group derecognises the financial asset and then records separately, if necessary, an asset or liability representing the rights and obligations created or held as part of the transfer of the asset. If the Group has retained control of the financial asset, it maintains it on its balance sheet to the extent of its continuing involvement in that asset.

Upon the derecognition of a financial asset in its entirety, a gain or loss on disposal is recognised in the profit and loss account for an amount equal to the difference between the carrying amount of the asset and the value of the consideration received, adjusted where appropriate for any unrealised gain or loss previously recognised directly in equity.

If all these conditions are not met, the Group retains the asset in its balance sheet and recognises a liability for the obligations arising on the transfer of the asset.

Derecognition of financial liabilities

The Group derecognises all or part of a financial liability when the liability is extinguished, *i.e.* when the obligation specified in the contract is extinguished, cancelled or expired. A financial liability may also be derecognised in the event of a substantial change in its contractual terms or if exchanged with the lender for an instrument with substantially different contractual terms.

Repurchase agreements and securities lending/borrowing

Securities temporarily sold under repurchase agreements continue to be recognised in the Group’s balance sheet in the category of securities to which they belong. The corresponding liability is recognised at amortised cost under the appropriate “Financial liabilities at amortised cost” category on the balance sheet, except in the case of repurchase agreements contracted for trading purposes, for which the corresponding liability is recognised in “Financial liabilities at fair value through profit or loss”.

Securities temporarily acquired under reverse repurchase agreements are not recognised in the Group’s balance sheet. The corresponding receivable is recognised at amortised cost under the appropriate “Financial assets at amortised cost” category in the balance sheet, except in the case of reverse repurchase agreements contracted for trading purposes, for which the corresponding receivable is recognised in “Financial assets at fair value through profit or loss”.

Securities lending transactions do not result in derecognition of the lent securities, and securities borrowing transactions do not result in recognition of the borrowed securities on the balance sheet. In cases where the borrowed securities are subsequently sold by the Group, the obligation to deliver the borrowed securities on maturity is recognised on the balance sheet under “Financial liabilities at fair value through profit or loss”.

1.e.12 Offsetting financial assets and financial liabilities

A financial asset and a financial liability are offset and the net amount presented in the balance sheet if, and only if, the Group has a legally enforceable right to set off the recognised amounts, and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Repurchase agreements and derivatives that meet the two criteria set out in the accounting standard are offset in the balance sheet.

1.f ACCOUNTING STANDARDS SPECIFIC TO INSURANCE ACTIVITIES

The specific accounting policies and valuation rules relating to assets and liabilities generated by insurance contracts and financial contracts with a discretionary participation feature written by fully consolidated insurance companies are retained for the purposes of the consolidated financial statements. These policies comply with IFRS 4.

The amendment to IFRS 4 "Insurance Contracts" published by the IASB on 25 June 2020 provides the option for entities that predominantly undertake insurance activities to defer the effective date of IFRS 9 application until 1 January 2023 in line with the deferral of the mandatory application date for IFRS 17 "Insurance Contracts".

The effect of such a deferral is that those entities may continue to report their financial statements under the existing standard IAS 39.

This temporary exemption from IFRS 9, limited to groups that predominantly undertake insurance activities according to the IASB amendment, has been extended to the insurance segment of financial conglomerates as defined by the Directive 2002/87/EC as adopted by the European Union. This exemption is subject to certain conditions, notably the absence of internal transfers of financial instruments, other than financial instruments that are measured at fair value through profit or loss, between insurance entities and other entities of the financial conglomerate.

BNP Paribas Group applies this amendment to all its insurance entities, including funds related to this activity, which will apply IAS 39 "Financial instruments: Recognition and Measurement" until 31 December 2022.

All other insurance company assets and liabilities are accounted for using the policies applied to the Group's assets and liabilities generally and are included in the relevant balance sheet and profit and loss account headings in the consolidated financial statements.

1.f.1 Profit and loss account

Income and expenses recognised under insurance contracts issued by the Group are presented in the income statement under "Net income from insurance activities".

This heading in the income statement includes premiums earned, net gain in investment contracts with no discretionary participation feature and other services, net investment income (including income on investment property and impairment on shares and other equity instruments), technical charges related to contracts; (including policyholders' surplus reserve), net charges from ceded reinsurance and external charges related to contracts (including commissions).

Other income and expenses relating to insurance activities (*i.e.* recorded by insurance entities) are presented in the other income statement headings according to their nature.

1.f.2 Financial investments and other assets related to insurance activities

Financial investments and other assets related to insurance activities mainly include:

- investments by insurance entities in financial instruments that are recognised in accordance with the principles of IAS 39, which include investments representing technical reserves of insurance activities and notably unit-linked contracts;
- derivative instruments with a positive fair value. Group insurance entities underwrite derivative instruments for hedging purposes;
- investment properties;
- equity method investments;
- reinsurers' share in liabilities arising from insurance and investment contracts; and
- policyholders' surplus reserve.

Investments in financial instruments

Financial investments held by the Group's insurance entities are classified in one of the four categories provided for in IAS 39: Financial assets at fair value through profit or loss, held-to-maturity financial assets, loans and receivables and available-for-sale financial assets.

Financial assets at fair value through profit or loss

The category 'Financial assets at fair value through profit or loss' includes derivatives and financial assets that the Group has elected to recognise and measure at fair value through profit or loss at inception, in accordance with the option offered by IAS 39.

Financial assets may be designated at fair value through profit or loss in the following cases (in accordance with IAS 39):

- hybrid financial instruments containing one or more embedded derivatives which otherwise would have been separated and accounted for separately. An embedded derivative is such that its economic characteristics and risks are not closely related to those of the host contract;
- where using the option enables the entity to eliminate or significantly reduce a mismatch in the measurement and accounting treatment of assets and liabilities that would arise if they were to be classified in separate accounting categories;
- when the group of financial assets and/or financial liabilities is managed and measured on the basis of fair value, in accordance with a documented risk management and investment strategy.

Investments held in respect of insurance or investment contracts where the financial risk is borne by policyholders (unit-linked contracts) are recognised at fair value option through profit or loss.

When the Group measures at fair value through profit or loss investments made in respect of its insurance activities in entities over which it exercises significant influence or joint control, these investments are presented under the line "Financial assets at fair value through profit or loss" (see note 1.b.2).

Financial instruments classified in this category are initially recognised at their fair value, with transaction costs being directly recognised in the income statement.

At the closing date, they are valued at their fair value.

Changes in value compared to the last valuation, income, dividends and realised gains and losses are presented under "Net income from insurance activities" and under "Net gain on financial instruments at fair value through profit or loss".

Loans and advances

Fixed or determinable income securities, which are not quoted in an active market, other than those for which the holder may not recover substantially all of its initial investment for reasons other than credit deterioration, are classified as "Loans and receivables" when they do not meet the conditions for classification as financial assets at fair value through profit or loss.

Loans and receivables are initially recognised at their fair value or equivalent, which generally corresponds to the net amount originally paid.

Loans and receivables are subsequently measured at amortised cost using the effective interest method and net of repayments of principal and interest.

Interest is calculated using the effective interest method, which includes interest, transaction costs and commissions included in their initial value and is presented under "Net income from insurance activities" and under sub-heading "Net gain on financial instruments at amortised cost".

Impairment losses recognised when there is objective evidence of impairment related to an event subsequent to the acquisition of the asset are presented under "Cost of risk".

Held-to-maturity financial assets

"Held-to-maturity financial assets" include debt securities, with fixed maturity, that the Group has the intention and ability to hold until maturity.

Securities classified in this category are recognised at amortised cost using the effective interest method.

Income received on these securities is presented under "Net income from insurance activities" and under sub-heading "Net gain on financial instruments at amortised cost". Impairment losses recognised when there is objective evidence of impairment related to an event subsequent to the acquisition of the asset are presented under "Cost of risk".

Available-for-sale financial assets

The category "Available-for-sale financial assets" includes debt or equity securities that do not fall within the previous three categories.

Assets included in the available-for-sale category are initially recorded at fair value, plus transaction costs where material. At the end of the reporting period, they are valued at their fair value and the changes in the latter, excluding accrued income, are presented under a specific heading of equity. On disposal of the securities, these unrealised gains or losses previously recognised in equity are reclassified in the income statement under the heading "Net income from insurance activities".

Income recognised using the effective interest method on debt securities, dividends received and impairment (in the event of a significant or lasting decline in the value of the securities) of equity securities are presented under "Net income from insurance activities" and under section "Net gain on available-for-sale financial assets". Impairment losses on debt securities are presented under "Cost of risk".

Investment property

Investment property corresponds to buildings held directly by insurance companies and property companies controlled.

Investment property, except for those used for unit-linked contracts, is recognised at cost and follows the accounting methods of the assets described elsewhere.

Investment property, held in respect of unit-linked contracts, is valued at fair value or equivalent, with changes in value recognised in the income statement.

Equity method investments

Investments in entities or real estate funds over which the Group exercises significant influence or joint control and for which the equity method is applied are recognised in the line "Equity method investments".

1.f.3 Technical reserves and other insurance liabilities

The item "Technical reserves and other insurance liabilities" includes:

- commitments to policyholders and beneficiaries of contracts, which include technical reserves for insurance contracts subject to significant insurance hazard (mortality, longevity, disability, incapacity, *etc.*) and technical liabilities of investment contracts with a discretionary profit-sharing feature, falling within IFRS 4. The discretionary participation clause grants life insurance policyholders the right to receive, in addition to the guaranteed remuneration, a share of the financial results achieved;
- other insurance liabilities related to unit-linked contracts that fall within the scope of IAS 39 (*i.e.* investment contracts with no discretionary participating features);
- policyholders' surplus reserve;
- liabilities arising from insurance and reinsurance operations, including liabilities due to policyholders;
- financial derivative instruments of insurance activities carried at fair value through profit or loss, the fair value of which is negative. Group insurance entities underwrite derivative instruments for hedging purposes.

Financial liabilities that are not insurance liabilities (*e.g.* subordinated debt) fall under IAS 39. They are presented in "Financial liabilities at amortised cost".

Insurance and reinsurance contracts and investment contracts with discretionary participating features

Life insurance guarantees cover mainly death risk (term life insurance, annuities, repayment of loans or guaranteed minimum on unit-linked contracts) and, regarding borrowers' insurance, to disability, incapacity and unemployment risks.

For life insurance, technical reserves consist mainly of mathematical reserves that corresponds as a minimum, to the surrender value of contracts and surplus reserve.

The policyholders' surplus reserve also includes amounts resulting from the application of shadow accounting representing the interest of policyholders, mainly within French life insurance subsidiaries, in unrealised gains and losses on assets where the benefit paid under the policy is linked to the return on those assets. This interest is an average derived from stochastic analyses of unrealised gains and losses attributable to policyholders in various scenarios.

A capitalisation reserve is set up in individual statutory accounts of French life-insurance companies on the sale of amortisable securities in order to defer part of the net realised gain and hence maintain the yield to maturity on the portfolio of admissible assets. In the consolidated financial statements, this reserve is reclassified into "Policyholders' surplus" on the liabilities side of the consolidated balance sheet, to the extent that it is highly probable it will be used.

Non-life technical reserves consist of unearned premium reserves (corresponding to the portion of written premiums relating to future periods) and outstanding claims reserves, inclusive of claims handling costs.

At the reporting date, a liability adequacy test is performed: The level of technical reserves (net of acquisition costs outstanding) is compared to the average value of future cash flows resulting from stochastic calculations. Related adjustment to technical reserves, if any, is taken to the profit and loss account for the period.

In the event of an unrealised loss on shadow accounted assets, a policyholders' loss reserve is recognised on the assets side of the consolidated balance sheet in an amount equal to the probable deduction from the policyholders' future profit share. This policyholders' loss reserve is presented with the other assets of insurance activities under "Financial investments and other assets related to insurance activities". The recoverability of the policyholders' loss reserve is assessed prospectively, taking into account policyholders' surplus reserves recognised elsewhere, capital gains on financial assets that are not shadow accounted due to accounting elections made (held-to-maturity financial assets and property investments measured at cost) and the company's ability and intention to hold the assets carrying the unrealised loss.

Investment contracts with no discretionary participating features

Investment contracts with no discretionary participating features correspond mainly to unit-linked contracts that do not meet the definition of insurance and investment contracts with discretionary participating features.

Liabilities arising from unit-linked contracts are measured by reference to the fair value of the assets backing these contracts at the closing date.

1.g PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS

Property, plant and equipment and intangible assets shown in the consolidated balance sheet are composed of assets used in operations and investment property. Rights-of-use related to leased assets (see note 1.h.2) are presented by the lessee within fixed assets in the same category as similar assets held.

Assets used in operations are those used in the provision of services or for administrative purposes, and include non-property assets leased by the Group as lessor under operating leases.

Investment property comprises property assets held to generate rental income and capital gains.

Investment property is recognised at cost, with the exception of those representing insurance or investment contracts whose risk is borne by policyholders (unit-linked contracts), which are measured at fair value through profit or loss and presented in the balance sheet under “Financial investments and other assets related to insurance activities” (note 1.f.2).

Property, plant and equipment and intangible assets are initially recognised at purchase price plus directly attributable costs, together with borrowing costs where a long period of construction or adaptation is required before the asset can be brought into service.

Software developed internally by the BNP Paribas Group that fulfils the criteria for capitalisation is capitalised at direct development cost, which includes external costs and the labour costs of employees directly attributable to the project.

Subsequent to initial recognition, property, plant and equipment and intangible assets are measured at cost less accumulated depreciation or amortisation and any impairment losses.

The depreciable amount of property, plant and equipment and intangible assets is calculated after deducting the residual value of the asset. Only assets leased by the Group as the lessor under operating leases are presumed to have a residual value, as the useful life of property, plant and equipment and intangible assets used in operations is generally the same as their economic life.

Property, plant and equipment and intangible assets are depreciated or amortised using the straight-line method over the useful life of the asset. Depreciation and amortisation expense is recognised in the profit and loss account under “Depreciation, amortisation and impairment of property, plant and equipment and intangible assets”.

Where an asset consists of a number of components which may require replacement at regular intervals, or which have different uses or generate economic benefits at different rates, each component is recognised separately and depreciated using a method appropriate to that component. The BNP Paribas Group has adopted the component-based approach for property used in operations and for investment property.

The depreciation periods used for office property are as follows: 80 years or 60 years for the shell (for prime and other property respectively); 30 years for facades; 20 years for general and technical installations; and 10 years for fixtures and fittings.

Software is amortised, depending on its type, over periods of no more than 8 years in the case of infrastructure developments and 3 years or 5 years in the case of software developed primarily for the purpose of providing services to customers.

Software maintenance costs are expensed as incurred. However, expenditure that is regarded as upgrading the software or extending its useful life is included in the initial acquisition or production cost.

Depreciable property, plant and equipment and intangible assets are tested for impairment if there is an indication of potential impairment at the balance sheet date. Non-depreciable assets are tested for impairment at least annually, using the same method as for goodwill allocated to cash-generating units.

If there is an indication of impairment, the new recoverable amount of the asset is compared with the carrying amount. If the asset is found to be impaired, an impairment loss is recognised in the profit and loss account. This loss is reversed in the event of a change in the estimated recoverable amount or if there is no longer an indication of impairment. Impairment losses are taken to the profit and loss account in “Depreciation, amortisation and impairment of property, plant and equipment and intangible assets”.

Gains and losses on disposals of property, plant and equipment and intangible assets used in operations are recognised in the profit and loss account in “Net gain on non-current assets”.

Gains and losses on disposals of investment property are recognised in the profit and loss account in “Income from other activities” or “Expense on other activities”.

1.h LEASES

Group companies may either be the lessee or the lessor in a lease agreement.

1.h.1 Group company as lessor

Leases contracted by the Group as lessor are categorised as either finance leases or operating leases.

Finance leases

In a finance lease, the lessor transfers substantially all the risks and rewards of ownership of an asset to the lessee. It is treated as a loan made to the lessee to finance the purchase of the asset.

The present value of the lease payments, plus any residual value, is recognised as a receivable. The net income earned from the lease by the lessor is equal to the amount of interest on the loan, and is taken to the profit and loss account under “Interest income”. The lease payments are spread over the lease term, and are allocated to reduction of the principal and to interest such that the net income reflects a constant rate of return on the net investment outstanding in the lease. The rate of interest used is the rate implicit in the lease.

Impairments of lease receivables are determined using the same principles as applied to financial assets measured at amortised cost.

Operating leases

An operating lease is a lease under which substantially all the risks and rewards of ownership of an asset are not transferred to the lessee.

The asset is recognised under property, plant and equipment in the lessor's balance sheet and depreciated on a straight-line basis over its useful life. The depreciable amount excludes the residual value of the asset. The lease payments are taken to the profit and loss account in full on a straight-line basis over the lease term. Lease payments and depreciation expenses are taken to the profit and loss account under "Income from other activities" and "Expense on other activities".

1.h.2 Group company as lessee

Lease contracts concluded by the Group, with the exception of contracts whose term is shorter than or equal to 12 months and low-value contracts, are recognised in the balance-sheet in the form of a right-of-use on the leased asset presented under fixed assets, along with the recognition of a financial liability for the rent and other payments to be made over the leasing period. The right of use assets is amortised on a straight-line basis and the financial liabilities are amortised on an actuarial basis over the lease period. Dismantling costs corresponding to specific and significant fittings and fixtures are included in the initial right-of-use estimation, in counterparty of a provision liability.

The key hypothesis used by the Group for the measurement of rights of use and lease liabilities are the following:

- the lease term corresponds to the non-cancellable period of the contract, together with periods covered by an extension option if the Group is reasonably certain to exercise this option. In France, the standard commercial lease contract is the so-called "three, six, nine" contract for which the maximum period of use is nine years, with a first non-cancellable period of three years followed by two optional extension periods of three years each; hence, depending on the assessment, the lease term can be of three, six or nine years. When investments like fittings or fixtures are performed under the contract, the lease term is aligned with their useful lives. For tacitly renewable contracts, with or without an enforceable period, related right of use and lease liabilities are recognised based on an estimate of the reasonably foreseeable economic life of the contracts, minimal occupation period included;
- the discount rate used to measure the right of use and the lease liability is assessed for each contract as the interest rate implicit in the lease, if that rate can be readily determined, or more generally based on the incremental borrowing rate of the lessee at the date of signature. The incremental borrowing rate is determined considering the average term (duration) of the contract;
- when the contract is modified, a new assessment of the lease liability is made taking into account the new residual term of the contract, and therefore a new assessment of the right of use and the lease liability is established.

1.i ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

Where the Group decides to sell assets or a group of assets and liabilities and it is highly probable that the sale will occur within 12 months, these assets are shown separately in the balance sheet, on the line "Assets held for sale". Any liabilities associated with these assets are also shown separately in the balance sheet, on the line "Liabilities associated with assets held for sale". When the Group is committed to a sale plan involving loss of control of a subsidiary and the sale is highly probable within 12 months, all the assets and liabilities of that subsidiary are classified as held for sale.

Once classified in this category, assets and the group of assets and liabilities are measured at the lower of carrying amount or fair value less costs to sell.

Such assets are no longer depreciated. If an asset or group of assets and liabilities becomes impaired, an impairment loss is recognised in the profit and loss account. Impairment losses may be reversed.

Where a group of assets and liabilities held for sale represents a cash generating unit, it is categorised as a "discontinued operation". Discontinued operations include operations that are held for sale, operations that have been shut down, and subsidiaries acquired exclusively with a view to resell.

In this case, gains and losses related to discontinued operations are shown separately in the profit and loss account, on the line "Net income from discontinued activities". This line includes after tax profits or losses of discontinued operations, after tax gain or loss arising from remeasurement at fair value less costs to sell, and after-tax gain or loss on disposal of the operation.

1.j EMPLOYEE BENEFITS

Employee benefits are classified in one of four following categories:

- short-term benefits, such as salary, annual leave, incentive plans, profit-sharing and additional payments;
- long-term benefits, including compensated absences, long-service awards, and other types of cash-based deferred compensation;
- termination benefits;
- post-employment benefits, including top-up banking industry pensions and retirement bonuses in France and pension plans in other countries, some of which are operated through pension funds.

Short-term benefits

The Group recognises an expense when it has used services rendered by employees in exchange for employee benefits.

Long-term benefits

These are benefits, other than short-term benefits, post-employment benefits and termination benefits. This relates, in particular, to compensation deferred for more than 12 months and not linked to the BNP Paribas share price, which is accrued in the financial statements for the period in which it is earned.

The actuarial techniques used are similar to those used for defined-benefit post-employment benefits, except that the revaluation items are recognised in the profit and loss account and not in equity.

Termination benefits

Termination benefits are employee benefits payable in exchange for the termination of an employee's contract as a result of either a decision by the Group to terminate a contract of employment before the legal retirement age, or a decision by an employee to accept voluntary redundancy in exchange for these benefits. Termination benefits due more than 12 months after the balance sheet date are discounted.

Post-employment benefits

In accordance with IFRS, the BNP Paribas Group draws a distinction between defined-contribution plans and defined-benefit plans.

Defined-contribution plans do not give rise to an obligation for the Group and do not require a provision. The amount of the employer's contributions payable during the period is recognised as an expense.

Only defined-benefit schemes give rise to an obligation for the Group. This obligation must be measured and recognised as a liability by means of a provision.

The classification of plans into these two categories is based on the economic substance of the plan, which is reviewed to determine whether the Group has a legal or constructive obligation to pay the agreed benefits to employees.

Post-employment benefit obligations under defined-benefit plans are measured using actuarial techniques that take demographic and financial assumptions into account.

The net liability recognised with respect to post-employment benefit plans is the difference between the present value of the defined-benefit obligation and the fair value of any plan assets.

The present value of the defined-benefit obligation is measured on the basis of the actuarial assumptions applied by the Group, using the projected unit credit method. This method takes into account various parameters, specific to each country or Group entity, such as demographic assumptions, the probability that employees will leave before retirement age, salary inflation, a discount rate, and the general inflation rate.

When the value of the plan assets exceeds the amount of the obligation, an asset is recognised if it represents a future economic benefit for the Group in the form of a reduction in future contributions or a future partial refund of amounts paid into the plan.

The annual expense recognised in the profit and loss account under "Salaries and employee benefits", with respect to defined-benefit plans includes the current service cost (the rights vested by each employee during the period in return for service rendered), the net interests linked to the effect of discounting the net defined-benefit liability (asset), the past service cost arising from plan amendments or curtailments, and the effect of any plan settlements.

Remeasurements of the net defined-benefit liability (asset) are recognised in shareholders' equity and are never reclassified to profit or loss. They include actuarial gains and losses, the return on plan assets and any change in the effect of the asset ceiling (excluding amounts included in net interest on the defined-benefit liability or asset).

1.k SHARE-BASED PAYMENTS

Share-based payment transactions are payments based on shares issued by the Group, whether the transaction is settled in the form of equity or cash of which the amount is based on trends in the value of BNP Paribas shares.

Stock option and share award plans

The expense related to stock option and share award plans is recognised over the vesting period, if the benefit is conditional upon the grantee's continued employment.

Stock options and share award expenses are recorded under salary and employee benefits expenses, with a corresponding adjustment to shareholders' equity. They are calculated on the basis of the overall plan value, determined at the date of grant by the Board of directors.

In the absence of any market for these instruments, financial valuation models are used that take into account any performance conditions related to the BNP Paribas share price. The total expense of a plan is determined by multiplying the unit value per option or share awarded by the estimated number of options or shares awarded vested at the end of the vesting period, taking into account the conditions regarding the grantee's continued employment.

The only assumptions revised during the vesting period, and hence resulting in a remeasurement of the expense, are those relating to the probability that employees will leave the Group and those relating to performance conditions that are not linked to the price value of BNP Paribas shares.

Share price-linked cash-settled deferred compensation plans

The expense related to these plans is recognised in the year during which the employee rendered the corresponding services.

If the payment of share-based variable compensation is explicitly subject to the employee's continued presence at the vesting date, the services are presumed to have been rendered during the vesting period and the corresponding compensation expense is recognised on a *pro rata* basis over that period. The expense is recognised under salary and employee benefits expenses with a corresponding liability in the balance sheet. It is revised to take into account any non-fulfilment of the continued presence or performance conditions and the change in BNP Paribas share price.

If there is no continued presence condition, the expense is not deferred, but recognised immediately with a corresponding liability in the balance sheet. This is then revised on each reporting date until settlement to take into account any performance conditions and the change in the BNP Paribas share price.

1.l PROVISIONS RECORDED UNDER LIABILITIES

Provisions recorded under liabilities (other than those relating to financial instruments, employee benefits and insurance contracts) mainly relate to restructuring, claims and litigation, fines and penalties.

A provision is recognised when it is probable that an outflow of resources embodying economic benefits will be required to settle an obligation arising from a past event, and a reliable estimate can be made of the amount of the obligation. The amount of such obligations is discounted, where the impact of discounting is material, in order to determine the amount of the provision.

1.m CURRENT AND DEFERRED TAX

The current income tax charge is determined on the basis of the tax laws and tax rates in force in each country in which the Group operates during the period in which the income is generated.

Deferred taxes are recognised when temporary differences arise between the carrying amount of an asset or liability in the balance sheet and its tax base.

Deferred tax liabilities are recognised for all taxable temporary differences other than:

- taxable temporary differences on initial recognition of goodwill;
- taxable temporary differences on investments in enterprises under the exclusive or joint control of the Group, where the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets are recognised for all deductible temporary differences and unused carryforwards of tax losses only to the extent that it is probable that the entity in question will generate future taxable profits against which these temporary differences and tax losses can be offset.

Deferred tax assets and liabilities are measured using the liability method, using the tax rate which is expected to apply to the period when the asset is realised or the liability is settled, based on tax rates and tax laws that have been or will have been enacted by the balance sheet date of that period. They are not discounted.

Deferred tax assets and liabilities are offset when they arise within the same tax group, they fall under the jurisdiction of a single tax authority, and there is a legal right to offset.

As regards the assessment of uncertainty over income tax treatments, the Group adopts the following approach:

- the Group assesses whether it is probable that a taxation authority will accept an uncertain tax treatment;
- any uncertainty shall be reflected when determining the taxable profit (loss) by considering either the most likely amount (having the higher probability of occurrence), or the expected value (sum of the probability-weighted amounts).

Current and deferred taxes are recognised as tax income or expenses in the profit and loss account, except for those relating to a transaction or an event directly recognised in shareholders' equity, which are also recognised in shareholders' equity. This concerns in particular the tax effect of coupons paid on financial instruments issued by the Group and qualified as equity instruments, such as Undated Super Subordinated Notes.

When tax credits on revenues from receivables and securities are used to settle corporate income tax payable for the period, the tax credits are recognised on the same line as the income to which they relate. The corresponding tax expense continues to be carried in the profit and loss account under "Corporate income tax".

1.n CASH FLOW STATEMENT

The cash and cash equivalents balance is composed of the net balance of cash accounts and accounts with central banks, and the net balance of interbank demand loans and deposits.

Changes in cash and cash equivalents related to operating activities reflect cash flows generated by the Group's operations, including those relating to financial investments of insurance activities and negotiable certificates of deposit.

Changes in cash and cash equivalents related to investing activities reflect cash flows resulting from acquisitions and disposals of subsidiaries, associates or joint ventures included in the consolidated Group, as well as acquisitions and disposals of property, plant and equipment excluding investment property and property held under operating leases.

Changes in cash and cash equivalents related to financing activities reflect the cash inflows and outflows resulting from transactions with shareholders, cash flows related to bonds and subordinated debt, and debt securities (excluding negotiable certificates of deposit).

1.o USE OF ESTIMATES IN THE PREPARATION OF THE FINANCIAL STATEMENTS

Preparation of the financial statements requires managers of core businesses and corporate functions to make assumptions and estimates that are reflected in the measurement of income and expense in the profit and loss account and of assets and liabilities in the balance sheet, and in the disclosure of information in the notes to the financial statements. This requires the managers in question to exercise their judgement and to make use of information available at the date of the preparation of the financial statements when making their estimates. The actual future results from operations where managers have made use of estimates may in reality differ significantly from those estimates, mainly according to market conditions. This may have a material effect on the financial statements.

This applies in particular to:

- the analysis of the cash flow criterion for specific financial assets;
- the measurement of expected credit losses. This applies in particular to the assessment of significant increase in credit risk, the models and assumptions used to measure expected credit losses, the determination of the different economic scenarios and their weighting;
- the analysis of renegotiated loans, in order to assess whether they should be maintained on the balance-sheet or derecognised;
- the assessment of an active market, and the use of internally developed models for the measurement of the fair value of financial instruments not quoted in an active market classified in "Financial assets at fair value through equity", or in "Financial instruments at fair value through profit or loss", whether as assets or liabilities, and more generally calculations of the fair value of financial instruments subject to a fair value disclosure requirement;
- the assumptions applied to assess the sensitivity to each type of market risk of the market value of financial instruments and the sensitivity of these valuations to the main unobservable inputs as disclosed in the notes to the financial statements;
- the appropriateness of the designation of certain derivative instruments such as cash flow hedges, and the measurement of hedge effectiveness;
- impairment tests performed on intangible assets;
- the estimation of residual assets values under simple lease agreements. These values are used as a basis for the determination of depreciation as well as any impairment, notably in relation to the effect of environmental considerations on the evaluation of future prices of second-hand vehicles;
- the deferred tax assets;
- the estimation of insurance technical reserves and policyholders' surplus reserves;
- the measurement of uncertainty over income tax treatments and other provisions for contingencies and charges. In particular, while investigations and litigations are ongoing, it is difficult to foresee their outcome and potential impact. Provision estimation is established by taking into account all available information at the date of the preparation of the financial statements, in particular the nature of the dispute, the underlying facts, the ongoing legal proceedings and court decisions, including those related to similar cases. The Group may also use the opinion of experts and independent legal advisers to exercise its judgement.

NOTE 2 NOTES TO THE PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2022

2.a NET INTEREST INCOME

The BNP Paribas Group includes in “Interest income” and “Interest expense” all income and expense calculated using the effective interest method (interest, fees and transaction costs) from financial instruments measured at amortised cost and financial instruments measured at fair value through equity.

These items also include the interest income and expense of non-trading financial instruments the characteristics of which do not allow for recognition at amortised cost or at fair value through equity, as well as of financial instruments that the Group has designated as at fair value through profit or loss. The change in fair value on financial instruments at fair value through profit or loss (excluding accrued interest) is recognised under “Net gain on financial instruments at fair value through profit or loss”.

Interest income and expense on derivatives accounted for as fair value hedges are included with the revenues generated by the hedged item. Similarly, interest income and expense arising from derivatives used to hedge transactions designated as at fair value through profit or loss is allocated to the same accounts as the interest income and expense relating to the underlying transactions.

In the case of a negative interest rates related to loans and receivables or deposits from customers and credit institutions, they are accounted for in interest expense or interest income respectively.

	Year to 31 Dec. 2022			Year to 31 Dec. 2021		
In millions of euros	Income	Expense	Net	Income	Expense	Net
Financial instruments at amortised cost	**34,794**	**(15,507)**	**19,287**	**24,122**	**(7,032)**	**17,090**
Deposits, loans and borrowings	30,749	(11,714)	19,035	21,423	(5,024)	16,399
Repurchase agreements	274	(83)	191	199	(56)	143
Finance leases	1,762	(102)	1,660	1,626	(101)	1,525
Debt securities	2,009		2,009	874		874
Issued debt securities and subordinated debt		(3,608)	(3,608)		(1,851)	(1,851)
Financial instruments at fair value through equity	**738**	**-**	**738**	**851**	**-**	**851**
Financial instruments at fair value through profit or loss (Trading securities excluded)	**59**	**(279)**	**(220)**	**36**	**(163)**	**(127)**
Cash flow hedge instruments	**3,025**	**(1,449)**	**1,576**	**1,982**	**(1,010)**	**972**
Interest rate portfolio hedge instruments	**2,466**	**(2,966)**	**(500)**	**2,527**	**(2,031)**	**496**
Lease liabilities	**-**	**(50)**	**(50)**	**-**	**(44)**	**(44)**
TOTAL INTEREST INCOME/(EXPENSE)	**41,082**	**(20,251)**	**20,831**	**29,518**	**(10,280)**	**19,238**

Interest income on individually impaired loans amounted to EUR 287 million for the year ended 2022, compared to EUR 331 million for the year ended 2021.

The Group subscribed to the TLTRO III (*Targeted Longer-Term Refinancing Operations*) programme, as modified by the Governing Council of the European Central Bank in March 2020, in December 2020 and in October 2022 (see note 4.g). The Group achieved the lending performance thresholds that enabled it to benefit from favourable interest rate conditions applicable for each of the reference period, namely:

- over the two special interest periods (*i.e.* from June 2020 to June 2022): the average deposit facility rate (“DFR”) -50 basis points, or -1%;
- over the next period (*i.e.* from June 2022 to November 2022): the average of the DFR between the TLTRO III initial date of subscription and 22 November 2022, *i.e.* for the main draws, -0.36% for the June 2020 tranche and -0.29% for the March 2021 tranche;

- over the last period (since 23 November 2022): the average of the DFR between 23 November 2022 and the redemption date. The average effective interest rate for the latter period was 1.64% at 31 December 2022.

This floating interest rate is considered as a market rate since it is applicable to all financial institutions meeting the lending criteria defined by the European Central Bank. The effective interest rate of these financial liabilities is determined for each reference period, its two components (reference rate and margin) being adjustable; it corresponds to the nominal interest rate. The addition of the last interest period in October 2022 is part of the European Central Bank's monetary policy and is therefore not considered a contractual amendment according to IFRS 9 but a revision of the market rate.

2.b COMMISSION INCOME AND EXPENSE

	Year to 31 Dec. 2022			Year to 31 Dec. 2021		
In millions of euros	**Income**	**Expense**	**Net**	**Income**	**Expense**	**Net**
Customer transactions	4,772	(1,172)	3,600	4,489	(1,024)	3,465
Securities and derivatives transactions	2,051	(1,578)	473	2,363	(1,628)	735
Financing and guarantee commitments	1,181	(100)	1,081	1,152	(55)	1,097
Asset management and other services	5,425	(337)	5,088	5,912	(748)	5,164
Others	1,193	(1,257)	(64)	1,121	(1,220)	(99)
COMMISSION INCOME/EXPENSE	**14,622**	**(4,444)**	**10,178**	**15,037**	**(4,675)**	**10,362**
of which net commission income related to trust and similar activities through which the Group holds or invests assets on behalf of clients, trusts, pension and personal risk funds or other institutions	*3,248*	*(268)*	*2,980*	*3,333*	*(357)*	*2,976*
of which commission income and expense on financial instruments not measured at fair value through profit or loss	*3,048*	*(370)*	*2,678*	*3,129*	*(337)*	*2,792*

2.c NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Net gain on financial instruments measured at fair value through profit or loss includes all profit and loss items relating to financial instruments held for trading, financial instruments that the Group has designated as at fair value through profit or loss, non-trading equity instruments that the Group did not choose to measure at fair value through equity, as well as debt instruments whose cash flows are not solely repayments of principal and interest on the principal or whose business model is not to collect cash flows nor to collect cash flows and sell the assets.

These income items include dividends on these instruments and exclude interest income and expense from financial instruments designated as at fair value through profit or loss and instruments whose cash flows are not only repayments of principal and interest on the principal or whose business model is not to collect cash flows nor to collect cash flows and sell the assets, which are presented in "Net interest income" (note 2.a).

In millions of euros	**Year to 31 Dec. 2022**	**Year to 31 Dec. 2021**
Financial instruments held for trading	**(2,017)**	**6,293**
Interest rate and credit instruments	(6,014)	(2,633)
Equity financial instruments	(3,268)	5,641
Foreign exchange financial instruments	5,898	2,317
Loans and repurchase agreements	(1,320)	(116)
Other financial instruments	2,687	1,084
Financial instruments designated as at fair value through profit or loss	**11,328**	**281**
Other financial instruments at fair value through profit or loss	**143**	**956**

Impact of hedge accounting	**(96)**	**85**
Fair value hedging derivatives	(9,123)	(2,445)
Hedged items in fair value hedge	9,027	2,530
NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS	**9,358**	**7,615**

Gains and losses on financial instruments designated as at fair value through profit or loss are mainly related to instruments for which changes in value may be compensated by changes in the value of economic hedging derivative financial instruments held for trading.

Net gain on financial instruments held for trading in 2022 and 2021 includes a non-material amount related to the ineffective portion of cash flow hedges.

Potential sources of ineffectiveness can be the differences between hedging instruments and hedged items, notably generated by mismatches in the terms of hedged and hedging instruments, such as the frequency and timing of interest rates resetting, the frequency of payments and the discounting factors, or when hedging derivatives have a non-zero fair value at the inception date of the hedging relationship. Credit valuation adjustments applied to hedging derivatives are also sources of ineffectiveness.

Cumulated changes in fair value related to discontinued cash flow hedge relationships, previously recognised in equity and included in 2022 in profit and loss accounts are not material, whether the hedged item ceased to exist or not.

2.d NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY

In millions of euros	**Year to 31 Dec. 2022**	**Year to 31 Dec. 2021**
Net gain on debt instruments	9	58
Dividend income on equity instruments	129	106
NET GAIN ON FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH EQUITY	**138**	**164**

Interest income from debt instruments is included in note 2.a *Net interest income*, and impairment losses related to potential issuer default are included in note 2.h *Cost of risk*.

2.e NET INCOME FROM INSURANCE ACTIVITIES

In millions of euros	**Year to 31 Dec. 2022**	**Year to 31 Dec. 2021**
Premiums earned	25,810	27,619
Net gain from investment contracts with discretionary participation feature and other services	30	12
Net income from financial investments	(9,280)	14,503
Technical charges related to contracts	(10,008)	(35,848)
Net charges from ceded reinsurance	(405)	(215)
External services expenses	(1,851)	(1,739)
NET INCOME FROM INSURANCE ACTIVITIES	**4,296**	**4,332**

NET INCOME FROM FINANCIAL INVESTMENTS

In millions of euros	**Year to 31 Dec. 2022**	**Year to 31 Dec. 2021**
Net gain on available-for-sale financial assets	1,975	3,082

Interest income and dividends	*2,770*	*2,634*
Additions to impairment provisions	*(57)*	*(10)*
Net disposal gains	*(738)*	*458*
Net gain on financial instruments at fair value through profit or loss	(11,359)	11,163
Net gain on financial instruments at amortised cost	78	118
Investment property income	45	142
Share of earnings of equity-method investments	(4)	1
Other expense	(15)	(3)
NET INCOME FROM FINANCIAL INVESTMENTS	**(9,280)**	**14,503**

2.f NET INCOME FROM OTHER ACTIVITIES

	Year to 31 Dec. 2022			Year to 31 Dec. 2021		
In millions of euros	**Income**	**Expense**	**Net**	**Income**	**Expense**	**Net**
Net income from investment property	58	(30)	28	103	(43)	60
Net income from assets held under operating leases	13,134	(10,365)	2,769	12,426	(10,525)	1,901
Net income from property development activities	773	(653)	120	988	(777)	211
Other net income	1,736	(1,782)	(46)	1,965	(2,084)	(119)
TOTAL NET INCOME FROM OTHER ACTIVITIES	**15,701**	**(12,830)**	**2,871**	**15,482**	**(13,429)**	**2,053**

2.g OTHER OPERATING EXPENSES

In millions of euros	**Year to 31 Dec. 2022**	**Year to 31 Dec. 2021**
External services and other operating expenses	(9,191)	(8,712)
Taxes and contributions(1)	(2,505)	(1,993)
TOTAL OTHER OPERATING EXPENSES	**(11,696)**	**(10,705)**

(1) Contributions to European the resolution fund, including exceptional contributions, amount to EUR 1,256 million for the year ended 2022 compared with EUR 967 million for the year ended 2021.

2.h COST OF RISK

The general model for impairment described in note 1.e.5 used by the Group relies on the following two steps:

- assessing whether there has been a significant increase in credit risk since initial recognition; and
- measuring impairment allowance as either 12-month expected credit losses or lifetime expected credit loss (*i.e.* loss expected at maturity).

Both steps rely on forward-looking information.

Significant increase in credit risk

At 31 December 2022, BNP Paribas revised its criteria for assessing the significant increase in credit risk in line with the recommendations issued by the European Banking Authority and the European Central Bank.

Previously, except for the consumer credit specialist business, the credit risk deterioration was mainly evaluated based on changes in the internal credit rating, an indicator of the average 1-year probability of default through the cycle. In order to fully consider forward-looking information, the new criteria use the probability of default to maturity, which is derived from the internal rating, incorporating the expected consequences of changes in macroeconomic scenarios, as the main indicator.

Under these new criteria, credit risk is assumed to have significantly increased, and the asset is classified in stage 2, if the probability of default to maturity of the instrument has increased at least threefold since its origination. This relative variation criterion is supplemented by an absolute variation criterion of the default probability of 400 basis points.

Furthermore, for all portfolios (except for the consumer credit specialist business):

- the facility is assumed to be in stage 1 when its 1-year "Point in Time" probability of default (PiT PD) is below 0.3% at the reporting date, since changes in probability of default due to credit downgrades in this zone are not material, and therefore not considered "significant";
- when the 1-year PiT PD is greater than 20% at the reporting date, given the Group's credit issuance practices, the deterioration is considered significant, and the facility is classified in stage 2 (as long as the facility is not credit-impaired).

In the consumer credit specialist business, the existence of a potentially regularised payment incident during the last 12 months is considered to be an indication of significant increase in credit risk and the facility is therefore classified in stage 2.

The table below shows a comparison between the previous and the new criteria for assessing the significant increase in credit risk:

		Stage 1 presumption	Deterioration from origination leading to transfer to stage 2	Stage 2 presumption
Previous criteria	Retail	One year probability of default* < 0.25%	$\frac{\text{One year probability of default}}{\text{One year probability of default at origination}} > 4$ **or** Rating downgrade ≥ **6 notches**	One year probability of default > **10%**
	Small and Medium Entreprises	Rating ≤ **4-**	Rating downgrade ≥ **6 notches**	Rating ≥ **9+**
	Large Corporates		Rating downgrade ≥ **3 notches**	
New criteria		One year PiT probability of default** < **0.3%**	$\frac{\text{Lifetime PiT probability of default}}{\text{Lifetime PiT probability of default at origination}} > 3$ **or** Variation of lifetime PiT probability of default since origination > **400 bps**	One year PiT probability of default > **20%**

** Probability of default through the cycle.*
*** "Point in Time" (PiT) probability of default including forward-looking.*

Credit risk is assumed to have increased significantly since initial recognition and the asset is classified in stage 2 in the event of late payment of more than 30 days or restructuring due to financial difficulties (as long as the facility is not credit-impaired).

In the first half of 2022, the internal ratings of the Russian counterparties (including the sovereign rating) were systematically downgraded to take into account recent events, thus leading to the transfer of their outstandings to stage 2. However, given the Group's limited level of exposure to this country, this deterioration had no significant effect on the cost of risk for the period.

Forward-Looking Information

The Group considers forward-looking information both when assessing significant increase in credit risk and when measuring Expected Credit Losses (ECL).

Regarding the measurement of expected credit losses, the Group has chosen to use 3 macroeconomic scenarios by geographic area covering a wide range of potential future economic conditions:

- a baseline scenario, consistent with the scenario used for budgeting;
- an adverse scenario, corresponding to the scenario used for the Group's quarterly stress tests;
- a favourable scenario, capturing situations where the economy performs better than anticipated.

The link between the macroeconomic scenarios and the ECL measurement is mainly achieved through a modelling of the probabilities of default and deformation of migration matrices based on internal rating (or risk parameter). The probabilities of default determined according to these scenarios are used to measure expected credit losses in each of these scenarios.

The Group's setup is broken down by sector to take into account the heterogeneity of sectoral dynamics when assessing the probability of default for corporates.

Forward-looking information is also considered when determining the significant deterioration in credit risk, since the probabilities of default used as the basis for this assessment include forward-looking multi-scenario information in the same way as for the calculation of the ECL.

The weight to be attributed to the expected credit losses calculated in each of the scenarios is defined as 50% for the baseline scenario, and:

- the weight of the two alternative scenarios is defined according to the position in the credit cycle. In this approach, the adverse scenario carries more weight in situations at the upper end of the cycle than those at the lower end of the cycle, in anticipation of a potential downturn in the economy;
- the minimum weight of each the alternative scenarios is 10% and therefore the maximum weight is 40%.

When appropriate, the ECL measurement can take into account asset sale scenarios.

Macroeconomic scenarios

The three macroeconomic scenarios are defined over a three-year projection horizon. They correspond to:

- a baseline scenario, which describes the most likely path of the economy over the projection horizon. This scenario is updated on a quarterly basis and is prepared by the Group Economic Research Department in collaboration with various experts within the Group. Projections are designed for each key market of the Group (France, Belgium, Italy, the United States and the eurozone) using key macroeconomic variables (Gross Domestic Product – GDP – and its components, unemployment rate, consumer prices, interest rates, foreign exchange rates, oil prices, real estate prices, *etc.*) which are key drivers for modeling risk parameters used in the stress test process;
- an adverse scenario, which describes the impact of the materialisation of some of the risks weighing on the baseline scenario, resulting in a much less favourable economic path than in the baseline scenario. The GDP shock is applied with varying magnitudes, but simultaneously, to the economies under consideration. Generally, these assumptions are broadly consistent with those proposed by the regulators. The calibration of shocks on other variables (*e.g.* unemployment, consumer prices, interest rates, *etc.*) is based on models and expert judgment;
- a favourable scenario, which reflects the impact of the materialisation of some of the upside risks for the economy, resulting in a more favourable economic path. The favourable shock on GDP is deducted from the adverse shock on GDP in such a way that the probabilities of the two shocks are equal on average over the cycle. Other variables (*e.g.* unemployment, inflation, interest rates, *etc.*) are defined in the same way as in the adverse scenario. Since June 2021, the favourable shocks applied have been substantially reduced, as any stronger path than in the baseline scenario could be limited by supply side constraints.

The link between the macroeconomic scenarios and the measurement of the ECL is complemented by an approach allowing to take into account anticipation aspects not captured by the models in the generic approach. This is particularly the case when unprecedented events in the historical chronicle taken into account to build the models occur or are anticipated, or when the nature or amplitude of change in macroeconomic parameter calls into question past correlations. Thus, the situation of high inflation and the current and projected increase in interest rates correspond to aspects not observed in the reference history. In this context, the Group has developed an approach to take into account the future economic outlook when assessing the financial strength of counterparties. This approach consists in simulating the impact of rate hikes on their financial ratios and the effect on their ratings.

In addition, post-model adjustments are considered to take into account, where applicable, the consequences of climatic events on expected credit losses.

Baseline scenario

Several major developments have contributed to a more marked deterioration than anticipated (after a rebound year in 2021), in both Europe and the United States. Beyond the humanitarian aspects, the consequences of the invasion of Ukraine have had a number of adverse economic effects, the first of which is to contribute to raising inflation to very high levels due to severe disruptions in energy and food markets. European countries have been particularly affected from this point of view. In response to expected inflation levels, central banks have carried out the most severe monetary tightening in decades, leading to a sharp tightening of financial conditions, which in turn penalise activity. Finally, the health crisis has continued to strongly disrupt activity in some countries, particularly in Asia, where there is less vaccine protection or stricter measures to contain the health crisis.

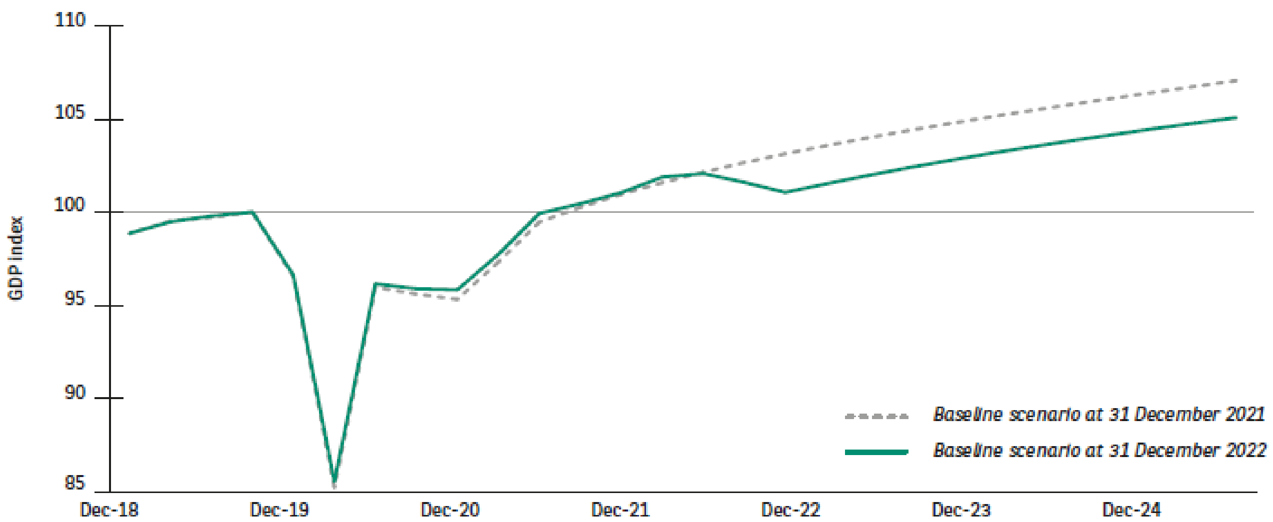
Faced with these combined energy and monetary shocks, activity is expected to contract in a number of economies (including the eurozone and the United States) in late 2022 and early 2023, leading to substantial downward revisions to growth projections for 2023. Activity is expected to stagnate in both the eurozone and the United States in 2023 (while, at 30 June 2022, GDP was expected to grow by around 1.5% in both regions). Activity growth is generally expected to rebound in 2024 and 2025.

After reaching very high levels in late 2022, inflation is expected to moderate in the course of 2023, mainly due to lower energy inflation and to the consequences of the slowdown in activity (*e.g.* higher unemployment, more limited supply chain disruptions). However, on an annual average, inflation will remain very high in 2023 in many countries, significantly exceeding central bank targets in most cases (notably in Europe and in the United States). Inflation is expected to come down to more usual levels in 2024 and 2025.

In this context, major central banks have so far prioritised the fight against inflation by tightening monetary policy. By the end of 2022, both short-term and long-term interest rates were at much higher levels than those observed in the past ten years, even though the central banks have not yet completed their tightening cycle. Key interest rates are expected to peak in 2023, before moderating in 2024 and 2025 (when the central banks are expected to lower policy rates in line with more moderate inflation).

The graph below presents a comparison of eurozone GDP projections used in the baseline scenario for the calculation of ECLs at 31 December 2021 and 2022.

EUROZONE GDP: INDEX BASE 100 AT THE FOURTH QUARTER OF 2019



MACROECONOMIC VARIABLES, BASELINE SCENARIO AT 31 DECEMBER 2022

(annual averages)	2022	2023	2024	2025
GDP growth rate				
Eurozone	3.2%	0.1%	1.6%	1.3%
France	2.5%	0.1%	1.4%	1.2%
Italy	3.7%	-0.2%	1.1%	0.9%
Belgium	2.3%	0.0%	1.5%	1.2%
United States	1.7%	0.0%	1.7%	1.6%
Unemployment rate				
Eurozone	6.8%	7.5%	7.6%	7.3%
France	7.5%	8.0%	8.1%	7.9%
Italy	8.1%	8.6%	8.4%	8.3%
Belgium	5.8%	6.4%	6.3%	6.1%
United States	3.7%	4.7%	4.6%	4.5%
Inflation rate				
Eurozone	8.5%	6.3%	2.4%	2.0%
France	6.0%	5.4%	2.5%	2.0%

Italy	8.7%	7.3%	2.1%	1.7%
Belgium	10.6%	7.5%	2.7%	2.2%
United States	8.1%	3.9%	2.3%	2.2%
10-year sovereign bond yields				
Germany	1.22%	2.64%	2.19%	2.00%
France	1.76%	3.19%	2.74%	2.55%
Italy	3.18%	4.94%	4.49%	4.30%
Belgium	1.76%	3.24%	2.79%	2.60%
United States	3.02%	4.24%	3.44%	3.25%

Adverse Scenario

The adverse scenario is based on the assumption that certain downside risks will materialise, resulting in a much less favourable economic path than in the baseline scenario.

The following risks are identified:

- **A dominant risk, the invasion of Ukraine and its implications** (especially higher inflation): the impacts mentioned in the baseline scenario could worsen due to additional negative developments. In particular, the adverse scenario assumes a more pronounced shock on commodity prices, further fueling inflation and leading to more severe disruptions in activity. Higher inflation would have a direct negative effect on consumption and production. In addition, governments of the most exposed economies could take rationing measures targeting the most energy-intensive sectors (with potential indirect consequences for other sectors). Activity can also be negatively affected by other channels (*e.g.* supply chain disruptions, trade, financial stress, uncertainty and confidence effects).
- **The remaining risk related to the health crisis:** although the link between health challenges and economic disruptions has eased markedly in many economies, particularly thanks to vaccination, health crisis-related challenges remain a significant risk, at least in some countries.
- **Less favourable public finances:** public debt-to-GDP ratios are high and central banks are tightening their monetary policy, leading to a rise in bond yields that could generate tensions in some countries due to the widening of spreads between sovereign bonds.
- **China's economy-related risks:** additional difficulties in China (*e.g.* sanitary measures, real estate) could affect global markets and activity in other countries through trade and supply-chain channels.
- **Geopolitical risks:** geopolitical tensions can weigh on the global economy through shocks to commodity prices, financial markets and business confidence. Beyond the invasion of Ukraine, other regions are also worth to be monitored (Asia and the Middle East).
- **Developments in trade and globalisation:** the invasion of Ukraine creates additional obstacles to trade and globalisation, adding to already negative developments of recent years (trade disagreements between the United States and China, willingness of some western governments to become more self-sufficient in certain strategic areas).

The adverse scenario assumes the materialisation of these identified latent risks from the first quarter of 2023.

The risks related to the invasion of Ukraine are taken into account in the adverse scenario through some specificities. First, an additional activity shock is applied to the different economies, depending on their perceived exposure to this situation. This shock reflects the countries' dependence on Russian gas as well as their vulnerability to other transmission channels (exports, dependence on the supply chain, weight of food and energy in inflation, investment links, political ties with Russia). Second, inflation is higher in the adverse scenario than in the baseline scenario in the first year of the projection horizon, in order to materialise the specific effects of this crisis in this area (reflecting more upward pressure on commodity prices and supply chain disruptions).

Among the countries considered, GDP levels in the adverse scenario stand between 5.8% and 12.2% lower than in the baseline scenario at the end of the shock period (three years). In particular, this deviation reaches 10.2% on average in the eurozone and 5.8% in the United States.

Scenario weighting and cost of risk sensitivity

At 31 December 2022, the weight of the adverse scenario considered by the Group was 16% and 34% for the favourable scenario. At 31 December 2021, the weight of the adverse scenario was on average equivalent to that of the favourable scenario.

The sensitivity of the amount of expected credit losses for all financial assets at amortised cost or at fair value through equity and credit commitments is assessed by comparing the estimated expected credit losses resulting from the weighting of the above scenarios with that resulting from each of the two alternative scenarios:

- an increase in ECL of 22%, or EUR 1,250 million according to the adverse scenario (18% at 31 December 2021);
- a decrease in ECL of 7%, or EUR 400 million according to the favourable scenario (12% at 31 December 2021).

Adaptation of the ECL assessment process to factor in the specific nature of the health crisis

Macroeconomic scenarios provisioning the models

The measurement of the impact of macroeconomic scenarios on expected credit losses was adjusted to reflect the specificities of the current health crisis. Given the exceptional nature of the shock linked to the temporary lockdown measures and strong support provided by governments and central banks, macroeconomic parameters for each country or geographic area included in the pre-existing models (calibrated on past crises) were adapted in order to extract information on the medium-term impacts on the macroeconomic environment and thus minimise excessive short-term volatility.

In 2020, the medium-term perspective adopted for the baseline scenario reduced the loss of income for the eurozone by an amount much lower than that of governments and European Central Bank support measures. Conversely, it moderated the favourable impacts of the economic rebounds observed in 2021. This adaptation ended in 2021.

Moratoria and state guarantees

For the loans secured by a state guarantee (mainly in France and Italy), the calculation of expected credit losses is adjusted accordingly.

The absence of a general maturity extension scheme for individuals, notably in France, led to classify as forborne the loans that benefited from accompanying measures that were not initially provided for under the contract. However, these measures were not considered as an automatic criterion for transfer to stage 2.

Post-model adjustments

Conservative adjustments were taken into account when the models used were based on indicators that show unusual levels in the context of the health crisis and the support programmes, such as the increase in deposits and the decrease in past due events for retail customers and entrepreneurs.

For the consumer credit specialist business, a conservative adjustment had been considered in 2020 for loans that benefitted from a moratorium. In 2021, this adjustment was reversed in connection with the satisfactory return to payment observed on these loans. However, a conservative adjustment was made to compensate for the atypical level of late payments.

These post-model adjustments were reversed in 2022.

Adaptation of the ECL assessment process to factor in the significant rise in inflation and in interest rates

Additional adjustments were made in 2022 to take into account the effects of inflation and interest rate hikes when this effect is not directly estimated by the models. For example, within the consumer credit specialist business, adjustments were considered for the categories of customers most sensitive to the gradual decline in the level of their net income.

All of these adjustments represent 6.1% of the total amount of expected credit losses at 31 December 2022, compared to 4.8% at 31 December 2021.

COST OF CREDIT RISK FOR THE PERIOD

In millions of euros	**Year to 31 Dec. 2022**	**Year to 31 Dec. 2021**
Net allowances to impairment	(2,444)	(2,591)
Recoveries on loans and receivables previously written off	343	321
Losses on irrecoverable loans	(714)	(701)
Act on assistance to borrowers in Poland	(189)	
TOTAL COST OF RISK FOR THE PERIOD	**(3,004)**	**(2,971)**

COST OF RISK FOR THE PERIOD BY ACCOUNTING CATEGORY AND ASSET TYPE

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Cash and balances at central banks	(6)	(8)
Financial instruments at fair value through profit or loss	(28)	6
Financial assets at fair value through equity	14	(6)
Financial assets at amortised cost	(2,853)	(2,779)
Loans and receivables	*(2,845)*	*(2,763)*
Debt securities	*(8)*	*(16)*
Other assets	(17)	12
Financing and guarantee commitments and other items	(114)	(196)
TOTAL COST OF RISK FOR THE PERIOD	**(3,004)**	**(2,971)**
Cost of risk on unimpaired assets and commitments	*(570)*	*(17)*
of which stage 1	*(511)*	*268*
of which stage 2	*(59)*	*(285)*
Cost of risk on impaired assets and commitments – stage 3	*(2,434)*	*(2,954)*

CREDIT RISK IMPAIRMENT

Changes in impairment by accounting category and asset type during the period

In millions of euros	31 December 2021	Net allowance to impairment	Impairment provisions used	Changes in scope, exchange rates and other items	31 December 2022
Assets impairment					
Amounts due from central banks	18	5		(2)	21
Financial instruments at fair value through profit or loss	121	15		(28)	108
Financial assets at fair value through equity	140	(14)		4	130
Financial assets at amortised cost	20,196	2,374	(4,187)	128	18,511
Loans and receivables	*20,028*	*2,329*	*(4,106)*	*130*	*18,381*
Debt securities	*168*	*45*	*(81)*	*(2)*	*130*
Other assets	59	(6)	(3)	(5)	45
Total impairment of financial assets	**20,534**	**2,374**	**(4,190)**	**97**	**18,815**
of which stage 1	*1,891*	*223*	*(4)*	*(36)*	*2,074*
of which stage 2	*2,748*	*87*	*(3)*	*49*	*2,881*
of which stage 3	*15,895*	*2,064*	*(4,183)*	*84*	*13,860*
Provisions recognised as liabilities					
Provisions for commitments	958	32	(15)	5	980

Other provisions	467	38	(56)	1	450
Total provisions recognised for credit commitments	**1,425**	**70**	**(71)**	**6**	**1,430**
of which stage 1	*230*	*94*		*2*	*326*
of which stage 2	*374*	*(33)*		*(3)*	*338*
of which stage 3	*821*	*9*	*(71)*	*7*	*766*
TOTAL IMPAIRMENT AND PROVISIONS	**21,959**	**2,444**	**(4,261)**	**103**	**20,245**

Change in impairment by accounting category and asset type during the previous period

In millions of euros	**31 December 2020**	**Net allowance to impairment**	**Impairment provisions used**	**Changes in scope, exchange rates and other items**	**31 December 2021**
Assets impairment					
Amounts due from central banks	17	9		(8)	18
Financial instruments at fair value through profit or loss	148	(20)		(7)	121
Financial assets at fair value through equity	132	6		2	140
Financial assets at amortised cost	21,704	2,438	(3,867)	(79)	20,196
Loans and receivables	*21,546*	*2,421*	*(3,867)*	*(72)*	*20,028*
Debt securities	*158*	*17*		*(7)*	*168*
Other assets	104	(15)	(29)	(1)	59
Total impairment of financial assets	**22,105**	**2,418**	**(3,896)**	**(93)**	**20,534**
of which stage 1	*2,379*	*(219)*	*(8)*	*(261)*	*1,891*
of which stage 2	*3,166*	*176*	*(6)*	*(588)*	*2,748*
of which stage 3	*16,560*	*2,461*	*(3,882)*	*756*	*15,895*
Provisions recognised as liabilities					
Provisions for commitments	964	60	(1)	(65)	958
Other provisions	383	113	(52)	23	467
Total provisions recognised for credit commitments	**1,347**	**173**	**(53)**	**(42)**	**1,425**
of which stage 1	*319*	*(55)*		*(34)*	*230*
of which stage 2	*297*	*100*		*(23)*	*374*
of which stage 3	*731*	*128*	*(53)*	*15*	*821*
TOTAL IMPAIRMENT AND PROVISIONS	**23,452**	**2,591**	**(3,949)**	**(135)**	**21,959**

Changes in impairment of financial assets at amortised cost during the period

In millions of euros	Impairment on assets subject to 12-month Expected Credit Losses (Stage 1)	Impairment on assets subject to lifetime Expected Credit Losses (Stage 2)	Impairment on doubtful assets (Stage 3)	Total
At 31 December 2021	**1,867**	**2,714**	**15,615**	**20,196**
Net allowance to impairment	**211**	**102**	**2,061**	**2,374**
Financial assets purchased or originated during the period	682	234		916
Financial assets derecognised during the period(1)	(390)	(388)	(822)	(1,600)
Transfer to stage 2	(133)	1,773	(212)	1,428
Transfer to stage 3	(65)	(665)	1,806	1,076
Transfer to stage 1	63	(502)	(36)	(475)
Change in the significant increase in credit risk assessment criteria	29	(280)		(251)
Other allowances/reversals without stage transfer(2)	25	(70)	1,325	1,280
Impairment provisions used	**(3)**	**(3)**	**(4,181)**	**(4,187)**
Changes in exchange rates	**(6)**	**(30)**	**104**	**68**
Changes in scope of consolidation and other items	**(34)**	**77**	**17**	**60**
At 31 December 2022	**2,035**	**2,860**	**13,616**	**18,511**

(1) Including disposals.
(2) Including amortisation.

In 2022, the increase in financial assets subject to impairment relates mainly to outstandings classified in stage 1. Thus, the gross value of loans and advances to customers classified in stage 1 increased by EUR 61 billion compared to 31 December 2021 (see note 4.e Financial assets at amortised cost). This change includes transfers of outstandings from stage 2 to stage 1 for a net amount of EUR 27 billion as a result of the change in the criteria used to assess the significant increase in credit risk, mainly within the French and Belgian Commercial & Personal Banking activities. This transfer mainly concerns the least risky outstandings among those previously classified in stage 2 (see section 5.4 *Credit risk* of the Universal Registration Document, Table 52: *Breakdown of financial assets subject to impairment by stage and internal rating)*. The impact of this transfer on the amount of expected credit losses is a net reversal of provision of EUR 251 million.

Excluding the effect of this change in estimate, outstandings in stage 2 increased by EUR 10 billion during the year ended 31 December 2022. This development is closely linked to the deterioration of the economic environment that weighed on the assessment of the significant increase in credit risk criterion.

These combined effects led to net additions to impairment in stages 1 and 2 in 2022. The provisioning rate for loans and advances to customers classified in stage 2 increased to 3.2% at 31 December 2022, compared with 2.6% at 31 December 2021.

Changes in impairment of financial assets at amortised cost during the previous period

In millions of euros	Impairment on assets subject to 12-month Expected Credit Losses (Stage 1)	Impairment on assets subject to lifetime Expected Credit Losses (Stage 2)	Impairment on doubtful assets (Stage 3)	Total
At 31 December 2020	**2,343**	**3,142**	**16,219**	**21,704**
Net allowance to impairment	**(216)**	**168**	**2,486**	**2,438**
Financial assets purchased or originated during the period	608	242		850
Financial assets derecognised during the period(1)	(353)	(295)	(896)	(1,544)
Transfer to stage 2	(190)	1,726	(393)	1,143
Transfer to stage 3	(22)	(598)	1,837	1,217
Transfer to stage 1	117	(724)	(45)	(652)
Other allowances/reversals without stage transfer(2)	(376)	(183)	1,983	1,424
Impairment provisions used	**(8)**	**(6)**	**(3,853)**	**(3,867)**
Changes in exchange rates	**(1)**	**(32)**	**95**	**62**
Changes in scope of consolidation and other items	**(28)**	**(355)**	**739**	**356**
Reclassification of assets held for sale	**(223)**	**(203)**	**(71)**	**(497)**
At 31 December 2021	**1,867**	**2,714**	**15,615**	**20,196**

(1) Including disposals.
(2) Including amortisation.

2.i NET GAIN ON NON-CURRENT ASSETS

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Gain or loss on investments in consolidated undertakings (note 6.c)	(257)	355
Gain or loss on tangible and intangible assets	7	479
Results from net monetary position	(3)	
Net gain on non-current assets	**(253)**	**834**

According to IAS 29 in connection with the hyperinflation situation of the economy in Türkiye, the line “Results from net monetary positions” mainly includes the effect of the evolution of the consumer price index in Türkiye on the valuation of non-monetary assets and liabilities (-EUR 434 million) and on accrued income from the Turkish government bonds portfolio indexed to inflation and held by Turk Ekonomi Bankasi AS (+EUR 431 million, reclassified from interest margin).

2.j CORPORATE INCOME TAX

Reconciliation of the effective tax expense to the theoretical tax expense at standard tax rate in France	Year to 31 Dec. 2022 in millions of euros	Year to 31 Dec. 2022 tax rate	Year to 31 Dec. 2021 in millions of euros	Year to 31 Dec. 2021 tax rate
Corporate income tax expense on pre-tax income at standard tax rate in France[1]	**(3,275)**	**25.8%**	**(3,454)**	**28.4%**
Impact of differently taxed foreign profits	(61)	0.5%	201	-1.7%
Impact of dividends and disposals taxed at reduced rate	54	-0.4%	153	-1.3%
Impact of the non-deductibility of taxes and bank levies[2]	(300)	2.4%	(253)	2.1%
Other items	(134)	1.0%	(231)	2.0%
Corporate income tax expense from continuing activities	**(3,716)**	**29.3%**	**(3,584)**	**29.5%**
Current tax expense for the year to 31 December	*(2,844)*		*(2,806)*	
Deferred tax expense for the year to 31 December (note 4.k)	*(872)*		*(778)*	

(1) Restated for the share of profits in equity-method entities and goodwill impairment.
(2) Contribution to the Single Resolution Fund and other non-deductible banking taxes.

NOTE 3 SEGMENT INFORMATION

The Group is composed of three operating divisions:

- **Corporate & Institutional Banking (CIB)** which covers Global Banking, Global Markets and Securities Services;
- **Commercial, Personal Banking & Services (CPBS)** which covers Commercial & Personal Banking in the eurozone, with Commercial & Personal Banking in France (CPBF), Commercial & Personal Banking in Italy (BNL bc), Commercial & Personal Banking in Belgium (CPBB) and Commercial & Personal Banking in Luxembourg (CPBL); Commercial & Personal Banking outside the eurozone, which is organised around Europe-Mediterranean, to cover Central and Eastern Europe and Türkiye, and BancWest in the United States. Lastly, it also covers specialised businesses, (Arval, BNP Paribas Leasing Solutions, BNP Paribas Personal Finance, BNP Paribas Personal Investors and New digital business lines like Nickel, Floa, Lyf);
- **Investment & Protection Services (IPS)** which covers Insurance (BNP Paribas Cardif), Wealth and Asset Management (BNP Paribas Asset Management, BNP Paribas Wealth Management and BNP Paribas Real Estate), Management of the BNP Paribas Group's portfolio of unlisted and listed industrial and commercial investments (BNP Paribas Principal Investments).

Other activities mainly include activities related to the Group's central treasury function, some costs related to cross-business projects, the residential mortgage lending business of Personal Finance (a significant part of which is managed in run-off), and certain investments.

They also include non-recurring items resulting from applying the rules on business combinations. In order to provide consistent and relevant economic information for each core business, the impact of amortising fair value adjustments recognised in the net equity of entities acquired and restructuring costs incurred in respect to the integration of entities, have been allocated to the "Other Activities" segment. The same applies to transformation, adaptation and IT reinforcement costs relating to the Group's savings programmes.

Inter-segment transactions are conducted at arm's length. The segment information presented comprises agreed inter-segment transfer prices.

The capital allocation is carried out on the basis of risk exposure, taking into account various conventions relating primarily to the capital requirement of the business as derived from the risk-weighted asset calculations required under capital adequacy rules. Normalised equity income by segment is determined by attributing to each segment the income of its allocated equity. The equity allocation to segments is based on a minimum of 11% of weighted assets. The breakdown of balance sheet by core business follows the same rules as the breakdown of the profit or loss by core business.

To provide a consistent reference with the presentation of the 2022 financial statements, the year ended 31 December 2021 of this note was restated for the following effects as if they had occurred on 1 January 2021:

- the new organisation of the Group;
- the change in method of internal allocation of the contribution to the Single Resolution Fund (SRF), impacting the breakdown among business lines of the banking taxes and contributions submitted to IFRIC 21. The Group has defined a

new allocation key for the SRF between the businesses to better reflect the increased liquidity resources generated by commercial activity and the changing regulatory environment;

- limited internal transfers of activities and results, having marginal impact on the vision with 2/3 of Private Banking in the Commercial, Personal Banking in France and in Belgium.

These effects do not change the results for the Group as a whole but only the analytical breakdown.

The information and financial elements contained in this note reflect an operational view and include BancWest's activity within the various income statement aggregates. A separate line reconciles the operational view with the one impacted by the application of IFRS 5.

INCOME BY BUSINESS SEGMENT

	Year to 31 Dec. 2022						Year to 31 Dec. 2021					
In millions of euros	Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income	Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income
Corporate & Institutional Banking	**16,465**	**(10,753)**	**(325)**	**5,387**	**10**	**5,398**	**14,236**	**(9,467)**	**(173)**	**4,596**	**58**	**4,654**
Global Banking	5,218	(2,878)	(336)	2,004	4	2,009	5,087	(2,652)	(201)	2,234	11	2,246
Global Markets	8,660	(5,806)	11	2,866	4	2,870	6,820	(4,924)	27	1,923	19	1,942
Securities Services	2,587	(2,069)		517	2	519	2,329	(1,892)	1	439	27	466
Commercial, Personal Banking & Services	**27,563**	**(17,518)**	**(2,458)**	**7,586**	**414**	**8,000**	**25,216**	**(16,523)**	**(2,586)**	**6,106**	**340**	**6,447**
Commercial & Personal Banking in the eurozone	**12,948**	**(8,976)**	**(726)**	**3,246**	**42**	**3,288**	**12,303**	**(8,659)**	**(1,018)**	**2,626**	**56**	**2,682**
Commercial & Personal Banking in France(1)	6,361	(4,530)	(245)	1,587	26	1,613	5,966	(4,395)	(428)	1,144	37	1,181
BNL banca commerciale(1)	2,548	(1,676)	(464)	408	3	410	2,591	(1,726)	(488)	377		377
Commercial & Personal Banking in Belgium(1)	3,577	(2,502)	(36)	1,039	10	1,049	3,332	(2,277)	(100)	954	19	973
Commercial & Personal Banking in Luxembourg(1)	461	(268)	19	213	3	216	414	(262)	(2)	150		150
Commercial & Personal Banking in the rest of the world	**4,953**	**(3,655)**	**(113)**	**1,185**	**292**	**1,477**	**4,286**	**(3,255)**	**(99)**	**932**	**201**	**1,133**
Europe-Mediterranean(1)	2,321	(1,641)	(152)	528	289	817	1,926	(1,598)	(145)	182	181	364
BancWest(1)	2,632	(2,014)	39	657	4	660	2,361	(1,656)	45	750	19	769
Specialised businesses	**9,662**	**(4,888)**	**(1,619)**	**3,155**	**80**	**3,235**	**8,627**	**(4,609)**	**(1,469)**	**2,549**	**84**	**2,632**
Personal Finance	5,387	(2,922)	(1,373)	1,092	28	1,121	5,216	(2,804)	(1,314)	1,097	78	1,175
Arval & Leasing Solutions	3,438	(1,395)	(146)	1,897	60	1,957	2,675	(1,298)	(150)	1,227	8	1,235
New Digital Businesses & Personal Investors(1)	837	(571)	(100)	166	(9)	157	735	(506)	(5)	224	(2)	222
Investment & Protections Services	**6,670**	**(4,363)**	**3**	**2,309**	**310**	**2,620**	**6,476**	**(4,218)**	**(7)**	**2,251**	**249**	**2,499**
Insurance	2,774	(1,558)	(2)	1,214	161	1,376	2,827	(1,536)	(1)	1,289	79	1,368
Wealth Management	1,612	(1,230)	3	385	39	424	1,476	(1,134)	(10)	332	1	333
Asset Management(2)	2,284	(1,576)	2	710	110	820	2,173	(1,548)	5	630	168	798
Other Activities	**(279)**	**(1,067)**	**(185)**	**(1,531)**	**(36)**	**(1,567)**	**308**	**(903)**	**(159)**	**(754)**	**792**	**38**
TOTAL GROUP	**50,419**	**(33,702)**	**(2,965)**	**13,752**	**698**	**14,450**	**46,235**	**(31,111)**	**(2,925)**	**12,199**	**1,438**	**13,637**

In millions of euros	Year to 31 Dec. 2022 Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income	Year to 31 Dec. 2021 Revenues	Operating expenses	Cost of risk	Operating income	Non-operating items	Pre-tax income
Reclassification of discontinued activities (note 7.d)	**(2,788)**	**2,007**	**(39)**	**(820)**	**(3)**	**(823)**	**(2,473)**	**1,645**	**(46)**	**(874)**	**(19)**	**(893)**
TOTAL CONTINUING ACTIVITIES	**47,631**	**(31,695)**	**(3,004)**	**12,932**	**695**	**13,627**	**43,762**	**(29,466)**	**(2,971)**	**11,325**	**1,419**	**12,744**

(1) Commercial & Personal Banking in France, BNL banca commerciale, Commercial & Personal Banking in Belgium, Commercial & Personal Banking in Luxembourg, Europe-Mediterranean, BancWest and Personal Investors after the reallocation within Wealth and Asset Management of one-third of the Wealth Management activities in France, Italy, Belgium, Luxembourg, Germany, Türkiye, Poland and the United States.

(2) Including Real Estate and Principal Investments.

NET COMMISSION INCOME BY BUSINESS SEGMENT, INCLUDING FEES ACCOUNTED FOR UNDER "NET INCOME FROM INSURANCE ACTIVITIES"

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Corporate & Institutional Banking	**2,310**	**2,766**
Global Banking	2,037	2,199
Global Markets	(1,223)	(891)
Securities Services	1,497	1,458
Commercial, Personal Banking & Services	**7,220**	**6,930**
Commercial & Personal Banking in the eurozone	**5,059**	**4,795**
Commercial & Personal Banking in France(1)	2,896	2,664
BNL banca commerciale(1)	1,047	1,071
Commercial & Personal Banking in Belgium(1)	1,028	981
Commercial & Personal Banking in Luxembourg(1)	88	79
Commercial & Personal Banking in the rest of the world	**876**	**849**
Europe-Mediterranean(1)	448	467
BancWest(1)	428	382
Specialised businesses	**1,285**	**1,286**
Personal Finance	743	750
Arval & Leasing Solutions	41	40
New Digital Businesses & Personal Investors(1)	501	495
Investment & Protections Services	**(893)**	**(607)**
Insurance	(3,288)	(3,072)
Wealth Management	789	836
Asset Management(2)	1,606	1,630
Other activities	**58**	**(55)**
TOTAL GROUP	**8,696**	**9,034**

(1) Commercial & Personal Banking in France, BNL banca commerciale, Commercial & Personal Banking in Belgium, Commercial & Personal Banking in Luxembourg, Europe-Mediterranean, BancWest and Personal Investors after the reallocation within Wealth and Asset Management of one-third of the Wealth Management activities in France, Italy, Belgium, Luxembourg, Germany, Türkiye, Poland and the United States.

(2) Including Real Estate and Principal Investments.

ASSETS AND LIABILITIES BY BUSINESS SEGMENT

In millions of euros, at	31 December 2022		31 December 2021	
	Asset	Liability	Asset	Liability
Corporate & Institutional Banking	**1,136,501**	**1,302,279**	**1,098,288**	**1,232,312**
Global Banking	183,096	239,352	165,082	202,807
Global Markets	913,848	908,354	871,532	872,645
Securities Services	39,557	154,573	61,674	156,860
Commercial, Personal Banking & Services	**843,216**	**793,620**	**818,842**	**774,956**
Commercial & Personal Banking in the eurozone	**546,268**	**584,747**	**529,698**	**578,604**
Commercial & Personal Banking in France	235,614	255,334	218,249	250,094
BNL banca commerciale	94,230	93,880	94,229	92,427
Commercial & Personal Banking in Belgium	189,119	204,538	188,732	204,867
Commercial & Personal Banking in Luxembourg	27,305	30,995	28,488	31,216
Commercial & Personal Banking in the rest of the world	**141,356**	**138,231**	**145,625**	**131,837**
Europe-Mediterranean	59,132	55,360	57,323	51,206
BancWest	82,224	82,871	88,302	80,631
Specialised businesses	**155,592**	**70,642**	**143,519**	**64,515**
Personal Finance	94,906	24,412	90,753	23,507
Arval & Leasing Solutions	56,668	12,443	50,654	9,439
New Digital Businesses & Personal Investors	4,019	33,787	2,112	31,569
Investment & Protections Services	**283,029**	**312,142**	**318,241**	**336,654**
Insurance	247,403	234,129	280,766	262,238
Wealth Management	28,242	74,563	29,583	70,686
Asset Management	7,384	3,450	7,892	3,730
Other activities	**403,630**	**258,335**	**399,073**	**290,522**
TOTAL GROUP	**2,666,376**	**2,666,376**	**2,634,444**	**2,634,444**

Information by business segment relating to goodwill is presented in note 4.o Goodwill.

Information by geographic area

The geographic split of segment results, assets and liabilities is based on the region in which they are recognised for accounting purposes, adjusted as per the managerial origin of the business activity. It does not necessarily reflect the counterparty's nationality or the location of operational businesses.

REVENUES BY GEOGRAPHIC AREA INCLUDING NET INCOME FROM DISCONTINUED ACTIVITIES

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
EMEA	39,770	36,506
Americas (North and South)	6,650	6,153

APAC	3,999	3,576
TOTAL GROUP	**50,419**	**46,235**

ASSETS AND LIABILITIES, IN CONTRIBUTION TO THE CONSOLIDATED ACCOUNTS, BY GEOGRAPHIC AREA

In millions of euros	**31 December 2022**	**31 December 2021**
EMEA	2,190,667	2,173,683
Americas (North and South)	305,141	294,601
APAC	170,568	166,160
TOTAL GROUP	**2,666,376**	**2,634,444**

NOTE 4 NOTES TO THE BALANCE SHEET AT 31 DECEMBER 2022

4.a FINANCIAL INSTRUMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets and liabilities at fair value through profit or loss

Financial assets and financial liabilities at fair value through profit or loss consist of held-for-trading transactions – including derivatives, of certain liabilities designated by the Group as at fair value through profit or loss at the time of issuance and of non-trading instruments whose characteristics prevent their accounting at amortised cost or at fair value through equity.

	31 December 2022				**31 December 2021**			
In millions of euros	**Financial instruments held for trading**	**Financial instruments designated as at fair value through profit or loss**	**Other financial assets at fair value through profit or loss**	**Total**	**Financial instruments held for trading**	**Financial instruments designated as at fair value through profit or loss**	**Other financial assets at fair value through profit or loss**	**Total**
Securities	157,138	1,273	7,666	166,077	181,079	2,898	7,530	191,507
Loans and repurchase agreements	186,968		4,157	191,125	247,507		2,301	249,808
FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS	**344,106**	**1,273**	**11,823**	**357,202**	**428,586**	**2,898**	**9,831**	**441,315**
Securities	99,155			99,155	112,338			112,338
Deposits and repurchase agreements	232,351	1,725		234,076	291,577	1,879		293,456
Issued debt securities *(note 4.h)*		70,460		70,460		70,383		70,383
of which subordinated debt		*675*		*675*		*947*		*947*
of which non subordinated debt		*64,110*		*64,110*		*62,334*		*62,334*
of which debt representative of shares of consolidated funds held by third parties		*5,675*		*5,675*		*7,102*		*7,102*

FINANCIAL LIABILITIES AT FAIR VALUE THROUGH PROFIT OR LOSS	**331,506**	**72,185**	**403,691**	**403,915**	**72,262**	**476,177**

Detail of these assets and liabilities is provided in note 4.d.

Financial liabilities designated as at fair value through profit or loss

Financial liabilities at fair value through profit or loss mainly consist of issued debt securities, originated and structured on behalf of customers, where the risk exposure is managed in combination with the hedging strategy. These types of issued debt securities contain significant embedded derivatives, which changes in value may be compensated by changes in the value of economic hedging derivatives.

The redemption value of debt issued and designated as at fair value through profit or loss at 31 December 2022 was EUR 70,940 million (EUR 59,958 million at 31 December 2021).

Other financial assets measured at fair value through profit or loss

Other financial assets at fair value through profit or loss are financial assets not held for trading:

- debt instruments that do not meet the criteria defined by IFRS 9 to be classified as financial instruments at "fair value through equity" or at "amortised cost":
  - their business model is not to "collect contractual cash flows" nor "collect contractual cash flows and sell the instruments", and/or
  - their cash flows are not solely repayments of principal and interest on the principal amount outstanding;
- equity instruments that the Group did not choose to classify as at "fair value through equity".

Derivative financial instruments

The majority of derivative financial instruments held for trading are related to transactions initiated for trading purposes. They may result from market-making or arbitrage activities. BNP Paribas actively trades in derivatives. Transactions include trades in "ordinary" instruments such as credit default swaps, and structured transactions with complex risk profiles tailored to meet the needs of its customers. The net position is in all cases subject to limits.

Some derivative instruments are also contracted to hedge financial assets or financial liabilities for which the Group has not documented a hedging relationship, or which do not qualify for hedge accounting under IFRS.

	31 December 2022		**31 December 2021**	
In millions of euros	**Positive market value**	**Negative market value**	**Positive market value**	**Negative market value**
Interest rate derivatives	150,122	125,215	119,219	107,490
Foreign exchange derivatives	134,382	129,274	75,314	75,694
Credit derivatives	7,294	7,731	8,371	8,451
Equity derivatives	22,602	27,291	24,217	35,071
Other derivatives	13,532	10,610	13,302	10,691
DERIVATIVE FINANCIAL INSTRUMENTS	**327,932**	**300,121**	**240,423**	**237,397**

The table below shows the total notional amount of trading derivatives. The notional amounts of derivative instruments are merely an indication of the volume of the Group's activities in financial instruments markets, and do not reflect the market risks associated with such instruments.

In millions of euros	31 December 2022 Exchange-traded	Over-the-counter, cleared through central clearing houses	Over-the-counter	Total	31 December 2021 Exchange-traded	Over-the-counter, cleared through central clearing houses	Over-the-counter	Total
Interest rate derivatives	1,442,663	12,349,703	5,254,166	19,046,532	1,319,006	9,761,179	4,846,327	15,926,512
Foreign exchange derivatives	40,292	130,148	7,610,392	7,780,832	56,415	133,330	6,873,623	7,063,368
Credit derivatives		464,228	518,926	983,154		392,338	545,919	938,257
Equity derivatives	1,177,728		535,465	1,713,193	799,005		506,164	1,305,169
Other derivatives	133,820		95,722	229,542	107,162		92,077	199,239
DERIVATIVE FINANCIAL INSTRUMENTS	**2,794,503**	**12,944,079**	**14,014,671**	**29,753,253**	**2,281,588**	**10,286,847**	**12,864,110**	**25,432,545**

As part of its Client Clearing activity, the Group guarantees the risk of default of its clients to central counterparties. The corresponding notional amount is EUR 1,187 billion at 31 December 2022 (EUR 1,050 billion at 31 December 2021).

4.b DERIVATIVES USED FOR HEDGING PURPOSES

The table below shows the notional amounts and the fair value of derivatives used for hedging purposes.

In millions of euros	31 December 2022 Notional amounts	Positive fair value	Negative fair value	31 December 2021 Notional amounts	Positive fair value	Negative fair value
Fair value hedges	**1,103,455**	**24,213**	**36,872**	**755,989**	**7,010**	**9,593**
Interest rate derivatives	1,094,689	23,955	36,525	746,253	6,689	9,512
Foreign exchange derivatives	8,766	258	347	9,736	321	81
Cash flow hedges	**213,866**	**1,126**	**3,070**	**213,743**	**1,606**	**481**
Interest rate derivatives	59,641	429	1,602	50,509	1,085	254
Foreign exchange derivatives	153,811	664	1,416	162,827	442	209
Other derivatives	414	33	52	407	79	18
Net foreign investment hedges	**1,719**	**62**	**59**	**2,659**	**64**	**2**
Foreign exchange derivatives	1,719	62	59	2,659	64	2
DERIVATIVES USED FOR HEDGING PURPOSES	**1,319,040**	**25,401**	**40,001**	**972,391**	**8,680**	**10,076**

Interest rate risk and foreign exchange risk management strategies are described in chapter 5 Pillar 3 of the Universal Registration Document (section 5.7 *Market risk – Market risk related to banking activities*). Quantitative information related to foreign currency borrowings used for net investment hedges is also mentioned in this chapter.

The table below presents the detail of fair value hedge relationships for identified financial instruments and portfolios of financial instruments that are continuing at 31 December 2022:

In millions of euros, at 31 December 2022	Hedging instruments				Hedged instruments			
	Notional amounts	**Positive fair value**	**Negative fair value**	**Cumulated changes in fair value used as the basis for recognising ineffectiveness**	**Carrying amount – asset**	**Cumulated changes in fair value – asset**	**Carrying amount – liability**	**Cumulated changes in fair value – liability**
Fair value hedges of identified instruments	**332,749**	**11,155**	**12,711**	**1,500**	**114,741**	**(12,204)**	**122,280**	**(10,588)**
Interest rate derivatives hedging the interest rate risk related to	**325,470**	**10,992**	**12,376**	**1,487**	**110,376**	**(12,128)**	**119,694**	**(10,540)**
Loans and receivables	19,827	613	171	527	18,394	(541)		
Securities	131,460	10,297	1,258	11,521	91,982	(11,587)		
Deposits	8,081	31	291	(375)			7,878	(388)
Debt securities	166,102	51	10,656	(10,186)			111,816	(10,152)
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**7,279**	**163**	**335**	**13**	**4,365**	**(76)**	**2,586**	**(48)**
Loans and receivables	2,619	95	64	35	2,410	(42)		
Securities	1,957	55	12	34	1,955	(34)		
Deposits	64		30	2			76	2
Debt securities	2,639	13	229	(58)			2,510	(50)
Interest rate risk hedged portfolios	**770,706**	**13,058**	**24,161**	**(11,240)**	**204,827**	**(8,877)**	**310,192**	**(20,063)**
Interest rate derivatives hedging the interest rate risk related to(1)	**769,218**	**12,963**	**24,149**	**(11,292)**	**203,490**	**(8,830)**	**310,192**	**(20,063)**
Loans and receivables	346,924	9,243	162	9,680	203,490	(8,830)		
Deposits	422,294	3,720	23,987	(20,972)			310,192	(20,063)
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**1,488**	**95**	**12**	**52**	**1,337**	**(47)**		
Loans and receivables	1,488	95	12	52	1,337	(47)		
TOTAL FAIR VALUE HEDGE	**1,103,455**	**24,213**	**36,872**	**(9,740)**	**319,568**	**(21,081)**	**432,472**	**(30,651)**

(1) Are included in this section the notional amounts of hedging derivatives and of swaps that reverse the interest rate positions, thus reducing the hedge relationship, when the hedged item still exists, for respectively EUR 121,183 million for derivatives hedging loans and receivables and EUR 103,261 million for derivatives hedging deposits.

The table below presents the detail of fair value hedge relationships for identified financial instruments and portfolios of financial instruments that are continuing at 31 December 2021:

	Hedging instruments				Hedged instruments			
In millions of euros, at 31 December 2021	Notional amounts	Positive fair value	Negative fair value	Cumulated changes in fair value used as the basis for recognising ineffectiveness	Carrying amount – asset	Cumulated changes in fair value – asset	Carrying amount – liability	Cumulated changes in fair value – liability
Fair value hedges of identified instruments	**302,733**	**3,013**	**6,008**	**(643)**	**110,232**	**1,530**	**116,360**	**1,131**
Interest rate derivatives hedging the interest rate risk related to	**294,121**	**2,818**	**5,939**	**(741)**	**105,419**	**1,601**	**112,726**	**1,099**
Loans and receivables	20,854	213	518	(278)	19,242	276		
Securities	112,596	1,179	5,399	(1,531)	86,177	1,325		
Deposits	6,725	351	17	274			6,644	271
Debt securities	153,946	1,075	5	794			106,082	828
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**8,612**	**195**	**69**	**98**	**4,813**	**(71)**	**3,634**	**32**
Loans and receivables	2,433	140	2	48	2,308	(51)		
Securities	2,518	28	12	20	2,505	(20)		
Deposits	181	3	21	9			197	9
Debt securities	3,480	24	34	21			3,437	23
Interest rate risk hedged portfolios	**453,256**	**3,997**	**3,585**	**(16)**	**109,933**	**1,463**	**178,771**	**1,320**
Interest rate derivatives hedging the interest rate risk related to(1)	**452,132**	**3,871**	**3,573**	**(58)**	**108,893**	**1,504**	**178,771**	**1,320**
Loans and receivables	183,765	606	2,574	(1,603)	108,893	1,504		
Deposits	268,367	3,265	999	1,545			178,771	1,320
Foreign exchange derivatives hedging the interest rate and foreign exchange risks related to	**1,124**	**126**	**12**	**42**	**1,040**	**(41)**		
Loans and receivables	1,124	126	12	42	1,040	(41)		
TOTAL FAIR VALUE HEDGE	**755,989**	**7,010**	**9,593**	**(659)**	**220,165**	**2,993**	**295,131**	**2,451**

(1) Are included in this section the notional amounts of hedging derivatives and of swaps that reverse the interest rate positions, thus reducing the hedge relationship, when the hedged item still exists, for respectively EUR 55,414 million for derivatives hedging loans and receivables and EUR 86,139 million for derivatives hedging deposits.

An asset or a liability or set of assets and liabilities, can be hedged over several periods of time with different derivative financial instruments. Besides, some hedges are achieved by the combination of two derivative instruments. In this case, the notional amounts add up and their total amount is higher than the hedged amount. The first situation is observed more particularly for interest rate risk hedged portfolios and the second for hedges of issued debt securities.

As regards discontinued fair value hedge relationships where the derivative contract was terminated, the cumulated amount of revaluation remaining to be amortised over the residual life of the hedged instruments amounts to EUR 1,399 million in assets at 31 December 2022, and to EUR -138 million in liabilities, for hedges of portfolios of financial instruments. At 31 December 2021, these amounts were EUR 1,509 million in assets and 14 million in liabilities.

Regarding hedges of identified instruments, the cumulated amount of revaluation remaining to be amortised over the residual life of the hedged instruments amounts to EUR 111 million in assets at 31 December 2022. At 31 December 2021, this amount was EUR 117 million in assets.

The notional amount of cash flow hedge derivatives is EUR 213,866 million at 31 December 2022. Changes in assets and liabilities recognised directly in equity amount to EUR -245 million. At 31 December 2021, the notional amount of cash flow hedge derivatives was EUR 213,743 million and changes in assets and liabilities recognised directly in equity amounted to EUR 1,329 million.

The tables below present the notional amounts of hedging derivatives by maturity at 31 December 2022 and at 31 December 2021:

In millions of euros, at 31 December 2022	Maturity date			
	Less than 1 year	**Between 1 and 5 years**	**Over 5 years**	**Total**
Fair value hedges	**382,063**	**430,968**	**290,424**	**1,103,455**
Interest rate derivatives	378,055	426,364	290,270	1,094,689
Foreign exchange derivatives	4,008	4,604	154	8,766
Cash flow hedges	**142,568**	**51,041**	**20,257**	**213,866**
Interest rate derivatives	18,178	30,041	11,422	59,641
Foreign exchange derivatives	124,223	20,753	8,835	153,811
Other derivatives	167	247		414
Net foreign investment hedges	**1,719**	**-**	**-**	**1,719**
Foreign exchange derivatives	1,719			1,719

In millions of euros, at 31 December 2021	Maturity date			
	Less than 1 year	**Between 1 and 5 years**	**Over 5 years**	**Total**
Fair value hedges	**149,613**	**340,799**	**265,577**	**755,989**
Interest rate derivatives	146,649	334,411	265,193	746,253
Foreign exchange derivatives	2,964	6,388	384	9,736
Cash flow hedges	**146,392**	**43,108**	**24,243**	**213,743**
Interest rate derivatives	10,350	27,777	12,382	50,509
Foreign exchange derivatives	135,867	15,099	11,861	162,827
Other derivatives	175	232		407
Net foreign investment hedges	**2,559**	**100**	**-**	**2,659**
Foreign exchange derivatives	2,559	100		2,659

4.c FINANCIAL ASSETS AT FAIR VALUE THROUGH EQUITY

In millions of euros	**31 December 2022**		**31 December 2021**	
	Fair value	**of which changes in value**	**Fair value**	**of which changes in value**

		recognised directly to equity		recognised directly to equity
Debt securities	**35,878**	**(866)**	**38,906**	**(1)**
Governments	18,682	(350)	19,980	117
Other public administrations	9,921	(197)	13,000	51
Credit institutions	3,816	(302)	4,138	(169)
Others	3,459	(17)	1,788	
Equity securities	**2,188**	**623**	**2,558**	**933**
TOTAL FINANCIAL ASSETS AT FAIR VALUE THROUGH EQUITY	**38,066**	**(243)**	**41,464**	**932**

Debt securities at fair value through equity include EUR 108 million classified as stage 3 at 31 December 2022 (EUR 105 million at 31 December 2021). For these securities, the credit impairment recognised in the profit and loss account has been charged to the negative changes in value recognised in equity for EUR 100 million at 31 December 2022 (EUR 104 million at 31 December 2021).

The option to recognise certain equity instruments at fair value through equity was retained in particular for shares held through strategic partnerships and shares that the Group is required to hold in order to carry out certain activities.

During the year ended 31 December 2022, the Group sold two of these investments and an unrealised gain of EUR 267 million was transferred to “retained earnings” (EUR 12 million at 31 December 2021).

4.d MEASUREMENT OF THE FAIR VALUE OF FINANCIAL INSTRUMENTS

Valuation process

BNP Paribas has retained the fundamental principle that it should have a unique and integrated processing chain for producing and controlling the valuations of financial instruments that are used for the purpose of daily risk management and financial reporting. All these processes are based on a common economic valuation which is a core component of business decisions and risk management strategies.

Economic value is composed of mid-market value, to which valuation adjustments are made.

Mid-market value is derived from external data or valuation techniques that maximise the use of observable and market-based data. Mid-market value is a theoretical additive value which does not take account of i) the direction of the transaction or its impact on the existing risks in the portfolio, ii) the nature of the counterparties, and iii) the aversion of a market participant to particular risks inherent in the instrument, the market in which it is traded, or the risk management strategy.

Valuation adjustments take into account valuation uncertainty and include market and credit risk premiums to reflect costs that could be incurred in case of an exit transaction in the principal market.

Fair value generally equals the economic value, subject to limited adjustments, such as own credit adjustments, which are specifically required by IFRS standards.

The main valuation adjustments are presented in the section below.

Valuation adjustments

Valuation adjustments retained by BNP Paribas for determining fair values are as follows:

Bid/offer adjustments: the bid/offer range reflects the additional exit cost for a price taker and symmetrically the compensation sought by dealers to bear the risk of holding the position or closing it out by accepting another dealer's price.

BNP Paribas assumes that the best estimate of an exit price is the bid or offer price, unless there is evidence that another point in the bid/offer range would provide a more representative exit price.

Input uncertainty adjustments: when the observation of prices or data inputs required by valuation techniques is difficult or irregular, an uncertainty exists on the exit price. There are several ways to gauge the degree of uncertainty on the exit price such as measuring the dispersion of the available price indications or estimating the possible ranges of the inputs to a valuation technique.

Model uncertainty adjustments: these relate to situations where valuation uncertainty is due to the valuation technique used, even though observable inputs might be available. This situation arises when the risks inherent in the instruments are different from those available in the observable data, and therefore the valuation technique involves assumptions that cannot be easily corroborated.

Future Hedging Costs adjustments (FHC): this adjustment applies to positions classified in Level 3 that require dynamic hedging throughout their lifetime leading to additional bid/offer costs. Calculation methods capture these expected costs in particular based on the optimal hedging frequency.

Credit valuation adjustment (CVA): the CVA adjustment applies to valuations and market quotations whereby the credit worthiness of the counterparty is not reflected. It aims to account for the possibility that the counterparty may default and that BNP Paribas may not receive the full fair value of the transactions.

In determining the cost of exiting or transferring counterparty risk exposures, the relevant market is deemed to be an inter-dealer market. However, the determination of CVA remains judgemental due to:

- the possible absence or lack of price discovery in the inter-dealer market;
- the influence of the regulatory landscape relating to counterparty risk on the market participants' pricing behaviour; and
- the absence of a dominant business model for managing counterparty risk.

The CVA model is grounded on the same exposures as those used for regulatory purposes. The model attempts to estimate the cost of an optimal risk management strategy based on i) implicit incentives and constraints inherent in the regulations in force and their evolutions, ii) market perception of the probability of default, and iii) default parameters used for regulatory purposes.

Funding valuation adjustment (FVA): when valuation techniques are used for the purpose of deriving fair value, funding assumptions related to the future expected cash flows are an integral part of the mid-market valuation, notably through the use of appropriate discount rates. These assumptions reflect what the Bank anticipates as being the effective funding conditions of the instrument that a market participant would consider. This notably takes into account the existence and terms of any collateral agreement. In particular, for non- or imperfectly collateralised derivative instruments, they include an explicit adjustment to the interbank interest rate.

Own-credit valuation adjustment for debts (OCA) and for derivatives (debit valuation adjustment – DVA): OCA and DVA are adjustments reflecting the effect of credit worthiness of BNP Paribas, on respectively the value of debt securities designated as at fair value through profit or loss and derivatives. Both adjustments are based on the expected future liability profiles of such instruments. The own credit worthiness is inferred from the market-based observation of the relevant bond issuance levels. The DVA adjustment is determined after taking into account the Funding Valuation Adjustment (FVA).

Thus, the carrying value of debt securities designated as at fair value though profit or loss is decreased by EUR 160 million at 31 December 2022, compared with an increase in value of EUR 359 million at 31 December 2021, *i.e.* a -EUR 519 million variation recognised directly in equity that will not be reclassified to profit or loss.

Instrument classes and classification within the fair value hierarchy for assets and liabilities measured at fair value

As explained in the summary of significant accounting policies (note 1.e.10), financial instruments measured at fair value are categorised into a fair value hierarchy consisting of three levels.

	31 December 2022											
	Financial instruments held for trading				**Instruments at fair value through profit or loss not held for trading**				**Financial assets at fair value through equity**			
In millions of euros	**Level 1**	**Level 2**	**Level 3**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
Securities	**130,589**	**25,744**	**805**	**157,138**	**1,643**	**1,495**	**5,801**	**8,939**	**32,727**	**4,395**	**944**	**38,066**
Governments	59,860	10,136	28	70,024				-	16,783	1,770	127	18,680
Other debt securities	16,454	14,695	630	31,779	1,152	500	333	1,985	14,497	2,412	288	17,197
Equities and other equity securities	54,275	913	147	55,335	491	995	5,468	6,954	1,447	213	529	2,189
Loans and repurchase agreements	**-**	**186,170**	**798**	**186,968**	**-**	**1,274**	**2,883**	**4,157**	**-**	**-**	**-**	**-**
Loans		6,428	5	6,433		1,274	2,883	4,157				
Repurchase agreements		179,742	793	180,535				-				
FINANCIAL ASSETS AT FAIR VALUE	**130,589**	**211,914**	**1,603**	**344,106**	**1,643**	**2,769**	**8,684**	**13,096**	**32,727**	**4,395**	**944**	**38,066**
Securities	**97,367**	**1,716**	**72**	**99,155**	**-**	**-**	**-**	**-**				
Governments	57,949	92	16	58,057				-				
Other debt securities	13,183	1,581	47	14,811				-				
Equities and other equity securities	26,235	43	9	26,287				-				
Borrowings and repurchase agreements	**-**	**230,303**	**2,048**	**232,351**	**-**	**1,472**	**253**	**1,725**				
Borrowings		6,952		6,952		1,472	253	1,725				
Repurchase agreements		223,351	2,048	225,399				-				
Issued debt securities *(note 4.h)*	**-**	**-**	**-**	**-**	**1,885**	**49,630**	**18,945**	**70,460**				
Subordinated debt *(note 4.h)*				-		675		675				
Non subordinated debt *(note 4.h)*				-	4	45,161	18,945	64,110				
Debt representative of shares of consolidated funds held by third parties				-	1,881	3,794		5,675				
FINANCIAL LIABILITIES AT FAIR VALUE	**97,367**	**232,019**	**2,120**	**331,506**	**1,885**	**51,102**	**19,198**	**72,185**				

31 December 2021

In millions of euros	Financial instruments held for trading				Instruments at fair value through profit or loss not held for trading				Financial assets at fair value through equity			
	Level 1	**Level 2**	**Level 3**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Total**
Securities	**152,215**	**28,234**	**630**	**181,079**	**3,520**	**1,865**	**5,043**	**10,428**	**33,356**	**6,987**	**1,121**	**41,464**
Governments	82,556	10,962	36	93,554				-	16,263	3,717		19,980
Other debt securities	20,921	15,697	404	37,022	2,867	696	404	3,967	15,551	3,057	318	18,926
Equities and other equity securities	48,738	1,575	190	50,503	653	1,169	4,639	6,461	1,542	213	803	2,558
Loans and repurchase agreements	**-**	**246,895**	**612**	**247,507**	**-**	**1,398**	**903**	**2,301**	**-**	**-**	**-**	**-**
Loans		6,525	13	6,538		1,398	903	2,301				
Repurchase agreements		240,370	599	240,969				-				
FINANCIAL ASSETS AT FAIR VALUE	**152,215**	**275,129**	**1,242**	**428,586**	**3,520**	**3,263**	**5,946**	**12,729**	**33,356**	**6,987**	**1,121**	**41,464**
Securities	**110,117**	**2,064**	**157**	**112,338**	**-**	**-**	**-**	**-**				
Governments	76,019	267		76,286								
Other debt securities	14,382	1,683	117	16,182								
Equities and other equity securities	19,716	114	40	19,870								
Borrowings and repurchase agreements	**-**	**290,659**	**918**	**291,577**	**-**	**1,556**	**323**	**1,879**				
Borrowings		1,758		1,758		1,556	323	1,879				
Repurchase agreements		288,901	918	289,819								
Issued debt securities *(note 4.h)*	**-**	**-**	**-**	**-**	**2,716**	**47,409**	**20,258**	**70,383**				
Subordinated debt *(note 4.h)*						947		947				
Non subordinated debt *(note 4.h)*						42,076	20,258	62,334				
Debt representative of shares of consolidated funds held by third parties					2,716	4,386		7,102				
FINANCIAL LIABILITIES AT FAIR VALUE	**110,117**	**292,723**	**1,075**	**403,915**	**2,716**	**48,965**	**20,581**	**72,262**				

Fair values of derivatives are broken down by dominant risk factor, namely interest rate, foreign exchange, credit and equity. Derivatives used for hedging purposes are mainly interest rate derivatives.

	31 December 2022							
	Positive market value				Negative market value			
In millions of euros	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	873	147,853	1,396	150,122	503	122,659	2,053	125,215
Foreign exchange derivatives	33	133,628	721	134,382	35	129,204	35	129,274
Credit derivatives		6,382	912	7,294		6,822	909	7,731
Equity derivatives	6,760	13,512	2,330	22,602	9,177	13,290	4,824	27,291
Other derivatives	1,295	12,158	79	13,532	843	9,629	138	10,610
DERIVATIVE FINANCIAL INSTRUMENTS NOT USED FOR HEDGING PURPOSES	**8,961**	**313,533**	**5,438**	**327,932**	**10,558**	**281,604**	**7,959**	**300,121**
DERIVATIVE FINANCIAL INSTRUMENTS USED FOR HEDGING PURPOSES	**-**	**25,401**	**-**	**25,401**	**-**	**40,001**	**-**	**40,001**

	31 December 2021							
	Positive market value				Negative market value			
In millions of euros	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Interest rate derivatives	331	117,854	1,034	119,219	318	105,988	1,184	107,490
Foreign exchange derivatives	40	74,827	447	75,314	36	75,388	270	75,694
Credit derivatives		7,532	839	8,371		7,562	889	8,451
Equity derivatives	9,770	12,741	1,706	24,217	12,593	15,795	6,683	35,071
Other derivatives	1,284	11,962	56	13,302	1,179	9,359	153	10,691
DERIVATIVE FINANCIAL INSTRUMENTS NOT USED FOR HEDGING PURPOSES	**11,425**	**224,916**	**4,082**	**240,423**	**14,126**	**214,092**	**9,179**	**237,397**
DERIVATIVE FINANCIAL INSTRUMENTS USED FOR HEDGING PURPOSES	**-**	**8,680**	**-**	**8,680**	**-**	**10,076**	**-**	**10,076**

Transfers between levels may occur when an instrument fulfils the criteria defined, which are generally market and product dependent. The main factors influencing transfers are changes in the observation capabilities, passage of time, and events during the transaction lifetime. The timing of recognising transfers is determined at the beginning of the reporting period.

During the year ended 2022, transfers between Level 1 and Level 2 were not significant.

Description of main instruments in each level

The following section provides a description of the instruments in each level in the hierarchy. It describes notably instruments classified in Level 3 and the associated valuation methodologies.

For main trading book instruments and derivatives classified in Level 3, further quantitative information is provided about the inputs used to derive fair value.

Level 1

This level encompasses all derivatives and securities that are listed on exchanges or quoted continuously in other active markets.

Level 1 includes notably equity securities and liquid bonds, shortselling of these instruments, derivative instruments traded on organised markets (futures, options, *etc.*). It includes shares of funds and UCITS, for which the net asset value is calculated on a daily basis, as well as debt representative of shares of consolidated funds held by third parties.

Level 2

The Level 2 stock of securities is composed of securities which are less liquid than the Level 1 bonds. They are predominantly corporate debt securities, government bonds, mortgage-backed securities, fund shares and short-term securities such as certificates of deposit. They are classified in Level 2 notably when external prices for the same security can be regularly observed from a reasonable number of market makers that are active in this security, but these prices do not represent directly tradable prices. This comprises amongst other, consensus pricing services with a reasonable number of contributors that are active market makers as well as indicative runs from active brokers and/or dealers. Other sources such as primary issuance market, may also be used where relevant.

Repurchase agreements are classified predominantly in Level 2. The classification is primarily based on the observability and liquidity of the repo market, depending on the underlying collateral and the maturity of the repo transaction.

Debts issued designated as at fair value through profit and loss, are classified in the same level as the one that would apply to the embedded derivative taken individually. The issuance spread is considered observable.

Derivatives classified in Level 2 comprise mainly the following instruments:

- vanilla instruments such as interest rate swaps, caps, floors and swaptions, credit default swaps, equity/foreign exchange (FX)/commodities forwards and options;
- structured derivatives for which model uncertainty is not significant such as exotic FX options, mono- and multi-underlying equity/funds derivatives, single curve exotic interest rate derivatives and derivatives based on structured rates.

The above derivatives are classified in Level 2 when there is a documented stream of evidence supporting one of the following:

- fair value is predominantly derived from prices or quotations of other Level 1 and Level 2 instruments, through standard market interpolation or stripping techniques whose results are regularly corroborated by real transactions;
- fair value is derived from other standard techniques such as replication or discounted cash flows that are calibrated to observable prices, that bear limited model risk and enable an effective offset of the risks of the instrument through trading Level 1 or Level 2 instruments;
- fair value is derived from more sophisticated or proprietary valuation techniques but is directly evidenced through regular back-testing using external market-based data.

Determining whether an over-the-counter (OTC) derivative is eligible for Level 2 classification involves judgement. Consideration is given to the origin, transparency and reliability of external data used, and the amount of uncertainty associated with the use of models. It follows that the Level 2 classification criteria involve multiple analysis axis within an “observability zone” whose limits are determined by i) a predetermined list of product categories and ii) the underlying and maturity bands. These criteria are regularly reviewed and updated, together with the applicable valuation adjustments, so that the classification by level remains consistent with the valuation adjustment policy.

Level 3

Level 3 securities of the trading book mainly comprise units of funds and unlisted equity shares measured at fair value through profit or loss or through equity.

Unlisted private equities are systematically classified as Level 3, with the exception of UCITS with a daily net asset value, which are classified in the Level 1 of the fair value hierarchy.

Shares and other unlisted variable income securities in Level 3 are valued using one of the following methods: a share of revalued net book value, multiples of comparable companies, future cash flows method, multi-criteria approach.

Some repurchase agreements: mainly long-term or structured repurchase agreements on corporate bonds and ABSs when the valuation of these transactions requires proprietary methodologies given the bespoke nature of the transactions and the lack of activity and price discovery in the long-term repo market. The curves used in the valuation are corroborated using available data such as recent long-term repo trade data and price enquiry data. Valuation adjustments applicable to these exposures are commensurate with the degree of uncertainty inherent in the modelling choices and amount of data available.

Debts issued designated as at fair value through profit or loss, are classified in the same level as the one that would apply to the embedded derivative taken individually. The issuance spread is considered observable.

Derivatives

Vanilla derivatives are classified in Level 3 when the exposure is beyond the observation zone for rate curves or volatility surfaces, or relates to less liquid markets such as tranches on old credit index series or emerging markets interest rates markets. The main instruments are:

- ***Interest rate derivatives:*** exposures mainly comprise swap products in less liquid currencies. Classification is driven by the lower liquidity of some maturities, while observation capabilities through consensus may be available. The valuation technique is standard, and uses external market information and extrapolation techniques;

- ***Credit derivatives (CDS):*** exposures mainly comprise CDSs beyond the maximum observable maturity and, to a much lesser extent, CDSs on illiquid or distressed names and CDSs on loan indices. Classification is driven by the lack of liquidity while observation capabilities may be available notably through consensus. Level 3 exposures also comprise CDS and Total Return Swaps (TRS) positions on securitised assets. These are priced along the same modelling techniques as the underlying bonds, taking into consideration the funding basis and specific risk premium;
- ***Equity derivatives:*** exposures essentially comprise long dated forward or volatility products or exposures where there is a limited market for optional products. The marking of the forward curves and volatility surfaces beyond the maximum observable maturity relies on extrapolation techniques. However, when there is no market for model input, volatility or forward is generally determined on the basis of proxy or historical analysis.

Similarly, long-term transactions on equity baskets are also classified in Level 3, based on the absence of equity correlation observability on long maturities.

These vanilla derivatives are subject to valuation adjustments linked to uncertainty on liquidity, specialised by nature of underlying and liquidity bands.

Structured derivatives classified in Level 3 predominantly comprise hybrid products (FX/Interest Rates hybrids, Equity hybrids), credit correlation products, prepayment-sensitive products, some stock basket optional products and some interest rate optional instruments. The main exposures are described below, with insight into the related valuation techniques and on the source of uncertainty:

- ***structured interest rate options*** are classified in Level 3 when they involve currencies where there is not sufficient observation or when they include a quanto feature where the pay-off is measured with a forex forward fixed rate (except for the main currencies). Long term structured derivatives are also classified in Level 3;
- ***hybrid FX/Interest rate products*** essentially comprise a specific product family known as Power Reverse Dual Currency (PRDC) when there is material valuation uncertainty. When valuation of PRDCs requires sophisticated modelling of joint behaviour of FX and interest rate, and is notably sensitive to the unobservable FX/interest rate correlations, such products are classified as Level 3. PRDCs valuations are corroborated with recent trade data and consensus data;
- ***securitisation swaps*** mainly comprise fixed-rate swaps, cross-currency or basis swaps whose notional is indexed to the prepayment behaviour of some underlying portfolio. The estimation of the maturity profile of securitisation swaps is corroborated by statistical estimates using external historical data;
- ***forward volatility options*** are generally products whose pay-off is indexed to the future variability of a rate index such as volatility swaps. These products involve material model risk as it is difficult to infer forward volatility information from market-traded instruments. The valuation adjustment framework is calibrated to the uncertainty inherent in the product, and to the range of uncertainty from the existing external consensus data;
- ***inflation derivatives*** classified in Level 3 mainly comprise swap products on inflation indices that are not associated with a liquid indexed bond market, optional products on inflation indices (such as caps and floors) and other forms of inflation indices involving optionality on the inflation indices or on the inflation annual rate. Valuation techniques used for inflation derivatives are predominantly standard market models. Proxy techniques are used for a few limited exposures. Although the valuations are corroborated through monthly consensus data, these products are classified as Level 3 due to their lack of liquidity and some uncertainties inherent in the calibration;
- the valuation of ***bespoke CDOs*** requires correlation of default events when there is material valuation uncertainty. This information is inferred from the active index tranche market through a proprietary projection technique and involves proprietary extrapolation and interpolation techniques. Multi-geography CDOs further require an additional correlation assumption. Finally, the bespoke CDO model also involves proprietary assumptions and parameters related to the dynamic of the recovery factor. CDO modelling, is calibrated on the observable index tranche markets, and is regularly back-tested against consensus data on standardised pools. The uncertainty arises from the model risk associated with the projection and geography mixing technique, and the uncertainty of associated parameters, together with the recovery modelling;
- ***N to Default baskets*** are other forms of credit correlation products, modelled through standard copula techniques. The main inputs required are the pair-wise correlations between the basket components which can be observed in the consensus and the transactions. Linear baskets are considered observable;
- ***equity and equity-hybrid correlation products*** are instruments whose pay-off is dependent on the joint behaviour of a basket of equities/indices leading to a sensitivity of the fair value measurement to the correlation amongst the basket components. Hybrid versions of these instruments involve baskets that mix equity and non-equity underlyings such as commodity indices, or foreign exchange rates. Only a subset of the Equity/index correlation matrix is regularly observable and traded, while most cross-asset correlations are not active. Therefore, classification in Level 3 depends on the composition of the basket, the maturity, and the hybrid nature of the product. The correlation input is derived from a proprietary model combining historical estimators, and other adjustment factors, that are corroborated by reference to recent trades or external data. The correlation matrix is essentially available from consensus services, and when a correlation between two underlying instruments is not available, it might be obtained from extrapolation or proxy techniques.

These structured derivatives are subject to specific valuation adjustments to cover uncertainties linked to liquidity, parameters and model risk.

Valuation adjustments (CVA, DVA and FVA)

The valuation adjustment for counterparty credit risk (CVA), own-credit risk for derivatives (DVA) and the explicit funding valuation adjustment (FVA) are deemed to be unobservable components of the valuation framework and therefore classified in

Level 3. This does not impact, in general cases, the classification of individual transactions into the fair value hierarchy. However, a specific process allows to identify individual deals for which the marginal contribution of these adjustments and related uncertainty is significant and justifies classifying these transactions in Level 3.

The table below provides the range of values of main unobservable inputs for the valuation of Level 3 financial instruments. The ranges displayed correspond to a variety of different underlying instruments and are meaningful only in the context of the valuation technique implemented by BNP Paribas. The weighted averages, where relevant and available, are based on fair values, nominal amounts or sensitivities.

The main unobservable parameters used for the valuation of debt issued in Level 3 are equivalent to those of their economic hedge derivative. Information on those derivatives, displayed in the following table, is also applicable to these debts.

Risk classes	Balance Sheet valuation *(in millions of euros)* Asset	Balance Sheet valuation *(in millions of euros)* Liability	Main product types composing the Level 3 stock within the risk class	Valuation technique used for the product types considered	Main unobservable inputs for the product types considered	Range of unobservable input across Level 3 population considered	Weighted average
Repurchase agreements	793	2,048	Long-term repo and reverse-repo agreements	Proxy techniques, based amongst other on the funding basis of a benchmark bond pool, that is actively traded and representative of the repo underlying	Long-term repo spread on private bonds (High Yield, High Grade) and on ABSs	0 bp to 80 bp	21 bp (a)
Interest rate derivatives	1,396	2,053	Hybrid Forex/Interest rates derivatives	Hybrid Forex interest rate option pricing model	Correlation between FX rate and interest rates. Main currency pairs are EUR/JPY, USD/JPY, AUD/JPY	-13% to 53%	17% (a)
			Hybrid inflation rates/Interest rates derivatives	Hybrid inflation interest rate option pricing model	Correlation between interest rates and inflation rates mainly in Europe.	3% to 14%	12%
			Floors and caps on inflation rate or on the cumulative inflation (such as redemption floors), predominantly on European and French inflation	Inflation pricing model	Volatility of cumulative inflation	1% to 11.7%	(b)
					Volatility of the year-on-year inflation rate	0.4% to 3.3%	
			Forward Volatility products such as volatility swaps, mainly in euros	Interest rates option pricing model	Forward volatility of interest rates	0.6% to 1.2%	(b)
			Balance-guaranteed fixed rate, basis or cross currency swaps, predominantly on European collateral pools	Prepayment modelling Discounted cash flows	Constant prepayment rates	0% to 18%	1% (a)
Credit derivatives	912	909	Collateralised Debt Obligations and index tranches for inactive index series	Base correlation projection technique and recovery modelling	Base correlation curve for bespoke portfolios	17% to 85%	(b)
					Recovery rate variance for single name underlyings	0 to 25%	(b)
			N-to-default baskets	Credit default model	Default correlation	48% to 73%	53% (a)
			Single name Credit Default Swaps (other than	Stripping, extrapolation and interpolation	Credit default spreads beyond	45 bp to 535 bp(1)	435 bp (c)

Risk classes	Balance Sheet valuation (in millions of euros) Asset	Liability	Main product types composing the Level 3 stock within the risk class	Valuation technique used for the product types considered	Main unobservable inputs for the product types considered	Range of unobservable input across Level 3 population considered	Weighted average
			CDS on ABSs and loans indices)		observation limit (10 years)		
					Illiquid credit default spread curves (across main tenors)	8 bp to 610 bp[(2)]	99 bp [(c)]
Equity derivatives	2,330	4,824	Simple and complex derivatives on multi-underlying baskets on stocks	Various volatility option models	Unobservable equity volatility	0% to 124%[(3)]	33% [(d)]
					Unobservable equity correlation	25% to 100%	73% [(c)]

(1) The upper part of the range relates to a significant balance sheet position on an issuer belonging to the European telecommunication sector. The remaining positions relate mainly to sovereign and financial issuers.
(2) The upper bound of the range relates to distribution, consumer and transportation sector issuers that represent an insignificant portion of the balance sheet (CDSs with illiquid underlying instruments).
(3) The upper part of the range relates to 6 equities representing a non-material portion of the balance sheet on options with equity underlying instruments. Including these inputs, the upper bound of the range would be around 289%.
(a) Weights based on relevant risk axis at portfolio level.
(b) No weighting, since no explicit sensitivity is attributed to these inputs.
(c) Weighting is not based on risks, but on an alternative methodology in relation with the Level 3 instruments (present value or notional).
(d) Simple averaging.

Table of movements in Level 3 financial instruments

For Level 3 financial instruments, the following movements occurred during the year ended 31 December 2022:

	Financial assets				Financial liabilities		
In millions of euros	**Financial instruments at fair value through profit or loss held for trading**	**Financial instruments at fair value through profit or loss not held for trading**	**Financial assets at fair value through equity**	**TOTAL**	**Financial instruments at fair value through profit or loss held for trading**	**Financial instruments designated as at fair value through profit or loss**	**TOTAL**
AT 31 DECEMBER 2021	**5,324**	**5,946**	**1,121**	**12,391**	**(10,254)**	**(20,581)**	**(30,835)**
Purchases	1,507	1,497	257	**3,261**			**-**
Issues				**-**		(6,810)	**(6,810)**
Sales	(1,591)	(1,219)	(502)	**(3,312)**	(24)		**(24)**
Settlements[(1)]	2,682	1,824	135	**4,641**	2,905	7,904	**10,809**
Transfers to Level 3	1,657	26	36	**1,719**	(733)	(1,760)	**(2,493)**
Transfers from Level 3	(2,126)	(34)		**(2,160)**	1,391	1,007	**2,398**
Gains (or losses) recognised in profit or loss with respect to transactions expired or terminated during the period	(434)	651	(41)	**176**	(2,983)	2,800	**(183)**
Gains (or losses) recognised in profit or loss with respect to unexpired instruments at the end of the period	20	1		**21**	(383)	(1,758)	**(2,141)**
Changes in fair value of assets and liabilities recognised directly in equity				-			-
Items related to exchange rate movements	2	(8)	(3)	**(9)**	2		**2**

Changes in fair value of assets and liabilities recognised in equity			(59)	**(59)**			**-**
AT 31 DECEMBER 2022	**7,041**	**8,684**	**944**	**16,669**	**(10,079)**	**(19,198)**	**(29,277)**

(1) For the assets, includes redemptions of principal, interest payments as well as cash inflows and outflows relating to derivatives. For the liabilities, includes principal redemptions, interest payments as well as cash inflows and outflows relating to derivatives the fair value of which is negative.

Transfers out of Level 3 of derivatives at fair value include mainly the update of the observability tenor of certain yield curves, and of market parameters related to repurchase agreements and credit transactions but also the effect of derivatives becoming only or mainly sensitive to observable inputs due to the shortening of their lifetime.

Transfers into Level 3 of instruments at fair value reflect the effect of the regular update of the observability zones.

Transfers have been reflected as if they had taken place at the beginning of the reporting period.

The Level 3 financial instruments may be hedged by other Level 1 and Level 2 instruments, the gains and losses of which are not shown in this table. Consequently, the gains and losses shown in this table are not representative of the gains and losses arising from management of the net risk on all these instruments.

Sensitivity of fair value to reasonably possible changes in Level 3 assumptions

The following table summarises those financial assets and financial liabilities classified as Level 3 for which alternative assumptions in one or more of the unobservable inputs would change fair value significantly.

The amounts disclosed are intended to illustrate the range of possible uncertainty inherent to the judgement applied when estimating Level 3 parameters, or when selecting valuation techniques. These amounts reflect valuation uncertainties that prevail at the measurement date, and even though such uncertainties predominantly derive from the portfolio sensitivities that prevailed at that measurement date, they are not predictive or indicative of future movements in fair value, nor do they represent the effect of market stress on the portfolio value.

In estimating sensitivities, BNP Paribas either remeasured the financial instruments using reasonably possible inputs, or applied assumptions based on the valuation adjustment policy.

For the sake of simplicity, the sensitivity on cash instruments that are not relating to securitised instruments was based on a uniform 1% shift in the price. More specific shifts were however calibrated for each class of the Level 3 securitised exposures, based on the possible ranges of the unobservable inputs.

For derivative exposures, the sensitivity measurement is based on the credit valuation adjustment (CVA), the explicit funding valuation adjustment (FVA) and the parameter and model uncertainty adjustments related to Level 3.

Regarding the credit valuation adjustment (CVA) and the explicit funding valuation adjustment (FVA), the uncertainty was calibrated based on prudent valuation adjustments described in the technical standard “Prudent Valuation” published by the European Banking Authority. For other valuation adjustments, two scenarios were considered: a favourable scenario where all or portion of the valuation adjustment is not considered by market participants, and an unfavourable scenario where market participants would require twice the amount of valuation adjustments considered by BNP Paribas for entering into a transaction.

	31 December 2022		**31 December 2021**	
In millions of euros	**Potential impact on income**	**Potential impact on equity**	**Potential impact on income**	**Potential impact on equity**
Debt securities	+/-8	+/-3	+/-7	+/-3
Equities and other equity securities	+/-56	+/-5	+/-48	+/-8
Loans and repurchase agreements	+/-42		+/-12	
Derivative financial instruments	*+/-576*		*+/-588*	
Interest rate and foreign exchange derivatives	*+/-227*		*+/-322*	
Credit derivatives	*+/-98*		*+/-35*	

Equity derivatives	*+/-245*		*+/-227*	
Other derivatives	*+/-6*		*+/-4*	
SENSITIVITY OF LEVEL 3 FINANCIAL INSTRUMENTS	**+/-682**	**+/-8**	**+/-655**	**+/-11**

Deferred margin on financial instruments measured using techniques developed internally and based on inputs partly unobservable in active markets

Deferred margin on financial instruments ("Day One Profit") primarily concerns the scope of financial instruments eligible for Level 3 and to a lesser extent some financial instruments eligible for Level 2 where valuation adjustments for uncertainties regarding parameters or models are not negligible compared to the initial margin.

The Day One Profit is calculated after setting aside valuation adjustments for uncertainties as described previously and released to profit or loss over the expected period for which the inputs will be unobservable. The unamortised amount is included under "Financial instruments at fair value through profit or loss" as a reduction in the fair value of the relevant transactions.

In millions of euros	**Deferred margin at 31 December 2021**	**Deferred margin on transactions during the period**	**Margin taken to the profit and loss account during the period**	**Deferred margin at 31 December 2022**
Interest rate and foreign exchange derivatives	204	142	(152)	194
Credit derivatives	164	150	(140)	174
Equity derivatives	401	449	(424)	426
Other instruments	9	31	(30)	10
Financial instruments	**778**	**772**	**(746)**	**804**

4.e FINANCIAL ASSETS AT AMORTISED COST

DETAIL OF LOANS AND ADVANCES BY NATURE

	31 December 2022			**31 December 2021**		
In millions of euros	**Gross value**	**Impairment** *(note 2.h)*	**Carrying amount**	**Gross value**	**Impairment** *(note 2.h)*	**Carrying amount**
Loans and advances to credit institutions	**32,716**	**(100)**	**32,616**	**21,844**	**(93)**	**21,751**
On demand accounts	11,000	(8)	10,992	9,009	(8)	9,001
Loans[(1)]	15,767	(92)	15,675	10,635	(85)	10,550
Repurchase agreements	5,949		5,949	2,200		2,200
Loans and advances to customers	**875,301**	**(18,281)**	**857,020**	**833,935**	**(19,935)**	**814,000**
On demand accounts	42,963	(2,844)	40,119	52,488	(3,157)	49,331
Loans to customers	788,971	(14,354)	774,617	740,080	(15,658)	724,422
Finance leases	42,574	(1,083)	41,491	41,026	(1,120)	39,906
Repurchase agreements	793		793	341		341
TOTAL LOANS AND ADVANCES AT AMORTISED COST	**908,017**	**(18,381)**	**889,636**	**855,779**	**(20,028)**	**835,751**

(1) Loans and advances to credit institutions include term deposits made with central banks.

CONTRACTUAL MATURITIES OF FINANCE LEASES

In millions of euros	31 December 2022	31 December 2021
Gross investment	**45,602**	**43,823**
Receivable within 1 year	*13,278*	*12,276*
Receivable after 1 year but within 5 years	*28,068*	*27,399*
Receivable beyond 5 years	*4,256*	*4,148*
Unearned interest income	**(3,028)**	**(2,797)**
Net investment before impairment	**42,574**	**41,026**
Receivable within 1 year	*12,176*	*11,289*
Receivable after 1 year but within 5 years	*26,396*	*25,845*
Receivable beyond 5 years	*4,002*	*3,892*
Impairment provisions	**(1,083)**	**(1,120)**
Net investment after impairment	**41,491**	**39,906**

DETAIL OF DEBT SECURITIES BY TYPE OF ISSUER

	31 December 2022			31 December 2021		
In millions of euros	Gross value	Impairment *(note 2.h)*	Carrying amount	Gross value	Impairment *(note 2.h)*	Carrying amount
Governments	59,961	(23)	59,938	57,221	(20)	57,201
Other public administration	15,686	(2)	15,684	17,317	(2)	17,315
Credit institutions	9,062	(2)	9,060	10,593	(2)	10,591
Others	29,435	(103)	29,332	23,547	(144)	23,403
TOTAL DEBT SECURITIES AT AMORTISED COST	**114,144**	**(130)**	**114,014**	**108,678**	**(168)**	**108,510**

DETAIL OF FINANCIAL ASSETS AT AMORTISED COST BY STAGE

	31 December 2022			31 December 2021		
In millions of euros	Gross Value	Impairment *(note 2.h)*	Carrying amount	Gross Value	Impairment *(note 2.h)*	Carrying amount
Loans and advances to credit institutions	**32,716**	**(100)**	**32,616**	**21,844**	**(93)**	**21,751**
Stage 1	32,439	(11)	32,428	21,516	(13)	21,503
Stage 2	191	(10)	181	242	(2)	240
Stage 3	86	(79)	7	86	(78)	8
Loans and advances to customers	**875,301**	**(18,281)**	**857,020**	**833,935**	**(19,935)**	**814,000**
Stage 1	761,930	(1,998)	759,932	701,259	(1,834)	699,425
Stage 2[(1)]	88,095	(2,839)	85,256	104,857	(2,687)	102,170
Stage 3	25,276	(13,444)	11,832	27,819	(15,414)	12,405
Debt securities	**114,144**	**(130)**	**114,014**	**108,678**	**(168)**	**108,510**
Stage 1	113,602	(27)	113,575	108,006	(20)	107,986
Stage 2	387	(10)	377	412	(25)	387
Stage 3	155	(93)	62	260	(123)	137
TOTAL FINANCIAL ASSETS AT AMORTISED COST	**1,022,161**	**(18,511)**	**1,003,650**	**964,457**	**(20,196)**	**944,261**

(1) The variation on loans classified as stage 2 is presented in note 2.h.

4.F IMPAIRED FINANCIAL ASSETS (STAGE 3)

The following tables present the carrying amounts of impaired financial assets carried at amortised cost and of impaired financing and guarantee commitments, as well as related collateral and other guarantees.

The amounts shown for collateral and other guarantees correspond to the lower of the value of the collateral or other guarantee and the value of the secured assets.

	31 December 2022			
	Impaired financial assets (Stage 3)			Collateral received
In millions of euros	Gross value	Impairment	Net	
Loans and advances to credit institutions *(note 4.e)*	86	(79)	7	1
Loans and advances to customers *(note 4.e)*	25,276	(13,444)	11,832	7,651
Debt securities at amortised cost *(note 4.e)*	155	(93)	62	14
TOTAL AMORTISED-COST IMPAIRED ASSETS (STAGE 3)	**25,517**	**(13,616)**	**11,901**	**7,666**
Financing commitments given	898	(73)	825	198
Guarantee commitments given	820	(243)	577	135
TOTAL OFF-BALANCE SHEET IMPAIRED COMMITMENTS (STAGE 3)	**1,718**	**(316)**	**1,402**	**333**

	31 December 2021			
	Impaired financial assets (Stage 3)			
In millions of euros	Gross value	Impairment	Net	Collateral received
Loans and advances to credit institutions *(note 4.e)*	86	(78)	8	1
Loans and advances to customers *(note 4.e)*	27,819	(15,414)	12,405	8,068
Debt securities at amortised cost *(note 4.e)*	260	(123)	137	25
TOTAL AMORTISED-COST IMPAIRED ASSETS (STAGE 3)	**28,165**	**(15,615)**	**12,550**	**8,094**
Financing commitments given	1,088	(89)	999	65
Guarantee commitments given	833	(265)	568	192
TOTAL OFF-BALANCE SHEET IMPAIRED COMMITMENTS (STAGE 3)	**1,921**	**(354)**	**1,567**	**257**

The following table presents the changes in gross exposures of stage 3 assets (EU CR2):

Gross value *In millions of euros*	Year to 31 Dec. 2022	Year to 31 Dec. 2021
IMPAIRED EXPOSURES (STAGE 3) AT OPENING BALANCE	**28,165**	**30,420**
Transfer to stage 3	6,125	6,432
Transfer to stage 1 or stage 2	(1,672)	(2,548)
Assets written off	(4,827)	(4,491)
Other changes	(2,274)	(1,648)
IMPAIRED EXPOSURES (STAGE 3) AT CLOSING BALANCE	**25,517**	**28,165**

4.G FINANCIAL LIABILITIES AT AMORTISED COST DUE TO CREDIT INSTITUTIONS AND CUSTOMERS

In millions of euros	31 December 2022	31 December 2021
Deposits from credit institutions	**124,718**	**165,699**
On demand accounts	12,538	9,105
Interbank borrowings(1)	104,135	147,635
Repurchase agreements	8,045	8,959
Deposits from customers	**1,008,054**	**957,684**
On demand deposits	592,267	634,784
Savings accounts	162,354	158,932
Term accounts and short-term notes	253,210	163,429
Repurchase agreements	223	539

(1) Interbank borrowings from credit institutions include term borrowings from central banks, of which EUR 67 billion of TLTRO III at 31 December 2022 compared to EUR 120.1 billion at 31 December 2021 (see note 2.a Net Interest Income).

4.H DEBT SECURITIES AND SUBORDINATED DEBT

This note covers all issued debt securities and subordinated debt measured at amortised cost and designated as at fair value through profit or loss.

DEBT SECURITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (NOTE 4.A)

Issuer/Issue date *In millions of euros*	**Currency**	**Original amount in foreign currency** *(millions)*	**Date of call or interest step-up**	**Interest rate**	**Interest step-up**	**Conditions precedent for coupon payment**[1]	**31 December 2022**	**31 December 2021**
Debt securities							**64,110**	**62,334**
Subordinated debt							**676**	**947**
Redeemable subordinated debt			[2]				**16**	**41**
Perpetual subordinated debt							**660**	**906**
BNP Paribas Fortis Dec. 2007[3]	EUR	3,000	Dec.-14	3-month Euribor +200 bp		A	660	906

(1) Conditions precedent for coupon payment:

A Coupon payments are halted should the issuer have insufficient capital or the underwriters become insolvent or when the dividend declared for Ageas shares falls below a certain threshold.

(2) After agreement from the banking supervisory authority and at the issuer's initiative, redeemable subordinated debt issues may contain a call provision authorising the Group to redeem the securities prior to maturity by repurchasing them in the stock market, via public tender offers, or in the case of private placements over the counter. Debt issued by BNP Paribas SA or foreign subsidiaries of the Group via placements in the international markets may be subject to early redemption of the capital and early payment of interest due at maturity at the issuer's discretion on or after a date stipulated in the issue particulars (call option), or in the event that changes in the applicable tax rules oblige the BNP Paribas Group issuer to compensate debt-holders for the consequences of such changes. Redemption may be subject to a notice period of between 15 and 60 days, and is in all cases subject to approval by the banking supervisory authorities.

(3) Convertible And Subordinated Hybrid Equity-linked Securities (CASHES) issued by BNP Paribas Fortis (previously Fortis Banque) in December 2007.

The CASHES are perpetual securities but may be exchanged for Ageas (previously Fortis SA/NV) shares at the holder's sole discretion at a price of EUR 239.40. However, as of 19 December 2014, the CASHES will be automatically exchanged into Ageas shares if their price is equal to or higher than EUR 359.10 for twenty consecutive trading days. The principal amount will never be redeemed in cash. The rights of the CASHES holders are limited to the Ageas shares held by BNP Paribas Fortis and pledged to them.

Ageas and BNP Paribas Fortis have entered into a Relative Performance Note (RPN) contract, the value of which varies contractually so as to offset the impact on BNP Paribas Fortis of the relative difference between changes in the value of the CASHES and changes in the value of the Ageas shares.

Since 1 January 2022, the liability is no longer eligible to prudential own funds.

DEBT SECURITIES MEASURED AT AMORTISED COST

Issuer/Issue date *In millions of euros*	Currency	Original amount in foreign currency *(millions)*	Date of call or interest step-up	Interest rate	Interest step-up	Conditions precedent for coupon payment(1)	31 December 2022	31 December 2021
Debt securities							**154,143**	**149,723**
Debt securities in issue with an initial maturity of less than one year							**58,042**	**47,293**
Negotiable debt securities							58,042	47,293
Debt securities in issue with an initial maturity of more than one year							**96,101**	**102,430**
Negotiable debt securities							17,587	27,256
Bonds							78,514	75,174
Subordinated debt							**24,156**	**24,720**
Redeemable subordinated debt			(2)				**22,419**	**23,000**
Undated subordinated notes							**1,509**	**1,494**
BNP Paribas SA Oct. 85	EUR	305	-	TMO - 0.25%	-	B	254	254
BNP Paribas SA Sept. 86	USD	500	-	6 month - Libor +0.075%	-	C	255	240
BNP Paribas Cardif Nov. 14	EUR	1,000	Nov. 25	4.032%	3-month Euribor +393 bp	D	1,000	1,000
Participating notes							**222**	**222**
BNP Paribas SA July 84(3)	EUR	337	-	(4)	-		215	215
Others							7	7
Expenses and commission, related debt							**6**	**4**

(1) Conditions precedent for coupon payment

B Payment of the interest is mandatory, unless the Board of directors decides to postpone these payments after the Shareholders' General Meeting has officially noted that there is no income available for distribution, where this occurs within the 12-month period preceding the due date for payment of the interest. Interest payments are cumulative and are payable in full once dividend payments resume.

C Payment of the interest is mandatory, unless the Board of directors decides to postpone these payments after the Shareholders' General Meeting has validated the decision not to pay out a dividend, where this occurs within the 12-month period preceding the due date for payment of the interest. Interest payments are cumulative and are payable in full once dividend payments resume. The bank has the option of resuming payment of interest arrears, even where no dividend is paid out.

D Payment of the interest is mandatory, except for cases of regulatory deficiency, in agreement with the regulator, or of suspension of payments. Interest payments are cumulative and are payable in full, once coupon payments resume, or, if these events occur before, when the issuance is redeemed or when the issuer is liquidated.

(2) See reference relating to "Debt securities at fair value through profit or loss".

(3) The participating notes issued by BNP Paribas SA may be repurchased as provided for in the law of 3 January 1983. The number of notes in the market is 1,434,092.

(4) Depending on net income subject to a minimum of 85% of the TMO rate and a maximum of 130% of the TMO rate.

4.i FINANCIAL INVESTMENTS AND OTHER ASSETS RELATED TO INSURANCE ACTIVITIES

In millions of euros	31 December 2022			31 December 2021		
	Assets not representative of unit-linked insurance contracts	Assets representative of unit-linked insurance contracts (financial risk supported by policyholders)	Total	Assets not representative of unit-linked insurance contracts	Assets representative of unit-linked insurance contracts (financial risk supported by policyholders)	Total
Financial instruments designated as at fair value through profit or loss	44,317	79,648	123,965	50,940	87,108	138,048
Derivative financial instruments	1,675		1,675	1,033		1,033
Available-for-sale financial assets	104,961		104,961	127,413		127,413
Held-to-maturity financial assets	970		970	981		981
Loans and receivables	3,074		3,074	3,145		3,145
Equity-method investments	342		342	349		349
Investment property	2,855	4,402	7,257	2,875	4,354	7,229
TOTAL	**158,194**	**84,050**	**242,244**	**186,736**	**91,462**	**278,198**
Reinsurers' share of technical reserves	2,277		2,277	2,568		2,568
Policyholders' surplus reserve – assets	2,882		2,882			
FINANCIAL INVESTMENTS AND OTHER ASSETS RELATED TO INSURANCE ACTIVITIES	**163,353**	**84,050**	**247,403**	**189,304**	**91,462**	**280,766**

Investments in financial instruments of insurance activities are accounted for according to IAS 39 principles.

The fair value of financial assets with contractual cash-flows corresponding only to payments of principal and interest on principal amounts to EUR 91.9 billion at 31 December 2022. It amounted to EUR 108.6 billion at 31 December 2021, which represents a variation of -EUR 16.7 billion over the period.

The fair value of other financial assets amounts to EUR 150.4 billion and corresponds to all financial instruments that do not meet the previously mentioned criteria, derivatives and financial assets managed on a market value basis. It amounted to EUR 170 billion at 31 December 2021, which represents a variation of -EUR 19.6 billion over the period.

The fair value of investment properties which are not representative of unit-linked insurance contracts accounted for at amortised cost amounts to EUR 4.2 billion at 31 December 2022, compared with EUR 4.4 billion at 31 December 2021.

MEASUREMENT OF THE FAIR VALUE OF FINANCIAL INSTRUMENTS

The criteria for allocating instruments to the levels of the fair value hierarchy, the corresponding valuation methodologies and the principles of transfer between the levels of the hierarchy for insurance investments are similar to those applied for the Group's other financial instruments (note 4.d).

In millions of euros	31 December 2022				31 December 2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Available-for-sale financial assets	**91,640**	**12,720**	**601**	**104,961**	**110,750**	**16,196**	**467**	**127,413**
Equity instruments	7,627	1,390	437	9,454	9,767	1,338	367	11,472
Debt securities	84,013	11,330	164	95,507	100,983	14,858	100	115,941
Financial instruments designated as at fair value through profit or loss	**70,018**	**41,471**	**12,476**	**123,965**	**86,497**	**43,486**	**8,065**	**138,048**
Equity instruments	69,439	32,669	12,452	114,560	85,749	34,660	8,037	128,446

Debt securities	579	8,802	24	9,405	748	8,826	28	9,602
Derivative financial instruments	**10**	**1,622**	**43**	**1,675**	**1**	**909**	**123**	**1,033**
FINANCIAL ASSETS MEASURED AT FAIR VALUE	**161,668**	**55,813**	**13,120**	**230,601**	**197,248**	**60,591**	**8,655**	**266,494**

Level 1: this level comprises equities and liquid bonds, derivative instruments traded on organised markets (futures, options, *etc.*), units of funds and UCITS for which the net asset value is calculated on a daily basis.

Level 2: this level comprises equities, certain government or corporate bonds, other fund units and UCITS and over-the-counter derivatives.

Level 3: this level consists mainly of fund units and shares which are not quoted on active markets, consisting mainly of units in venture capital companies and funds.

TABLE OF MOVEMENTS IN LEVEL 3 FINANCIAL INSTRUMENTS

For Level 3 financial instruments, the following movements occurred during the period:

	Financial assets		
In millions of euros	**Available-for-sale financial instruments**	**Financial instruments as at fair value through profit or loss**	**Total**
AT 31 DECEMBER 2021	**467**	**8,188**	**8,655**
Purchases	290	3,701	3,991
Sales	(371)	(2,875)	(3,246)
Settlements	(16)	(393)	(409)
Transfers to Level 3	312	2,423	2,735
Transfers from Level 3	(80)	(41)	(121)
Gains recognised in profit or loss	5	1,509	1,514
Items related to exchange rate movements		8	8
Changes in fair value of assets and liabilities recognised in equity	(6)		(6)
AT 31 DECEMBER 2022	**601**	**12,519**	**13,120**

DETAILS OF AVAILABLE-FOR-SALE FINANCIAL ASSETS

	31 December 2022			**31 December 2021**		
In millions of euros	**Balance sheet value**	**of which impairment**	**of which changes in value recognised directly in equity**	**Balance sheet value**	**of which impairment**	**of which changes in value recognised directly in equity**
Debt securities	95,507		(11,744)	115,941		9,408
Equity instruments	9,454	(698)	2,041	11,472	(664)	3,257
TOTAL AVAILABLE-FOR-SALE FINANCIAL ASSETS	**104,961**	**(698)**	**(9,703)**	**127,413**	**(664)**	**12,665**

FAIR VALUE OF FINANCIAL INSTRUMENTS CARRIED AT AMORTISED COST

	31 December 2022					31 December 2021				
In millions of euros	Level 1	Level 2	Level 3	Total	Carrying value	Level 1	Level 2	Level 3	Total	Carrying value
Held-to-maturity financial assets	1,016			1,016	970	1,150			1,150	981
Loans and receivables		3,069	7	3,076	3,074		3,152	3	3,155	3,145

4.J TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES

In millions of euros	31 December 2022	31 December 2021
Technical reserves – Non-Life insurance contracts	**4,147**	**4,212**
Technical reserves – Life insurance contracts	**162,909**	**168,910**
Insurance contracts	88,278	87,325
Unit-linked contracts	74,631	81,585
Technical liabilities – investment contracts	**47,984**	**50,723**
Investment contracts with discretionary participation feature	39,729	41,850
Investment contracts without discretionary participation feature – Unit-linked contracts	8,255	8,873
Policyholders' surplus reserve – liability	**6,527**	**27,011**
Total technical reserves and liabilities related to insurance and investment contracts	**221,567**	**250,856**
Debts arising out of insurance and reinsurance operations	3,065	2,890
Derivative financial instruments	1,900	1,049
TOTAL TECHNICAL RESERVES AND OTHER INSURANCE LIABILITIES	**226,532**	**254,795**

The policyholders' surplus reserve arises from the application of shadow accounting. It represents the interest of policyholders, within life insurance subsidiaries in France, Luxembourg and Italy, in unrealised gains and losses and impairment losses on assets where the benefit paid under the policy is linked to the return on those assets. It is obtained from stochastic calculations modelling the unrealised gains and losses attributable to policyholders based on economic scenarios and assumptions as regards rates paid to customers and new business inflows. For France, this resulted in an average interest rate of 92% in 2022, unchanged from 2021.

The Liability Adequacy Test required by IFRS 4 and performed by contract portfolio consists of comparing reserves (net of deferred acquisition costs) with an evaluation of future discounted cash flows.

At 31 December 2022, this test confirms the absence of deficiency.

The change in technical reserves and liabilities related to insurance contracts breaks down as follows:

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Liabilities related to insurance contracts at start of period	**250,856**	**236,185**
Additions to insurance contract technical reserves and deposits taken on financial contracts related to life insurance	1,384	24,687
Claims and benefits paid	(20,495)	(18,721)
Effect of changes in value of admissible investments related to unit-linked contracts	(9,725)	8,242
Effect of movements in exchange rates	(341)	811
Effect of changes in the scope of consolidation	(112)	(348)
Liabilities related to insurance contracts at end of period	**221,567**	**250,856**

See note 4.i for details of reinsurers' share of technical reserves.

4.k CURRENT AND DEFERRED TAXES

In millions of euros	31 December 2022	31 December 2021
Current taxes	1,685	1,862
Deferred taxes	4,208	4,004
Current and deferred tax assets	**5,893**	**5,866**
Current taxes	2,042	1,787
Deferred taxes	1,012	1,316
Current and deferred tax liabilities	**3,054**	**3,103**

Change in deferred tax by nature over the period:

In millions of euros	31 December 2021	Changes recognised in profit or loss	Changes recognised in equity that may be reclassified to profit or loss	Changes recognised in equity that will not be reclassified to profit or loss	Effects of exchange rates, consolidation scope and other movements	31 December 2022
Financial instruments	(857)	(278)	1,434	(135)	19	183
Provisions for employee benefit obligations	738	(13)	-	39	(11)	753
Unrealised finance lease reserve	(481)	(89)	-	-	(7)	(577)
Credit risk impairment	2,705	(93)	-	-	20	2,632
Tax loss carryforwards	774	(221)	-	-	10	563
Other items	(191)	(126)	-	-	(41)	(358)
NET DEFERRED TAXES	**2,688**	**(820)**	**1,434**	**(96)**	**(10)**	**3,196**

Deferred tax assets	4,004	4,208
Deferred tax liabilities	(1,316)	(1,012)

In order to determine the amount of the tax loss carryforwards recognised as assets, the Group conducts every year a specific review for each relevant entity based on the applicable tax regime, notably incorporating any time limit rules, and a realistic projection of their future revenue and charges in line with their business plan.

Deferred tax assets recognised on tax loss carryforwards are mainly related to BNP Paribas Fortis for EUR 254 million at 31 December 2022, with a 3-year expected recovery period (unlimited carryforward period).

Unrecognised deferred tax assets totalled EUR 1,530 million at 31 December 2022 (of which EUR 1,336 million of tax loss carryforwards) compared with EUR 1,408 million at 31 December 2021 (of which EUR 1,234 million of tax loss carryforwards).

4.l ACCRUED INCOME/EXPENSE AND OTHER ASSETS/LIABILITIES

In millions of euros	**31 December 2022**	**31 December 2021**
Guarantee deposits and bank guarantees paid	155,199	136,142
Collection accounts	282	242
Accrued income and prepaid expenses	7,030	4,617
Other debtors and miscellaneous assets	46,581	38,122
TOTAL ACCRUED INCOME AND OTHER ASSETS	**209,092**	**179,123**
Guarantee deposits received	124,047	101,923
Collection accounts	2,907	2,870
Accrued expense and deferred income	10,874	7,739
Lease liabilities	3,075	3,248
Other creditors and miscellaneous liabilities	44,553	29,619
TOTAL ACCRUED EXPENSE AND OTHER LIABILITIES	**185,456**	**145,399**

4.m EQUITY-METHOD INVESTMENTS

Cumulated financial information of associates and joint ventures is presented in the following table:

	Year to 31 December 2022			**31 December 2022**	**Year to 31 December 2021**			**31 December 2021**
In millions of euros	**Share of net income**	**Share of changes in assets and liabilities recognised directly in equity**	**Share of net income and changes in assets and liabilities recognised directly in equity**	**Equity-method investments**	**Share of net income**	**Share of changes in assets and liabilities recognised directly in equity**	**Share of net income and changes in assets and liabilities recognised directly in equity**	**Equity-method investments**
Joint ventures	34	130	164	1,447	5	128	133	1,022
Associates[(1)]	665	(990)	(325)	4,816	489	184	673	5,506
TOTAL EQUITY-METHOD ENTITIES	**699**	**(860)**	**(161)**	**6,263**	**494**	**312**	**806**	**6,528**

(1) *Including controlled but non-material entities consolidated under the equity method.*

Financing and guarantee commitments given by the Group to joint ventures are listed in note 7.j *Other related parties*.

The carrying amount of the Group's investment in the main joint ventures and associates is presented in the following table:

In millions of euros	Country of registration	Activity	Interest (%)	31 December 2022	31 December 2021
Joint ventures					
bpost bank[(1)]	Belgium	Retail Banking	100%	-	111
Union de Creditos Inmobiliarios	Spain	Retail mortgage	50%	327	203
BoB Cardif Life Insurance	China	Life Insurance	50%	232	231
BNPP Cardif TCB Life Insurance	Taiwan	Life Insurance	49%	161	214
Associates					
AG Insurance	Belgium	Insurance	25%	597	1,704
Bank of Nanjing	China	Retail Banking	14%	2,757	2,306
Allfunds Group Plc	United Kingdom	Financial Services	12%	318	370

(1) *On 3 January 2022, the Group BNP Paribas took exclusive control of bpost bank.*

4.n PROPERTY, PLANT, EQUIPMENT AND INTANGIBLE ASSETS USED IN OPERATIONS, INVESTMENT PROPERTY

	31 December 2022			31 December 2021		
In millions of euros	Gross value	Accumulated depreciation, amortisation and impairment	Carrying amount	Gross value	Accumulated depreciation, amortisation and impairment	Carrying amount
INVESTMENT PROPERTY	**827**	**(298)**	**529**	**869**	**(294)**	**575**
Land and buildings	11,507	(4,704)	6,803	12,023	(4,817)	7,206
Equipment, furniture and fixtures	7,177	(5,400)	1,777	7,172	(5,312)	1,860
Plant and equipment leased as lessor under operating leases	38,817	(10,658)	28,159	33,890	(9,285)	24,605
Other property, plant and equipment	2,318	(1,118)	1,200	1,932	(1,095)	837
PROPERTY, PLANT AND EQUIPMENT	**59,819**	**(21,880)**	**37,939**	**55,017**	**(20,509)**	**34,508**
Of which right of use	6,000	(3,294)	2,706	6,117	(3,314)	2,803
PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY	**60,646**	**(22,178)**	**38,468**	**55,886**	**(20,803)**	**35,083**
Purchased software	3,690	(3,035)	655	3,303	(2,651)	652

Internally developed software	6,345	(5,000)	1,345	5,995	(4,657)	1,338
Other intangible assets	2,367	(577)	1,790	2,157	(488)	1,669
INTANGIBLE ASSETS	**12,402**	**(8,612)**	**3,790**	**11,455**	**(7,796)**	**3,659**

Investment property

Land and buildings leased by the Group as lessor under operating leases are recorded in "Investment property".

The estimated fair value of investment property accounted for at amortised cost at 31 December 2022 is EUR 680 million, compared with EUR 736 million at 31 December 2021.

Operating leases

Operating leases and investment property transactions are in certain cases subject to agreements providing for the following minimum future payments:

In millions of euros	31 December 2022	31 December 2021
Future minimum lease payments receivable under non-cancellable leases	**8,221**	**7,757**
Payments receivable within 1 year	*3,613*	*3,364*
Payments receivable after 1 year but within 5 years	*4,582*	*4,341*
Payments receivable beyond 5 years	*26*	*52*

Future minimum lease payments receivable under non-cancellable leases are payments that the lessee is required to make during the lease term.

Intangible assets

Other intangible assets include leasehold rights, goodwill and trademarks acquired by the Group.

Amortisation and provision

Net depreciation and amortisation expense for the year ended 31 December 2022 was EUR 2,376 million, compared with EUR 2,336 million for the year ended 31 December 2021.

The net increase in impairment on property, plant, equipment and intangible assets taken to the profit and loss account for the year ended 31 December 2022 amounted to EUR 18 million, compared with EUR 8 million for the year ended 31 December 2021.

4.o GOODWILL

In millions of euros	31 December 2022	31 December 2021
CARRYING AMOUNT AT START OF PERIOD	**5,121**	**7,493**
Acquisitions	215	47
Divestments	(15)	(90)
Impairment recognised during the period	(28)	(26)
Transfer to assets held for sale *(note 7.d)*		(2,533)
Exchange rate adjustments	1	230
CARRYING AMOUNT AT END OF PERIOD	**5,294**	**5,121**
Gross value	8,413	8,350

Accumulated impairment recognised at the end of period	(3,119)	(3,229)

Goodwill by cash-generating unit is as follows:

	Carrying amount		**Recognised impairment**		**Acquisitions**	
In millions of euros	**31 December 2022**	**31 December 2021**	**Year to 31 Dec. 2022**	**Year to 31 Dec. 2021**	**31 December 2022**	**31 December 2021**
Corporate & Institutional Banking	**1,215**	**1,210**				
Global Banking	*279*	*276*				
Global Markets	*490*	*478*				
Securities Services	*446*	*456*				
Commercial, Personal Banking & Services	**2,894**	**2,704**	**(19)**	**(26)**	**215**	**32**
Arval	*608*	*523*			*96*	*1*
Leasing Solutions	*148*	*150*				
Personal Finance	*1,291*	*1,236*	*(19)*		*61*	
Personal Investors	*564*	*568*		*(26)*		
New Digital Businesses	*220*	*159*			*61*	
Other	*63*	*68*			*(3)*	*31*
Investment & Protection Services	**1,182**	**1,204**	**(9)**		**-**	**15**
Asset Management	*190*	*186*				
Insurance	*281*	*296*				
Real Estate	*402*	*406*				
Wealth Management	*309*	*316*	*(9)*			*15*
Other Activities	**3**	**3**				
TOTAL GOODWILL	**5,294**	**5,121**	**(28)**	**(26)**	**215**	**47**
Negative goodwill			277	117		
CHANGE IN VALUE OF GOODWILL RECOGNISED IN THE PROFIT AND LOSS ACCOUNT			**249**	**91**		

The Group carried out a detailed analysis of goodwill to identify whether impairments were necessary in connection with the health crisis.

This analysis is based in particular on the assumptions of economic scenarios (see note 2.h).

The cash-generating units to which goodwill is allocated are:

Global Banking: Global Banking combines financing solutions to corporates, all transaction banking products, corporate finance advisory services in mergers and acquisitions and primary equity activities.

Global Markets: Global Markets provides investment, hedging, financing and research services across asset classes, to corporate and institutional clients – as well as private and retail banking networks. The sustainable, long-term business model of Global Markets connects clients to capital markets throughout EMEA (Europe, Middle East & Africa), Asia Pacific and the

Americas, with innovative solutions and digital platforms. Global Markets includes activities of Fixed Income, Currencies & Commodities and Equity & Prime Services.

Securities Services: Securities Services provides integrated solutions for all actors involved in the investment cycle, sell side, buy side and issuers. BNP Paribas is one of the major global players in securities services.

Arval: Specialist in vehicle long-term leasing and mobility, Arval offers corporates (from multinational companies to small and medium companies), employees and individuals tailored solutions that optimise their mobility.

Leasing Solutions: BNP Paribas Leasing Solutions uses a multi-channel partnership approach (sales *via* referrals, partnerships, direct sales and banking networks) to offer corporate and small business clients an array of leasing and rental solutions, ranging from equipment financing to fleet outsourcing.

Personal Finance: BNP Paribas Personal Finance is the Group's consumer credit specialist. Through its brands and partnerships such as Cetelem, Cofinoga, Findomestic, AlphaCredit or Opel Vauxhall, Personal Finance provides a full range of consumer loans at point of sale (retail stores and car dealerships) or through its customer relation centres, websites and mobile applications. The business line, in some countries outside the domestic markets, is integrated into the BNP Paribas Group's retail banking.

Personal Investors: BNP Paribas Personal Investors is a digital specialist of banking and investment services. Based in Germany and India, it provides a wide range of banking, savings and long and short-term investment services to individual clients *via* the internet, and also on the phone and face-to-face. In addition to its activities destined to private clients, Personal Investors offers its services and IT platform to independent financial consultants, asset managers and FinTechs.

New digital businesses: they include in particular the account management service "Nickel", open to all, without any conditions regarding income, deposits or personal wealth, and without any overdraft or credit facility. This service, which operates in real time using the latest technology, is available through over 9,000 points of sale in France, Spain, Belgium and Portugal.

BancWest: In the United States, the Retail Banking business is conducted through Bank of the West, which markets a very broad range of retail banking products and services to individuals, small businesses and corporate clients, through branches and offices in 24 States, mainly in western and mid-western America. It also has strong positions across the USA in several specialised lending activities, such as marine, recreational vehicles and agribusiness, and develops its commercial set up particularly in Corporate Banking, Wealth Management, and Small and Medium Enterprise businesses.

On 18 December 2021, the Group concluded an agreement with BMO Financial Group for the sale of its retail and commercial banking activities in the United States operated by BancWest for a total price of USD 16.3 billion to be paid in cash at the time of the transaction.

The Group applies the provisions of IFRS 5 on groups of assets and liabilities held for sale, leading to the reclassification of the goodwill into "Assets held for sale" (see note 7.d).

Asset Management: BNP Paribas Asset Management is the dedicated asset management business line of the BNP Paribas Group and offers services to individual investors (through internal distributors – BNP Paribas private and retail banking – and external distributors), to corporates and to institutional investors (insurance companies, retirement funds, official institutions, consultants). Its aim is to offer an added value based on a broad range of expertise throughout its active management of equities and bonds, its activity of private debt and real asset management and its multi-asset, quantitative and solutions division.

Insurance: BNP Paribas Cardif, a world leader in personal insurance, has designed, developed and marketed savings and protection products and services to protect individuals, their projects and their assets. BNP Paribas Cardif also offer products in damage insurance, health insurance, budget insurance, revenue and means of payment insurance, unexpected event protection (unemployment, accident, death, theft or breakage) or the protection of private digital data to meet the evolution of customers' needs.

Real Estate: BNP Paribas Real Estate serves the needs of its clients, whether institutional investors, corporates, public entities or individuals, at all stages of the life cycle of their property (from the conception of a construction project to its daily management).

Wealth Management: Wealth Management encompasses the private banking activities of BNP Paribas and serves a clientele of wealthy individuals, shareholder families and entrepreneurs seeking a one-stop shop for all their wealth management and financial needs.

Goodwill impairment tests are based on three different methods: observation of transactions related to comparable businesses, share price data for listed companies with comparable businesses, and discounted future cash flows (DCF).

If one of the two comparables-based methods indicates the need for impairment, the DCF method is used to validate the results and determine the amount of impairment required.

The DCF method is based on a number of assumptions in terms of future revenues, expenses and cost of risk (cash flows) based on medium-term business plans over a period of five years. Cash flow projections beyond the 5-year forecast period are based on a growth rate to perpetuity and are normalised when the short-term environment does not reflect the normal conditions of the economic cycle.

The key parameters which are sensitive to the assumptions made are the cost of capital, the cost/income ratio, the cost of risk and the growth rate to perpetuity.

Cost of capital is determined on the basis of a risk-free rate, an observed market risk premium weighted by a risk factor based on comparables specific to each cash-generating unit. The values of these parameters are obtained from external information sources.

Allocated capital is determined for each cash-generating unit based on the "Common Equity Tier One" regulatory requirements for the legal entity to which the cash-generating unit belongs, with a minimum of 7%.

The growth rate to perpetuity used is 2% for mature economies in Europe. For CGUs implemented in countries with high levels of inflation, a specific add-on is taken into account (calculated according to inflation rates disclosed by external sources).

The following table shows the sensitivity of the valuation of the Personal Finance cash generating unit to changes in the value of parameters used in the DCF calculation: the cost of capital, the cost/income ratio in terminal value, the cost of risk in terminal value and the growth rate to perpetuity.

SENSITIVITY OF THE MAIN GOODWILL VALUATIONS TO A 10-BASIS POINT CHANGE IN THE COST OF CAPITAL, A 1% CHANGE IN THE COST/INCOME RATIO IN TERMINAL VALUE, A 5% CHANGE OF THE COST OF RISK IN TERMINAL VALUE AND A 50-BASIS POINT CHANGE IN THE GROWTH RATE TO PERPETUITY

In millions of euros	**Personal Finance**
Cost of capital	**10.8%**
Adverse change (+10 basis points)	(159)
Positive change (-10 basis points)	162
Cost/income ratio	**47.8%**
Adverse change (+1%)	(351)
Positive change (-1%)	351
Cost of risk	**(1,503)**
Adverse change (+5%)	(408)
Positive change (-5%)	408
Growth rate to perpetuity	**2.0%**
Adverse change (-50 basis points)	(257)
Positive change (+50 basis points)	288

Concerning the homogeneous Personal Finance set, there would be no need to depreciate even by using, for the impairment test, the four most unfavourable variations in the table.

4.p PROVISIONS FOR CONTINGENCIES AND CHARGES

PROVISIONS FOR CONTINGENCIES AND CHARGES BY TYPE

In millions of euros	31 December 2021	Net additions to provisions	Provisions used	Changes in value recognised directly in equity	Effect of movements in exchange rates and other movements	31 December 2022
Provisions for employee benefits	6,532	1,256	(1,254)	(640)	223	6,117
of which post-employment benefits *(note 6.b)*	3,727	235	(369)	(604)	171	3,160
of which post-employment healthcare benefits *(note 6.b)*	115	7	(2)	(37)		83
of which provision for other long-term benefits *(note 6.c)*	1,364	498	(345)		29	1,546
of which provision for voluntary departure, early retirement plans, and headcount adaptation plan *(note 6.d)*	355	18	(113)		10	270
of which provision for share-based payments *(note 6.e)*	970	498	(423)		14	1,059
Provisions for home savings accounts and plans	93	(46)				47
Provisions for credit commitments (*note 2.h*)	1,425	70	(71)		6	1,430
Provisions for litigations	992	369	(215)		26	1,172
Other provisions for contingencies and charges	1,145	228	(128)		29	1,274
TOTAL PROVISIONS FOR CONTINGENCIES AND CHARGES	**10,187**	**1,877**	**(1,668)**	**(640)**	**284**	**10,040**

PROVISIONS AND DISCOUNT FOR HOME SAVINGS ACCOUNTS AND PLANS

In millions of euros	31 December 2022	31 December 2021
Deposits collected under home savings accounts and plans	**16,547**	**17,378**
of which deposits collected under home savings plans	14,409	15,239
Aged more than 10 years	*6,332*	*5,652*
Aged between 4 and 10 years	*7,227*	*8,108*
Aged less than 4 years	*850*	*1,479*
Outstanding loans granted under home savings accounts and plans	**10**	**23**
of which loans granted under home savings plans	2	4
Provisions and discount recognised for home savings accounts and plans	**47**	**93**
provisions recognised for home savings plans	42	93
provisions recognised for home savings accounts	5	-
discount recognised for home savings accounts and plans	-	-

4.q OFFSETTING OF FINANCIAL ASSETS AND LIABILITIES

The following tables present the amounts of financial assets and liabilities before and after offsetting. This information, required by IFRS 7, aims to enable the comparability with the accounting treatment applicable in accordance with generally accepted accounting principles in the United States (US GAAP), which are less restrictive than IAS 32 as regards offsetting.

"Amounts set off on the balance sheet" have been determined according to IAS 32. Thus, a financial asset and a financial liability are offset and the net amount presented on the balance sheet when, and only when, the Group has a legally enforceable right to set off the recognised amounts and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously. Amounts set off derive mainly from repurchase agreements and derivative instruments traded with clearing houses.

The "impacts of master netting agreements and similar agreements" are relative to outstanding amounts of transactions within an enforceable agreement, which do not meet the offsetting criteria defined by IAS 32. This is the case of transactions for which offsetting can only be performed in case of default, insolvency or bankruptcy of one of the contracting parties.

"Financial instruments given or received as collateral" include guarantee deposits and securities collateral recognised at fair value. These guarantees can only be exercised in case of default, insolvency or bankruptcy of one of the contracting parties.

Regarding master netting agreements, the guarantee deposits received or given in compensation for the positive or negative fair values of financial instruments are recognised in the balance sheet in accrued income or expenses and other assets or liabilities.

In millions of euros, at 31 December 2022	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments received as collateral	Net amounts
Assets						
Financial instruments at fair value through profit or loss						
Securities	166,077		166,077			166,077
Loans and repurchase agreements	334,401	(143,276)	191,125	(27,377)	(147,368)	16,380
Derivative financial instruments (including derivatives used for hedging purposes)	980,161	(626,829)	353,333	(228,379)	(64,980)	59,974
Financial assets at amortised cost	1,003,650		1,003,650	(966)	(5,198)	997,486
of which repurchase agreements	*6,742*		*6,742*	*(966)*	*(5,198)*	*578*
Accrued income and other assets	209,092		209,092		(44,982)	164,110
of which guarantee deposits paid	*155,199*		*155,199*		*(44,982)*	*110,217*
Other assets not subject to offsetting	743,099		743,099			743,099
TOTAL ASSETS	**3,436,480**	**(770,105)**	**2,666,376**	**(256,722)**	**(262,528)**	**2,147,126**

In millions of euros, at 31 December 2022	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments given as collateral	Net amounts
Liabilities						
Financial instruments at fair value through profit or loss						
Securities	99,155		99,155			99,155
Deposits and repurchase agreements	377,352	(143,276)	234,076	(27,376)	(184,013)	22,687
Issued debt securities	70,460		70,460			70,460
Derivative financial instruments (including derivatives used for hedging purposes)	966,951	(626,829)	340,122	(228,379)	(44,335)	67,408
Financial liabilities at amortised cost	1,132,772		1,132,772	(967)	(6,500)	1,125,305
of which repurchase agreements	*8,268*		*8,268*	*(967)*	*(6,500)*	*801*
Accrued expense and other liabilities	185,456		185,456		(57,443)	128,013
of which guarantee deposits received	*124,047*		*124,047*		*(57,443)*	*66,604*

Other liabilities not subject to offsetting	477,780		477,780			477,780
TOTAL LIABILITIES	**3,309,926**	**(770,105)**	**2,539,821**	**(256,722)**	**(292,291)**	**1,990,808**

In millions of euros, at 31 December 2021	Gross amounts of financial assets	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments received as collateral	Net amounts
Assets						
Financial instruments at fair value through profit or loss						
Securities	191,507		191,507			191,507
Loans and repurchase agreements	398,413	(148,605)	249,808	(34,906)	(194,920)	19,982
Derivative financial instruments (including derivatives used for hedging purposes)	711,002	(461,899)	249,103	(159,997)	(32,435)	56,671
Financial assets at amortised cost	944,261		944,261	(355)	(1,983)	941,923
of which repurchase agreements	*2,541*		*2,541*	*(355)*	*(1,983)*	*203*
Accrued income and other assets	179,123		179,123		(31,945)	147,178
of which guarantee deposits paid	*136,142*		*136,142*		*(31,945)*	*104,197*
Other assets not subject to offsetting	820,642		820,642			820,642
TOTAL ASSETS	**3,244,948**	**(610,504)**	**2,634,444**	**(195,258)**	**(261,283)**	**2,177,903**

In millions of euros, at 31 December 2021	Gross amounts of financial liabilities	Gross amounts set off on the balance sheet	Net amounts presented on the balance sheet	Impact of Master Netting Agreements (MNA) and similar agreements	Financial instruments given as collateral	Net amounts
Liabilities						
Financial instruments at fair value through profit or loss						
Securities	112,338		112,338			112,338
Deposits and repurchase agreements	442,061	(148,605)	293,456	(34,156)	(241,481)	17,819
Issued debt securities	70,383		70,383			70,383
Derivative financial instruments (including derivatives used for hedging purposes)	709,373	(461,899)	247,474	(159,997)	(34,076)	53,401
Financial liabilities at amortised cost	1,123,383		1,123,383	(1,105)	(7,816)	1,114,462
of which repurchase agreements	*9,498*		*9,498*	*(1,105)*	*(7,816)*	*577*

Accrued expense and other liabilities	145,399		145,399		(30,655)	114,744
of which guarantee deposits received	*101,923*		*101,923*		*(30,655)*	*71,268*
Other liabilities not subject to offsetting	519,504		519,504			519,504
TOTAL LIABILITIES	**3,122,441**	**(610,504)**	**2,511,937**	**(195,258)**	**(314,028)**	**2,002,651**

4.r TRANSFERS OF FINANCIAL ASSETS

Financial assets that have been transferred but not derecognised by the Group are mainly composed of securities sold temporarily under repurchase agreements or securities lending transactions, as well as securitised assets. The liabilities associated to securities temporarily sold under repurchase agreements consist of debts recognised under the "repurchase agreements" heading. The liabilities associated to securitised assets consist of the securitisation notes purchased by third parties.

SECURITIES LENDING, REPURCHASE AGREEMENTS AND OTHER TRANSACTIONS

	31 December 2022		31 December 2021	
In millions of euros, at	**Carrying amount of transferred assets**	**Carrying amount of associated liabilities**	**Carrying amount of transferred assets**	**Carrying amount of associated liabilities**
Securities lending operations				
Financial instruments at fair value through profit or loss	6,274		7,382	
Financial assets at amortised cost	1,410		1,613	
Financial assets at fair value through equity	75		317	
Repurchase agreements				
Financial instruments at fair value through profit or loss	33,550	33,547	28,413	28,413
Financial assets at amortised cost	6,311	6,287	6,437	6,437
Financial assets at fair value through equity	459	459	1,524	1,524
Financial investments of insurance activities	6,312	6,895	6,180	6,226
TOTAL	**54,391**	**47,188**	**51,866**	**42,600**

SECURITISATION TRANSACTIONS PARTIALLY REFINANCED BY EXTERNAL INVESTORS, WHOSE RECOURSE IS LIMITED TO THE TRANSFERRED ASSETS

In millions of euros, at 31 December 2022	**Carrying amount of transferred assets**	**Carrying amount of associated liabilities**	**Fair value of transferred assets**	**Fair value of associated liabilities**	**Net position**
Securitisation					
Financial assets at amortised cost	24,126	23,326	24,164	22,112	2,052
TOTAL	**24,126**	**23,326**	**24,164**	**22,112**	**2,052**

In millions of euros, at 31 December 2021	Carrying amount of transferred assets	Carrying amount of associated liabilities	Fair value of transferred assets	Fair value of associated liabilities	Net position
Securitisation					
Financial assets at amortised cost	19,129	17,747	19,134	17,748	1,386
TOTAL	**19,129**	**17,747**	**19,134**	**17,748**	**1,386**

There have been no significant transfers leading to partial or full derecognition of the financial assets in which the Bank has a continuing involvement.

NOTE 5 FINANCING AND GUARANTEE COMMITMENTS

5.a FINANCING COMMITMENTS GIVEN OR RECEIVED

Contractual value of financing commitments given and received by the Group:

In millions of euros, at	31 December 2022	31 December 2021
Financing commitments given		
to credit institutions	**4,235**	**3,501**
to customers	**382,746**	**362,902**
Confirmed financing commitments	347,650	328,741
Other commitments given to customers	35,096	34,161
TOTAL FINANCING COMMITMENTS GIVEN	**386,981**	**366,403**
of which stage 1	*343,339*	*321,368*
of which stage 2	*18,745*	*22,529*
of which stage 3	*898*	*1,088*
of which insurance activities	*1,477*	*1,810*
of which financing commitments given associated with assets held for sale	*22,522*	*19,608*
Financing commitments received		
from credit institutions	**66,554**	**38,708**
from customers	**2,221**	**6,729**
TOTAL FINANCING COMMITMENTS RECEIVED	**68,775**	**45,437**
of which financing commitments received associated with assets held for sale	*9,272*	*8,711*

5.b GUARANTEE COMMITMENTS GIVEN BY SIGNATURE

In millions of euros, at	31 December 2022	31 December 2021
Guarantee commitments given		
to credit institutions	**60,357**	**30,221**
to customers	**118,427**	**141,074**
Property guarantees	2,285	2,474
Sureties provided to tax and other authorities, other sureties	65,294	64,571
Other guarantees	50,848	74,029
TOTAL GUARANTEE COMMITMENTS GIVEN	**178,784**	**171,295**
of which stage 1	*165,549*	*159,247*
of which stage 2	*12,120*	*10,953*
of which stage 3	*820*	*833*
of which insurance activities	*295*	*262*
of which guarantee commitments given associated with assets held for sale	-	-

5.c SECURITIES COMMITMENTS

In connection with the settlement date accounting for securities, commitments representing securities to be delivered or securities to be received are the following:

In millions of euros	31 December 2022	31 December 2021
Securities to be delivered	17,325	11,608
Securities to be received	17,263	10,604

5.d OTHER GUARANTEE COMMITMENTS

FINANCIAL INSTRUMENTS GIVEN AS COLLATERAL

In millions of euros	31 December 2022	31 December 2021
Financial instruments (negotiable securities and private receivables) lodged with central banks and eligible for use at any time as collateral for refinancing transactions after haircut	**132,938**	**158,111**
Used as collateral with central banks	*67,792*	*120,777*
Available for refinancing transactions	*65,146*	*37,334*
Securities sold under repurchase agreements	**371,552**	**457,168**
Other financial assets pledged as collateral for transactions with credit institutions, financial customers or subscribers of covered bonds issued by the Group(1)	**239,761**	**231,877**

(1) Notably including "Société de Financement de l'Économie Française" and "Caisse de Refinancement de l'Habitat" financing.

The fair value of financial instruments given as collateral or transferred under repurchase agreements by the Group that the beneficiary is authorised to sell or reuse as collateral amounted to EUR 523,321 million at 31 December 2022 (EUR 610,170 million at 31 December 2021).

FINANCIAL INSTRUMENTS RECEIVED AS COLLATERAL

In millions of euros	**31 December 2022**	**31 December 2021**
Financial instruments received as collateral (excluding repurchase agreements)	**326,198**	**212,910**
of which instruments that the Group is authorised to sell and reuse as collateral	*192,274*	*99,407*
Securities received under repurchase agreements	**336,799**	**418,435**

The fair value of financial instruments received as collateral or under repurchase agreements that the Group effectively sold or reused as collateral amounted to EUR 307,886 million at 31 December 2022 (compared with EUR 328,084 million at 31 December 2021).

NOTE 6 SALARIES AND EMPLOYEE BENEFITS

6.a SALARY AND EMPLOYEE BENEFIT EXPENSE

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Fixed and variable remuneration, incentive bonuses and profit-sharing	13,484	12,379
Employee benefit expense	3,627	3,508
Payroll taxes	494	530
TOTAL SALARY AND EMPLOYEE BENEFIT EXPENSE	**17,605**	**16,417**

6.b POST-EMPLOYMENT BENEFITS

IAS 19 distinguishes between two categories of plans, each handled differently depending on the risk incurred by the entity. When the entity is only committed to paying a fixed amount, stated as a percentage of the beneficiary's annual salary, for example, to an external entity handling payment of the benefits based on the assets available for each plan member, it is described as a defined-contribution plan. Conversely, when the entity's obligation is to manage the financial assets funded through the collection of contributions from employees and to bear the cost of benefits itself or to guarantee the final amount subject to future events, it is described as a defined-benefit plan. The same applies if the entity entrusts management of the collection of premiums and payment of benefits to a separate entity, but retains the risk arising from management of the assets and/or from future changes in the benefits.

Main Defined-contribution pension plans for Group entities

The BNP Paribas Group has implemented over the past few years a wide campaign of converting defined-benefit plans into defined-contribution plans.

Thus, in France, the BNP Paribas Group pays contributions to various nationwide basic and top-up pension schemes. BNP Paribas SA and certain subsidiaries have set up a funded pension plan under a company-wide agreement. Under this plan, employees will receive an annuity on retirement in addition to the pension paid by nationwide schemes.

Since defined-benefit plans have been closed to new employees in most countries outside France, they are offered the benefit of joining defined-contribution pension plans.

The amount paid into defined-contribution post-employment plans for the year ended 31 December 2022 was EUR 720 million, compared with EUR 670 million for the year ended 31 December 2021.

The breakdown by major contributors is determined as follows:

Contribution amount *In millions of euros*	Year to 31 Dec. 2022	Year to 31 Dec. 2021
France	353	349
Italy	90	94
UK	64	56
Türkiye	26	25
Hong Kong	26	22
Luxembourg	28	22
USA	25	11
Others	108	91
TOTAL	**720**	**670**

In Italy, the plan introduced by BNL is funded by employer contributions (4.2% of salaries) and employee contributions (2% of salaries). Employees can also make additional voluntary contributions.

In the United Kingdom, the employer contributes 12% of salaries for the majority of employees; employees can make additional voluntary contributions.

In the US, the bank matches the voluntary contributions made by employees, within certain limits.

Main defined-benefit pension plans for Group entities and indemnities payable on retirement

Defined-benefit plans

In Belgium, BNP Paribas Fortis funds a defined-benefit plan, based on final salary and number of years of service, for its management and employees who joined the bank before its pension plans were harmonised on 1 January 2002. Actuarial liabilities under this scheme are pre-funded at 88% at 31 December 2022 (compared with 93% at 31 December 2021) through AG Insurance, in which the BNP Paribas Group owns a 25% equity interest.

BNP Paribas Fortis senior managers are covered by a top-up pension plan, paying a lump sum based on the number of years of service and final salary. This plan is pre-funded at 90% at 31 December 2022 (100% at 31 December 2021) through insurance companies.

In Belgium, employees benefit from a defined-contribution scheme with a legal obligation for the employer to guarantee a minimum return on financial assets invested. Thus, a provision was recognised for these schemes, as this guarantee is not entirely covered by the insurance company.

In France, BNP Paribas pays a top-up banking industry pension arising from rights acquired to 31 December 1993 by retired employees and active employees in service at that date. At 31 December 2022, the Group’s residual obligations for these employees were recognised on the balance sheet in full.

The defined-benefit plans previously granted to some Group senior managers have all been closed to new employees and converted into top-up type schemes. The amounts allocated to residual beneficiaries, subject to their presence within the Group at retirement, were fixed when these schemes were closed. At 31 December 2022, these pension plans were funded at 221% through insurance companies (148% at 31 December 2021).

In the United Kingdom, defined-benefit pension plans (pension funds) still exist but are closed to new employees. Under these plans, the defined pension is generally based on final salary and number of years of service. Pension schemes are managed by independent management bodies (Trustees). At 31 December 2022, obligations for all UK entities were 125% covered by financial assets, compared with 127% at 31 December 2021.

In Switzerland, liabilities relate to top-up pension plans based on the principle of defined-contribution schemes with guaranteed returns, paying an annuity under pre-defined terms. These schemes are managed by a foundation. At 31 December 2022, obligations were 121% covered by financial assets, compared with 102% at 31 December 2021.

In the United States, defined-benefit pension plans are based on annual vesting rights to a lump sum comprising a pension expressed as a percentage of annual salary and paying interest at a pre-defined rate. These plans are closed to new entrants and have offered almost no new vesting rights. At 31 December 2022, the obligation was 85% covered by financial assets, (95% at 31 December 2021).

In Germany, liabilities are mainly related to defined-benefit pension plans, closed to new employees. Under these plans, the defined pension is generally based on the number of years of service and final salary. They offer the payment of an annuity under pre-defined terms. At 31 December 2022, the obligation was 70% covered by financial assets, (55% at 31 December 2021).

In Türkiye, the main pension plan replaces the national pension scheme and should eventually be transferred to the Turkish State. This plan offers guarantees exceeding the minimal legal requirements. At the end of 2022, obligations under this plan are fully funded by financial assets held with an external foundation; these financial assets exceeding the related obligations, this surplus is not recognised as an asset by the Group.

Other post-employment benefits

Group employees also receive various other contractual post-employment benefits, such as indemnities payable on retirement, determined according to minimal legal requirements (Labour Code, collective agreements) or according to specific company-level agreements.

In France, the obligations for these benefits are funded through a contract held with a third-party insurer. At 31 December 2022, this obligation was 132% covered by financial assets, compared with 108% at 31 December 2021.

In May 2021, IFRIC issued its decision on the method of assessing the liability to be recognised under certain post-employment benefit plans.

This decision modifies the measurement of the obligations of the Group’s French entities relating to indemnities payable on retirement, whose fee schedule is either capped in terms of total length of service, or composed of steps of incremental rights, or both, by specifying the timing of recording of the corresponding costs.

Its implementation led, at 1 January 2021, to a decrease in the present value of the gross obligation of EUR 96 million, recognised as an increase in reserves for an after-tax amount of EUR 74 million.

In other countries, the obligations of the Group related to other post-employment benefits are mainly concentrated in Italy, where vested rights up to 31 December 2006 were frozen.

Obligations under defined-benefit pension plans and indemnities payable on retirement

ASSETS AND LIABILITIES RECOGNISED ON THE BALANCE SHEET

In millions of euros, at 31 December 2022	***Defined-benefit obligation arising from wholly or partially funded plans***	***Defined-benefit obligation arising from unfunded plans***	**Present value of defined-benefit obligation**	**Fair value of plan assets**	**Fair value of reimbursement rights[1]**	**Effect of asset ceiling**	**Net obligation**	**of which asset recognised in the balance sheet for defined-benefit plans**	***of which net assets of defined-benefit plans***	***of which fair value of reimbursement rights***	**of which obligation recognised in the balance sheet for defined-benefit plans**
Belgium	2,738		2,738	(124)	(2,395)		219	(2,395)		(2,395)	2,614
UK	1,067		1,067	(1,334)			(267)	(267)	(267)		
Switzerland	979		979	(1,185)		208	2				2
France	845	62	907	(1,157)			(250)	(346)	(346)		96
USA	467	64	531	(458)			73	(24)	(24)		97
Türkiye	139	63	202	(295)		157	64				64
Italy		182	182				182				182
Germany	93	45	138	(98)			40	(7)	(7)		47
Others	379	51	430	(313)	(2)	2	117	(13)	(11)	(2)	130
TOTAL	**6,707**	**467**	**7,174**	**(4,964)**	**(2,397)**	**367**	**180**	**(3,052)**	**(655)**	**(2,397)**	**3,232**
of which continuing activities	**6,391**	**404**	**6,795**	**(4,635)**	**(2,397)**	**367**	**130**	**(3,030)**	**(633)**	**(2,397)**	**3,160**
of which discontinued activities	**316**	**63**	**379**	**(329)**	**-**	**-**	**50**	**(22)**	**(22)**	**-**	**72**

In millions of euros, at 31 December 2021	*Defined-benefit obligation arising from wholly or partially funded plans*	*Defined-benefit obligation arising from unfun ded plans*	**Present value of defined-benefit obligation**	**Fair value of plan assets**	**Fair value of reimbur sement rights(1)**	**Effect of asset ceiling**	**Net obliga tion**	**of which asset recognised in the balance sheet for defined-benefit plans**	***of which net assets of defined-benefit plans***	***of which fair value of reimbur sement rights***	**of which obliga tion recognis ed in the balance sheet for defined-benefit plans**
Belgium	3,189		3,189	(157)	(2,930)		102	(2,930)		(2,930)	3,032
UK	1,769		1,769	(2,248)			(479)	(481)	(481)		2
Switzerland	1,146		1,146	(1,172)		29	3				3
France	1,058	81	1,139	(1,175)			(36)	(191)	(191)		155
USA	572	79	651	(579)			72	(16)	(16)		88
Türkiye	134	32	166	(238)		104	32				32
Italy		238	238				238				238
Germany	132	71	203	(112)			91				91
Others	504	55	559	(401)	(2)		156	(8)	(6)	(2)	164
TOTAL	**8,504**	**556**	**9,060**	**(6,082)**	**(2,932)**	**133**	**179**	**(3,626)**	**(694)**	**(2,932)**	**3,805**
of which continuing activities	**8,129**	**479**	**8,608**	**(5,691)**	**(2,932)**	**133**	**118**	**(3,609)**	**(677)**	**(2,932)**	**3,727**
of which discontinued activities	**375**	**77**	**452**	**(391)**	**-**	**-**	**61**	**(17)**	**(17)**	**-**	**78**

(1) The reimbursement rights are principally found on the balance sheet of the Group's insurance subsidiaries and associated companies – notably AG Insurance with respect to BNP Paribas Fortis' defined-benefit plan – to hedge their commitments to other Group entities that were transferred to them to cover the post-employment benefits of certain employee categories.

CHANGE IN THE PRESENT VALUE OF THE DEFINED-BENEFIT OBLIGATION INCLUDING DISCONTINUED ACTIVITIES

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
PRESENT VALUE OF DEFINED-BENEFIT OBLIGATION AT START OF PERIOD	**9,060**	**9,428**
Current service cost	215	222
Interest cost	100	61
Past service cost	(5)	(1)
Settlements	(11)	(25)
Actuarial (gains)/losses on change in demographic assumptions	10	(24)
Actuarial (gains)/losses on change in financial assumptions	(1,985)	(327)
Actuarial (gains)/losses on experience gaps	341	195
Actual employee contributions	23	22
Benefits paid directly by the employer	(101)	(105)
Benefits paid from assets/reimbursement rights	(489)	(419)
Exchange rate (gains)/losses on obligation	(25)	108
(Gains)/losses on obligation related to changes in the consolidation scope	41	21
Others(1)	-	(96)
PRESENT VALUE OF DEFINED-BENEFIT OBLIGATION AT END OF PERIOD	**7,174**	**9,060**

(1) Impact of the May 2021 IFRIC decision.

CHANGE IN THE FAIR VALUE OF PLAN ASSETS AND REIMBURSEMENT RIGHTS INCLUDING DISCONTINUED ACTIVITIES

	Plan assets		Reimbursement rights	
In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021	Year to 31 Dec. 2022	Year to 31 Dec. 2021
FAIR VALUE OF ASSETS AT START OF PERIOD	**6,082**	**5,870**	**2,932**	**3,050**
Expected return on assets	99	73	13	2
Settlements	(21)	(26)		
Actuarial gains/(losses) on assets	(938)	216	(548)	(29)
Actual employee contributions	13	13	10	9
Employer contributions	54	65	198	98
Benefits paid from assets	(257)	(220)	(232)	(199)
Exchange rate gains/(losses) on assets	(64)	70		
Gains/(losses) on assets related to changes in the consolidation scope	(4)	21	24	1
FAIR VALUE OF ASSETS AT END OF PERIOD	**4,964**	**6,082**	**2,397**	**2,932**

COMPONENTS OF THE COST OF DEFINED-BENEFIT PLANS

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Service costs	**220**	**222**
Current service cost	215	222
Past service cost	(5)	(1)
Settlements	10	1
Net financial expense	**6**	**9**
Interest cost	100	61
Interest income on plan asset	18	23
Interest income on reimbursement rights	(99)	(73)
Expected return on asset ceiling	(13)	(2)
TOTAL RECOGNISED IN SALARY AND EMPLOYEE BENEFIT EXPENSE	**226**	**231**
of which continuing activities	**222**	**228**
of which discontinued activities	**4**	**3**

OTHER ITEMS RECOGNISED DIRECTLY IN EQUITY

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Actuarial (losses)/gains on plan assets or reimbursement rights	(1,486)	187
Actuarial (losses)/gains of demographic assumptions on the present value of obligations	(10)	24
Actuarial (losses)/gains of financial assumptions on the present value of obligations	1,985	327
Experience (losses)/gains on obligations	(341)	(195)
Variation of the effect of assets limitation	(263)	27
TOTAL OF OTHER ITEMS RECOGNISED DIRECTLY IN EQUITY	**(115)**	**370**
of which continuing activities	**(127)**	**350**
of which discontinued activities	**12**	**20**

MAIN ACTUARIAL ASSUMPTIONS USED TO CALCULATE OBLIGATIONS

In the eurozone, United Kingdom and United States, the Group discounts its obligations using the yields of high quality corporate bonds, with a term consistent with the duration of the obligations.

The ranges of rates used are as follows:

	31 December 2022		31 December 2021	
In %	**Discount rate**	**Compensation increase rate[(1)]**	**Discount rate**	**Compensation increase rate[(1)]**
Belgium	1.90% / 3.80%	3.30% / 5.00%	0.00% / 1.10%	2.90% / 3.60%
UK	3.50% / 4.90%	2.00% / 3.30%	1.30% / 1.90%	2.00% / 3.50%
France	3.30% / 3.80%	2.10% / 3.65%	0.10% / 1.10%	1.40% / 3.25%
Switzerland	2.00% / 2.15%	1,75% / 2,00%	0.20% / 0.30%	1.50%
USA	4.90% / 5.00%	2.50%	2.60% / 2.90%	2.50%
Italy	1.90% / 3.60%	2.10% / 3.20%	0.30% / 1.00%	1.80% / 2.50%
Germany	2.30% / 3.80%	2.00% / 2.90%	0.60% / 1.10%	1.80% / 2.50%
Türkiye	10.60%	8.50%	20.01%	17.03%

(1) Including price increases (inflation).

Average discount rates weighted by obligation amounts are as follows:

- in the eurozone: 3.54% at 31 December 2022 (0.60% at 31 December 2021);
- in the United Kingdom: 4.78% at 31 December 2022 (1.88% at 31 December 2021);
- in Switzerland: 2.15% at 31 December 2022 (0.30% at 31 December 2021).

The impact of a 100-bps change in discount rates on the present value of post-employment benefit obligations is as follows:

	31 December 2022		31 December 2021	
Change in the present value of obligations *In millions of euros*	**Discount rate -100 bps**	**Discount rate +100 bps**	**Discount rate -100 bps**	**Discount rate +100 bps**
Belgium	201	(175)	327	(266)
UK	187	(147)	403	(302)
France	92	(78)	129	(107)
Switzerland	133	(107)	177	(140)
USA	18	(15)	30	(24)
Italy	12	(11)	18	(16)
Germany	26	(20)	41	(32)
Türkiye	13	(10)	15	(12)

Inflation assumptions used for the valuations of the Group obligations are determined locally depending on the monetary area, except for the eurozone for which the assumption is determined centrally.

Average discount rates weighted by obligation amounts are as follows:

- in the eurozone: 2.43% at 31 December 2022 (1.76% at 31 December 2021);
- in the United Kingdom: 3.03% at 31 December 2022 (2.90% at 31 December 2021);
- in Switzerland: 1.25% at 31 December 2022 (1.00% at 31 December 2021).

The impact of a +100-bps increase in inflation rates on the present value of post-employment benefit obligations is as follows:

	31 December 2022	**31 December 2021**
Change in the present value of obligations ***In millions of euros***	**Inflation rate +100 bps**	**Inflation rate +100 bps**
Belgium	148	188
UK	126	256
France	92	125
Switzerland	8	11
USA	0	0
Italy	8	12
Germany	14	7
Türkiye	12	18

Variation effects of discount and inflation rates presented above are not cumulative.

ACTUAL RATE OF RETURN ON PLAN ASSETS AND REIMBURSEMENT RIGHTS OVER THE PERIOD

	Year to 31 Dec. 2022		**Year to 31 Dec. 2021**	
In %	**Range of value** *(reflecting the existence of several plans in the same country)*	**Weighted average rates**	**Range of value** *(reflecting the existence of several plans in the same country)*	**Weighted average rates**
Belgium	-18.75% / 6.30%	-12.65%	-5.65% / 13.35%	0.45%
UK	-38.30% / 0%	-34.60%	6.60% / 14.80%	7.70%
France	2.60%	2.60%	2.00%	2.00%
Switzerland	-15.85% / 1%	0.50%	1.00% / 9.45%	7.85%
USA	-29.75% / -16.75%	-28.90%	2.00%	2.00%
Germany	-26.15% / 1.30%	-11.20%	-6.65% / 5.25%	4.60%
Türkiye	40.80%	40.80%	20.60%	20.60%

BREAKDOWN OF PLAN ASSETS

In %	31 December 2022						31 December 2021					
	Shares	Governmental bonds	Non-Governmental bonds	Real-estate	Deposit account	Others	Shares	Governmental bonds	Non-Governmental bonds	Real-estate	Deposit account	Others
Belgium	8%	48%	20%	1%	0%	23%	7%	53%	14%	1%	0%	25%
UK	7%	65%	13%	0%	2%	13%	8%	72%	8%	0%	2%	10%
France(1)	8%	60%	18%	13%	1%	0%	7%	69%	16%	8%	0%	0%
Switzerland	32%	0%	23%	21%	3%	20%	36%	0%	26%	20%	4%	14%
USA	19%	18%	58%	0%	1%	4%	18%	0%	73%	1%	6%	2%
Germany	25%	64%	0%	0%	3%	9%	23%	66%	0%	0%	2%	9%
Türkiye	0%	59%	0%	3%	30%	7%	0%	0%	0%	4%	93%	3%
Others	10%	18%	12%	2%	2%	57%	9%	17%	10%	2%	2%	60%
GROUP	**12%**	**44%**	**18%**	**6%**	**2%**	**18%**	**11%**	**49%**	**15%**	**4%**	**4%**	**17%**

(1) In France, the breakdown of plan assets reflects the breakdown of the general fund of the insurance company through which the Group's obligations are funded.

The Group introduced an asset management governance for assets backing defined-benefit pension plan commitments, the main objectives of which are the management and control of the risks in terms of investment.

It sets out investment principles, in particular, by defining an investment strategy for plan assets, based on financial objectives and financial risk management, to specify the way in which plan assets have to be managed, *via* financial management servicing contracts.

The investment strategy is based on an assets and liabilities management analysis that should be realised at least every three years for plans with assets in excess of EUR 100 million.

Post-employment healthcare benefits

The Group offers some healthcare benefit plans for retired employees, mainly in Belgium.

The present value of post-employment healthcare benefit obligations stood at EUR 83 million at 31 December 2022, compared with EUR 115 million at 31 December 2021.

6.c OTHER LONG-TERM BENEFITS

BNP Paribas offers its employees various long-term benefits, mainly long-service awards, the ability to save up paid annual leave in time savings accounts, and certain guarantees protecting them in the event they become incapacitated. The net provision amounted to EUR 453 million at 31 December 2022 (EUR 457 million at 31 December 2021).

As part of the Group's variable compensation policy, annual deferred compensation plans are set up for certain high-performing employees or pursuant to special regulatory frameworks. Under these plans, payment is deferred over time and is subject to the performance achieved by the business lines, divisions and Group.

Since 2013, BNP Paribas has introduced a Group loyalty scheme with a cash payment, at the end of a three-year to four-year vesting period, which fluctuates according to the Group's intrinsic performance. The aim of this loyalty scheme is to make different categories of managerial staff partners in the Group's development and profitability objectives. These personnels are representative of the Group's talent and the breadth of its managerial framework *i.e.*, senior managers, managers in key positions, line managers and experts, high-potential managers, high-performing young executives with good career development prospects and key contributors to the Group's results.

The amounts allocated under this plan are linked to changes in the Group's operational performance over the duration of the plan (for 80%) and to the achievement of the Group's Corporate Social Responsibility (CSR) targets (for 20%). These ten targets are in line with the four pillars on which the Group's CSR policy is based. In addition, the final payment is subject to continuous service within the Group between the grant date and the payment date, provided that the Group's operating income and pre-tax income for the year prior to payment are strictly positive. For employees subject to special regulatory frameworks, this loyalty scheme is adjusted in accordance with the CRD European Directive.

The net obligation related to deferred compensation plans and loyalty schemes amounts to EUR 1,017 million at 31 December 2022 (EUR 817 million at 31 December 2021).

In millions of euros	31 December 2022	31 December 2021
Net provisions for other long-term benefits	**1,470**	**1,274**
Asset recognised in the balance sheet under the other long-term benefits	(76)	(90)
Obligation recognised in the balance sheet under the other long-term benefits	1,546	1,364

6.d TERMINATION BENEFITS

BNP Paribas has implemented a number of voluntary redundancy plans and headcount adaptation plans for employees who meet certain eligibility criteria. The obligations to eligible active employees under such plans are provided for as soon as a bilateral agreement or a bilateral agreement proposal for a particular plan is made.

In millions of euros	31 December 2022	31 December 2021
Provision for voluntary departure, early retirement plans, and headcount adaptation plans	270	355

6.e SHARE-BASED PAYMENTS

As part of the Group's variable remuneration policy, deferred annual compensation plans offered to certain high-performing employees or set up pursuant to special regulatory frameworks may entitle beneficiaries to variable compensation settled in cash but linked to the share price, payable over several years.

Variable compensation for employees, subject to special regulatory frameworks

Since the publication of the Decree by the French Ministry of Finance on 13 December 2010, and following the provisions of the European Directive CRD4 of 26 July 2013, modified by the CRD 5 Directive of 20 May 2019, transposed into the French law in the Monetary and Financial Code by the Ordinance of 20 February 2014, and the Ordinance of 21 December 2020, as well as the Decrees and Orders of 3 November 2014 and 22 December 2020 and the delegated European regulation of 25 March 2021, the variable compensation plans apply to Group employees performing activities that may have a material impact on the Group's risk profile.

Under these plans, payment is deferred over time and is contingent on the performance achieved by the business lines, core businesses and Group.

Sums will mostly be paid in cash linked to the increase or decrease in the BNP Paribas share price.

Deferred variable compensation for other Group employees

Sums due under the annual deferred compensation plans for high-performing employees are partly paid in cash linked to the increase or decrease in the BNP Paribas share price.

EXPENSE OF SHARE-BASED PAYMENTS

Expense/(revenue) *in millions of euros*	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Prior deferred compensation plans	(116)	67
Deferred compensation plans for the year	614	530
TOTAL	**498**	**597**

NOTE 7 ADDITIONAL INFORMATION

7.a CHANGES IN SHARE CAPITAL AND EARNINGS PER SHARE

At 31 December 2022, the share capital of BNP Paribas SA amounts to EUR 2,468,663,292 and was divided into 1,234,331,646 shares. The nominal value of each share is EUR 2 (unchanged from 31 December 2021).

Ordinary shares issued by BNP Paribas and held by the Group

	Proprietary transactions		Trading transactions[1]		Total	
	Number of shares	Carrying amount *(in millions of euros)*	Number of shares	Carrying amount *(in millions of euros)*	Number of shares	Carrying amount *(in millions of euros)*
Shares held at 31 December 2020	**721,971**	**38**	**979,314**	**42**	**1,701,285**	**80**
Acquisitions	15,466,915	900			15,466,915	900
Disposals						
Shares delivered to employees						
Capital decrease	(15,466,915)	(900)			(15,466,915)	(900)
Net movements			(979,314)	(42)	(979,314)	(42)
Shares held at 31 December 2021	**721,971**	**38**			**721,971**	**38**
Net movements			159,670	8	159,670	8
Shares held at 31 December 2022	**721,971**	**38**	**159,670**	**8**	**881,641**	**46**

(1) Transactions realised in the framework of an activity of trading and arbitrage transactions on equity indices.

At 31 December 2022, the Group holds 881,641 BNP Paribas shares representing an amount of EUR 46 million, which was recognised as a decrease in equity.

Preferred shares and Undated Super Subordinated Notes eligible as Tier 1 regulatory capital

Preferred shares issued by the Group's foreign subsidiaries

BNP Paribas Personal Finance made in 2004 two issues of undated non-voting preferred shares through a structured entity governed by UK law and which is exclusively controlled.

On 15 April 2021, BNP Paribas Personal Finance redeemed the issues, for an amount of EUR 80 million. These notes paid a TEC 10 rate coupon.

Undated Super Subordinated Notes issued by BNP Paribas SA

BNP Paribas SA has issued Undated Super Subordinated Notes which pay a fixed, fixed adjustable or floating-rate coupon and are redeemable at the end of a fixed period and thereafter at each coupon date or every five years. If the notes are not redeemed at the end of this period, some of these issues will pay a coupon indexed to Euribor, Libor or a swap rate or a fixed-rate coupon.

On 19 February 2021, BNP Paribas SA issued Undated Super Subordinated Notes for an amount of USD 1,250 million which pay a 4.625% fixed-rate coupon. These notes could be redeemed at the end of a period of 10 years. If the notes are not redeemed in 2031, a US 5-year Constant Maturity Treasury rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 8 March 2021, BNP Paribas SA redeemed the June 2007 issue, for an amount of USD 600 million. These notes paid a 6.5% fixed-rate coupon.

On 30 March 2021, BNP Paribas SA redeemed the March 2016 issue, for an amount of USD 1,500 million, before the first call date. These notes paid a 7.625% fixed-rate coupon.

On 3 January 2022, BNP Paribas SA redeemed the July 2006 and June 2007 issues, for EUR 150 million and USD 1,100 million respectively. These notes paid 5.45% and 7.195% fixed-rate coupon.

On 12 January 2022, BNP Paribas SA issued Undated Super Subordinated Notes for an amount of USD 1,250 million which pay a 4.625% fixed-rate coupon. These notes could be redeemed at the end of a period of 5 years. If the notes are not redeemed in 2027, a US 5-year Constant Maturity Treasury rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 19 February 2022, BNP Paribas SA redeemed the June 2007 issue, for an amount of USD 1,100 million. These notes paid a 7.195% fixed-rate coupon.

On 14 March 2022, BNP Paribas SA redeemed the December 2016 issue, for an amount of USD 750 million. These notes paid a 6.75% fixed-rate coupon.

On 17 June 2022, BNP Paribas SA redeemed the June 2015 issue, for an amount of EUR 750 million, at the first call date. These notes paid a 6.125% fixed-rate coupon.

On 16 August 2022, BNP Paribas SA issued Undated Super Subordinated Notes for an amount of USD 2,000 million which pay a 7.75% fixed-rate coupon. These notes could be redeemed at the end of a period of 7 years. If the notes are not redeemed in 2029, a US 5-year Constant Maturity Treasury rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 6 September 2022, BNP Paribas SA issued Undated Super Subordinated Notes for an amount of EUR 1,000 million which pay a 6.875% fixed-rate coupon. These notes could be redeemed at the end of a period of 7 years and 3 months. If the notes are not redeemed in 2029, a mid-swap rate EUR 5-year coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

On 17 November 2022, BNP Paribas SA issued Undated Super Subordinated Notes for an amount of USD 1,000 million which pay a 9.25% fixed-rate coupon. These notes could be redeemed at the end of a period of 5 years. If the notes are not redeemed in 2027, a US 5-year Constant Maturity Treasury rate coupon will be paid half-yearly. This issue is eligible to Additional Tier 1 capital.

The following table summarises the characteristics of these various issues:

Date of issue	Currency	Amount *(in millions of currency units)*	Coupon payment date	Rate and term before 1st call date		Rate after 1st call date
August 2015	USD	1,500	semi-annual	7.375%	10 years	USD 5-year swap +5.150%
November 2017	USD	750	semi-annual	5.125%	10 years	USD 5-year swap +2.838%
August 2018	USD	750	semi-annual	7.000%	10 years	USD 5-year swap +3.980%
March 2019	USD	1,500	semi-annual	6.625%	5 years	USD 5-year swap +4.149%
July 2019	AUD	300	semi-annual	4.500%	5.5 years	AUD 5-year swap +3.372%
February 2020	USD	1,750	semi-annual	4.500%	10 years	US 5-year CMT +2.944%
February 2021	USD	1,250	semi-annual	4.625%	10 years	US 5-year CMT +3.340%
January 2022	USD	1,250	semi-annual	4.625%	5 years	US 5-year CMT +3.196%
August 2022	USD	2,000	semi-annual	7.75%	7 years	US 5-year CMT +4.899%
September 2022	EUR	1,000	semi-annual	6.875%	7.25 years	EUR 5-year swap +4.645%
November 2022	USD	1,000	semi-annual	9.25%	5 years	US 5-year CMT +4.969%
TOTAL EURO-EQUIVALENT HISTORICAL VALUE AT 31 DECEMBER 2022		**11,800**(1)				

(1) Net of shares held in treasury by Group entities.

BNP Paribas has the option of not paying interest due on these Undated Super Subordinated Notes. Unpaid interest is not carried forward.

For notes issued before 2015, the absence of coupon payment is conditional on the absence of dividend payment on BNP Paribas SA ordinary shares or on Undated Super Subordinated Note equivalents during the previous year. Interest due is payable once dividend payment on BNP Paribas SA ordinary shares resumes.

The contracts relating to these Undated Super Subordinated Notes contain a loss absorption clause. Under the terms of this clause, in the event of insufficient regulatory capital, the nominal value of the notes may be reduced in order to serve as a new basis for the calculation of the related coupons until the capital deficiency is made up and the nominal value of the notes is increased to its original amount.

The proceeds from these issues are recorded in equity under “Capital and retained earnings”. In accordance with IAS 21, issues denominated in foreign currencies are recognised at their historical value based on their translation into euros at the issue date. Interest on the instruments is treated in the same way as dividends.

At 31 December 2022, the BNP Paribas Group held EUR 14 million of Undated Super Subordinated Notes which were deducted from shareholders’ equity.

Earnings per share

Basic earnings per share are calculated by dividing the net income for the period attributable to holders of ordinary shares by the weighted average number of ordinary shares outstanding during the period. The net income attributable to ordinary shareholders is determined by deducting the net income attributable to holders of preferred shares.

Diluted earnings per share correspond to the net income for the period attributable to holders of ordinary shares, divided by the weighted average number of shares outstanding as adjusted for the maximum effect of the conversion of dilutive equity instruments into ordinary shares. In-the-money stock subscription options are taken into account in the diluted earnings per share calculation, as are performance shares granted under the Global Share-Based Incentive Plan. Conversion of these instruments would have no effect on the net income figure used in this calculation. All stock option and performance share plans are expired.

	Year to 31 Dec. 2022	**Year to 31 Dec. 2021**
Net profit used to calculate basic and diluted earnings per ordinary share *(in millions of euros)*(1)	**9,621**	**9,052**
Weighted average number of ordinary shares outstanding during the year	**1,232,991,607**	**1,247,014,704**
Effect of potentially dilutive ordinary shares	-	-
Weighted average number of ordinary shares used to calculate diluted earnings per share	**1,232,991,607**	**1,247,014,704**
Basic earnings per share *(in euros)*	**7.80**	**7.26**
of which continuing activities *(in euros)*	7.24	6.68
of which discontinued activities *(in euros)*	0.56	0.58
Diluted earnings per share *(in euros)*	**7.80**	**7.26**
of which continuing activities *(in euros)*	7.24	6.68
of which discontinued activities *(in euros)*	0.56	0.58

(1) *The net profit used to calculate basic and diluted earnings per share is the net profit attributable to equity shareholders, adjusted for the remuneration on the Undated Super Subordinated Notes issued by BNP Paribas SA (treated as preferred share equivalents), which for accounting purposes is handled as dividends, as well as the related foreign exchange gain or loss impact recognised directly in shareholders’ equity in case of repurchase.*

The Board of directors will propose to the Annual General Meeting on 16 May 2023, a dividend per share of EUR 3.90 out of the 2022 net income (against EUR 3.67 out of the 2021 net income).

The proposed distribution amounted to EUR 4,811 million, against EUR 4,527 million paid in 2022.

This distribution will be raised to 60% of the 2022 net income with a share buyback programme of EUR 962 million, subject to the customary condition precedents, including European Central Bank authorisations.

7.b LEGAL PROCEEDINGS AND ARBITRATION

BNP Paribas (the "**Bank**") is party as a defendant in various claims, disputes and legal proceedings (including investigations by judicial or supervisory authorities) in a number of jurisdictions arising in the ordinary course of its business, including *inter alia* in connection with its activities as market counterparty, lender, employer, investor and taxpayer.

The related risks have been assessed by the Bank and are subject, where appropriate, to provisions disclosed in note 4.p "*Provisions for liabilities and charges*" of the consolidated financial statements at 31 December 2022; a provision is recognised when it is probable that an outflow of resources embodying economic benefits will be required to settle an obligation arising from a past event and a reliable estimate can be made of the amount of the obligation.

The main contingent liabilities related to pending governmental, legal or arbitration proceedings as of 31 December 2022 are described below. The Bank currently considers that none of these proceedings is likely to have a material adverse effect on its financial position or profitability; however, the outcome of legal or governmental proceedings is by definition unpredictable.

The Bank and certain of its subsidiaries are defendants in several actions pending before the United States Bankruptcy Court for the Southern District of New York brought by the Trustee appointed for the liquidation of Bernard L. Madoff Investment Securities LLC ("BLMIS"). These actions, known generally as "clawback claims", are similar to those brought by the BLMIS Trustee under the U.S. Bankruptcy Code and New York state law against numerous institutions, and seek recovery of approximately USD 1.3 billion allegedly received by BNP Paribas entities from BLMIS or indirectly through BLMIS-related "feeder funds" in which BNP Paribas entities held interests.

As a result of certain decisions of the Bankruptcy Court and the United States District Court between 2016 and 2018, the majority of the BLMIS Trustee's actions were either dismissed or substantially narrowed. However, those decisions were either reversed or effectively overruled by subsequent decisions of the United States Court of Appeals for the Second Circuit issued on 25 February 2019 and 30 August 2021. As a result, the BLMIS Trustee may seek to re-file certain claims that were previously dismissed. BNP Paribas has substantial and credible defences to these actions and is defending against them vigorously.

Litigation was brought in Belgium by minority shareholders of the previous Fortis Group against the Société fédérale de Participations et d'Investissement, Ageas and BNP Paribas seeking (amongst other things) damages from BNP Paribas as restitution for part of the BNP Paribas Fortis shares that were contributed to BNP Paribas in 2009, on the ground that the transfer of these shares was null and void. On 29 April 2016, the Brussels Commercial court decided to stay the proceedings until the resolution of the pending Fortis criminal proceeding in Belgium. The criminal proceeding, in which the Public Prosecutor had requested a dismissal, is definitively closed, as the Council Chamber of the Brussels Court of first instance issued on 4 September 2020 a ruling (which since became final) that the charges were time-barred. Certain minority shareholders are continuing the civil proceedings against BNP Paribas and the Société fédérale de Participations et d'Investissement before the Brussels Commercial court; BNP Paribas continues to defend itself vigorously against the allegations of these shareholders.

Like many other financial institutions in the banking, investment, mutual funds and brokerage sectors, the Bank has received or may receive requests for information from, or be subject to investigations by supervisory, governmental or self-regulatory agencies. The Bank responds to such requests, and cooperates with the relevant authorities and regulators and seeks to address and remedy any issues that may arise.

On 26 February 2020, the Paris Criminal Court found BNP Paribas Personal Finance guilty of misleading commercial practice and concealment of this practice. BNP Paribas Personal Finance was ordered to pay a fine of EUR 187,500 and damages and legal fees to the civil plaintiffs. The damages award was of immediate effect. BNP Paribas Personal Finance filed an appeal on the merits on 6 March 2020. It also sought to suspend the immediate effectiveness of the judgment, which the court rejected by decision dated 25 September 2020. BNP Paribas Personal Finance paid to the civil plaintiffs the damages awarded, without prejudice to the pending appeal before the Court of Appeal of Paris and to the civil legal proceedings that are otherwise ongoing.

Save as disclosed above, there are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the Bank is aware) that may have or have had, in the previous twelve months, any significant effects on the financial position or the profitability of the Bank and/or the BNP Paribas Group.

7.c BUSINESS COMBINATIONS AND LOSS OF CONTROL OR SIGNIFICANT INFLUENCE

Allfunds Group Plc

At 31 December 2020, BNP Paribas held a stake of 22.5% in Allfunds Plc Ltd, European market leader in fund distribution platforms.

On 23 April 2021, the Group participated in the initial public offering of Allfunds, contributing 6.7% of the capital. The disposal led to the recognition of a result of EUR 300 million.

On 16 September 2021, the Group sold a stake of 2% of Allfunds. The disposal led to the recognition of a result of EUR 144 million.

On 24 September 2022, the Group sold a stake of 2% of Allfunds and retained a significant influence with 12.2% of the capital of AFB Group Plc. The disposal led to the recognition of a result of EUR 31 million.

Verner Investissements

On 13 July 2021, BNP Paribas SA purchased the residual 50% stake in Verner Investissements, the holding company of Exane entities.

The Group BNP Paribas took therefore exclusive control of this entity and fully consolidated it from the second half of 2021.

Consequently, this operation increased the Group's balance sheet by EUR 6 billion at the acquisition date, in particular EUR 3.7 billion in financial assets at fair value through profit and loss, and led to the recognition of badwill of EUR 111 million in the profit and loss account.

Including the remeasurement of the previously held stake through profit or loss, the net impact on net income of the acquisition is -EUR 51 million.

bpost bank

On 3 January 2022, BNP Paribas Fortis purchased the residual 50% stake in bpost bank.

The Group BNP Paribas took therefore exclusive control of this entity and fully consolidated it from the first quarter of 2022.

Consequently, this operation increased the Group's balance sheet by EUR 12 billion at the acquisition date, in particular EUR 11 billion in financial assets at amortised cost and led to the recognition of badwill of EUR 245 million in the profit and loss account.

Axepta SpA

On 4 January 2022, Banca Nazionale del Lavoro sold 80% of its stake of Wordline Merchant Services Italia (ex-Axepta Spa).

The Group BNP Paribas lost exclusive control of this entity but kept a significant influence.

The disposal led to the recognition of a result of EUR 204 million on the line "Net gain on non-current assets".

The residual stake of 20% was consolidated using the equity method for its remeasured value, including goodwill of EUR 41 million.

Floa

On 31 January 2022, BNP Paribas purchased 100% of Floa.

The Group BNP Paribas took exclusive control of this entity and fully consolidated it from the first quarter of 2022.

The Group's balance sheet increased by EUR 2 billion at the acquisition date, in particular in financial assets at amortised cost.

The goodwill related to this operation was EUR 122 million.

UkrSibbank

In the context of the conflict in Ukraine, the Group reassessed the nature of control over its subsidiary UkrSibbank and concluded to the loss of exclusive control, and the maintain of a significant influence. This situation led the Group to consolidate the entity using the equity method from 1 March 2022.

The loss of exclusive control involved the recognition of a loss on disposal of -EUR 159 million and the reclassification to the profit and loss account of cumulated changes in assets and liabilities for exchange differences of -EUR 274 million, in "Net gain on non-current assets".

The Group's balance sheet decreased by EUR 2 billion at the date of loss of exclusive control, in particular in financial assets at amortised cost.

Terberg Leasing Group BV

On 30 November 2022, Arval Service Lease purchased 100% of Terberg Leasing Group BV.

The Group BNP Paribas took exclusive control of these entities and fully consolidated them from the last quarter of 2022.

The Group's balance sheet increased by EUR 1 billion at the acquisition date, in particular in tangible assets.

The goodwill related to this operation was EUR 96 million.

7.d DISCONTINUED ACTIVITIES

On 18 December 2021, BNP Paribas concluded an agreement with BMO Financial Group for the sale of 100% of its retail and commercial banking activities in the United States, operated by the BancWest cash-generating unit, for a total consideration of USD 16.3 billion in cash.

The transaction was closed on 1 February 2023 following receipt of all regulatory approvals by BMO Financial Group.

The group of assets covered by the agreement comprises most of the entities of the homogeneous BancWest set (see reference D2 in note 7.l *Scope of consolidation*). BancWest is therefore classified as a discontinued activity (see note 1.i *Assets held for sale and discontinued operations*).

As required by IFRS 5 related to groups of assets and liabilities held for sale, the Group's consolidated financial statements are adapted to present BancWest separately in 2021 and in 2022:

- the assets are reclassified on a separate line of the balance sheet "Assets held for sale";
- the liabilities are also reclassified in a separate line "Liabilities associated with assets held for sale";
- amounts accounted for in equity for the revaluation of assets and liabilities are presented separately in the statement of net income and changes in assets and liabilities recognised directly in equity;
- revenues and expenses are reclassified in a separate line "Net income from discontinued activities" in the profit and loss statement. This income includes revenues and expenses from internal transactions with BancWest, provided that, following the sale, the Group will no longer receive these revenues or incur these expenses;
- the net change in cash and cash equivalents is isolated in the cash flow statement.

NET INCOME FROM DISCONTINUED ACTIVITIES

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Revenues	**2,788**	**2,473**
Operating Expenses and Dep.	(2,007)	(1,645)
Gross Operating Income	**781**	**828**
Cost of Risk	39	46
Operating Income	**820**	**874**
Net gain on non-current assets	3	19
Pre-tax Income	**823**	**893**
Corporate income tax	(137)	(173)
NET INCOME FROM DISCONTINUED ACTIVITIES	**686**	**720**

STATEMENT OF NET INCOME AND CHANGES IN ASSETS AND LIABILITIES RECOGNISED DIRECTLY IN EQUITY OF DISCONTINUED ACTIVITIES

In millions of euros	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Net income from discontinued activities	**686**	**720**
Changes in assets and liabilities recognised directly in equity of discontinued activities	**(434)**	**580**
Items that are or may be reclassified to profit or loss	**(440)**	**571**
Changes in fair value through profit or loss	111	739
Changes in fair value of financial assets through equity		
Changes in fair value recognised in equity	*(730)*	*(173)*
Changes in fair value reported in profit or loss	*(18)*	*(30)*
Deferred value changes in hedging derivatives		
Changes in fair value recognised in equity	*(256)*	*(61)*
Changes in fair value reported in profit or loss		
Income taxes	453	96
Items that will not be reclassified to profit or loss	**6**	**9**

Revaluation effects on post-employment benefit plans	7	12
Income taxes	(1)	(3)
TOTAL	**252**	**1,300**

BALANCE SHEET OF DISCONTINUED ACTIVITIES

In millions of euros	31 December 2022	31 December 2021
Cash and balances at central banks	2,750	14,654
Financial assets at fair value through equity	4,503	5,009
Financial assets at amortised cost	73,007	65,775
Property, plant and equipment	453	428
Intangible assets and goodwill	2,910	2,770
Other assets	3,216	2,631
TOTAL ASSETS HELD FOR SALE	**86,839**	**91,267**
Financial liabilities at amortised cost	74,563	73,041
Other liabilities	2,439	1,325
TOTAL LIABILITIES ASSOCIATED WITH ASSETS HELD FOR SALE	**77,002**	**74,366**

CHANGES IN ASSETS AND LIABILITIES RECOGNISED DIRECTLY IN EQUITY OF DISCONTINUED ACTIVITIES AT 31 DECEMBER 2022

In millions of euros	31 December 2022	31 December 2021
Items that are or may be reclassified to profit or loss	**168**	**608**
Exchange differences	799	687
Financial assets at fair value through equity	(405)	(41)
Derivatives used for hedging purposes	(226)	(38)
Items that will not be reclassified to profit or loss	**(119)**	**(125)**
Remeasurement gains (losses) related to postemployment benefit plans	(119)	(125)
CHANGES IN ASSETS AND LIABILITIES RECOGNISED DIRECTLY IN EQUITY OF DISCONTINUED ACTIVITIES	**49**	**483**

FINANCIAL ASSETS AT AMORTISED COST CLASSIFIED AS “ASSETS HELD FOR SALE”

	31 December 2022			31 December 2021		
In millions of euros	Gross Value	Impairment	Carrying amount	Gross Value	Impairment	Carrying amount
Loans and advances to credit institutions	**143**	**-**	**143**	**52**	**-**	**52**
Stage 1	143	-	143	52	-	52
Loans and advances to customers	**56,414**	**(329)**	**56,085**	**50,530**	**(476)**	**50,054**

Stage 1	52,711	(141)	52,570	45,751	(172)	45,579
Stage 2	3,150	(126)	3,024	4,370	(217)	4,153
Stage 3	553	(62)	491	409	(87)	322
Debt securities	**16,779**	**-**	**16,779**	**15,669**	**-**	**15,669**
Stage 1	16,779	-	16,779	15,669	-	15,669
TOTAL FINANCIAL ASSETS AT AMORTISED COST	**73,336**	**(329)**	**73,007**	**66,251**	**(476)**	**65,775**

CASH FLOWS FROM DISCONTINUED ACTIVITIES

In millions of euros	**Year to 31 Dec .2022**	**Year to 31 Dec. 2021**
Net decrease (increase) in cash and cash equivalents generated by operating activities	(10,175)	9,772
Net decrease in cash and cash equivalents related to investing activities	(141)	(111)
Decrease (increase) in cash and cash equivalents related to financing activities	(2,322)	406
Effect of movement in exchange rates on cash and cash equivalents	703	672
NET DECREASE (INCREASE) IN CASH AND CASH EQUIVALENTS FROM DISCONTINUED ACTIVITIES	**(11,935)**	**10,739**

7.e EVENT AFTER THE REPORTING PERIOD

Bank of the West

On 18 December 2021, BNP Paribas concluded an agreement with BMO Financial Group for the sale of 100% of its retail and commercial banking activities in the United States, operated by the group BancWest.

The transaction was closed on 1 February 2023 following receipt of all regulatory approvals by BMO Financial Group.

The estimated impact on the Group's balance sheet at sale date is a decrease of approximately EUR 87 billion in assets held for sale.

The capital gain on the disposal amounts to EUR 2.9 billion, including the result related to the Group subscription commitment to the capital increase of BMO Financial Group. The gain will be recognised in the first quarter of 2023.

7.f MINORITY INTERESTS

In millions of euros	**Capital and retained earnings**	**Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss**	**Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss**	**Minority interests**
Balance at 1 January 2021	**4,640**	**9**	**(99)**	**4,550**
Appropriation of net income for 2020	**(221)**			**(221)**
Increases in capital and issues	10			10
Reduction or redemption of capital	(73)			(73)

In millions of euros	Capital and retained earnings	Changes in assets and liabilities recognised directly in equity that will not be reclassified to profit or loss	Changes in assets and liabilities recognised directly in equity that may be reclassified to profit or loss	Minority interests
Movements in consolidation scope impacting minority shareholders	(139)			(139)
Acquisitions of additional interests or partial sales of interests	55			55
Change in commitments to repurchase minority shareholders' interests	38			38
Other movements	9			9
Realised gains or losses reclassified to retained earnings	1	(1)		-
Changes in assets and liabilities recognised directly in equity		7	(7)	-
Net income for 2021	**392**			**392**
Balance at 31 December 2021	**4,712**	**15**	**(106)**	**4,621**
IAS 29 Impact	**(14)**		**62**	**48**
Balance at 1 January 2022	**4,698**	**15**	**(44)**	**4,669**
Appropriation of net income for 2021	**(133)**			**(133)**
Increases in capital and issues	34			34
Impact of internal transactions on minority shareholders	2			2
Movements in consolidation scope impacting minority shareholders	(136)			(136)
Change in commitments to repurchase minority shareholders' interests	(157)			(157)
Other movements	(1)			(1)
Changes in assets and liabilities recognised directly in equity		6	78	84
Net income for 2022	**401**			**401**
Balance at 31 December 2022	**4,708**	**21**	**34**	**4,763**

MAIN MINORITY INTERESTS

The assessment of the material nature of minority interests is based on the contribution of the relevant subsidiaries to the Group balance sheet (before elimination of intragroup balances and transactions) and to the Group profit and loss account.

	31 December 2022							Year to 31 Dec. 2022
In millions of euros	Total assets before elimination of intragroup transactions	Revenues	Net income	Net income and changes in assets and liabilities recognised directly in equity	Minority shareholders' interest (%)	Net income attributable to minority interests	Net income and changes in assets and liabilities recognised directly in equity – attributable to minority interests	Dividends paid to minority shareholders
Contribution of the entities belonging to the BGL BNP Paribas Group	95,376	1,851	604	269	34%	189	121	81
Other minority interests						212	364	52
TOTAL						401	485	133

	31 December 2021							Year to 31 Dec. 2021
In millions of euros	Total assets before elimination of intragroup transactions	Revenues	Net income	Net income and changes in assets and liabilities recognised directly in equity	Minority shareholders' interest (%)	Net income attributable to minority interests	Net income and changes in assets and liabilities recognised directly in equity – attributable to minority interests	Dividends paid to minority shareholders
Contribution of the entities belonging to the BGL BNP Paribas Group	98,967	1,779	585	557	34%	179	167	163
Other minority interests						213	225	58
TOTAL						392	392	221

There are no particular contractual restrictions on the assets of BGL BNP Paribas related to the presence of the minority shareholder.

INTERNAL RESTRUCTURING THAT LED TO A CHANGE IN MINORITY SHAREHOLDERS' INTEREST IN THE EQUITY OF SUBSIDIARIES

No significant internal restructuring operation occurred during the year 2022, nor during the year 2021.

ACQUISITIONS OF ADDITIONAL INTERESTS AND PARTIAL SALES OF INTERESTS LEADING TO CHANGES IN MINORITY INTERESTS IN THE EQUITY OF SUBSIDIARIES

	Year to 31 Dec. 2022		**Year to 31 Dec. 2021**	
In millions of euros	**Attributable to shareholders**	**Minority interests**	**Attributable to shareholders**	**Minority interests**
Bank BGZ BNP Paribas				
Partial disposal of 1.26% of the total share, reducing the Group's share to 87.43%			(11)	37
Financit Spa				
Implementation of a partnership, reducing the Group's share to 60%			21	18
Other			(2)	
TOTAL	**-**	**-**	**8**	**55**

Commitments to repurchase minority shareholders' interests

In connection with the acquisition of certain entities, the Group granted minority shareholders put options on their holdings.

The total value of these commitments, which are recorded as a reduction in shareholders' equity, amounts to EUR 361 million at 31 December 2022, compared with EUR 322 million at 31 December 2021.

7.g SIGNIFICANT RESTRICTIONS IN SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

Significant restrictions related to the ability of entities to transfer cash to the Group

The ability of entities to pay dividends or to repay loans and advances depends, *inter alia*, on local regulatory requirements for capitalisation and legal reserves, as well as the entities' financial and operating performance. During 2022, none of the BNP Paribas Group entities were subject to significant restrictions other than those related to regulatory requirements.

Significant restrictions relative to the Group's ability to use the assets lodged in consolidated structured entities

Access to the assets of consolidated structured entities in which third-party investors have invested is limited inasmuch as these entities' assets are reserved for the holders of units or securities. These assets total EUR 37 billion at 31 December 2022 (EUR 34 billion at 31 December 2021).

Significant restrictions related to the Group's ability to use assets pledged as collateral or under repurchase agreements

The financial instruments pledged by the BNP Paribas Group as collateral or under repurchase agreements are presented in notes 4.r and 5.d.

Significant restrictions related to liquidity reserves

Significant restrictions related to liquidity reserves correspond to the mandatory deposits placed with central banks presented in chapter 5 of the Universal Registration Document under *Liquidity risk*.

Assets representative of unit-linked insurance contracts

Financial assets representative of unit-linked insurance contracts designated as at fair value through profit or loss, which amount to EUR 80 billion at 31 December 2022 (compared with EUR 87 billion at 31 December 2021), are held for the benefit of the holders of these contracts.

7.h STRUCTURED ENTITIES

The BNP Paribas Group is engaged in transactions with sponsored structured entities mainly through its activities of securitisation of financial assets – as either originator or sponsor, fund management and specialised asset financing.

In addition, the BNP Paribas Group is also engaged in transactions with structured entities that it has not sponsored, notably in the form of investments in funds or securitisation vehicles.

The method for assessing control for structured entities is detailed in note 1.b.2. Consolidation methods.

Consolidated structured entities

The main categories of consolidated structured entities are:

- **ABCP (Asset-Backed Commercial Paper) conduits:** the ABCP securitisation conduits Starbird, Matchpoint and Scaldis fund securitisation transactions managed by the BNP Paribas Group on behalf of its customers. Details on how these are financed and the Group's risk exposure are presented in chapter 5 of the Universal Registration Document under *Securitisation as sponsor on behalf of clients/Short-term refinancing*;
- **Proprietary securitisation:** proprietary securitisation positions originated and held by the BNP Paribas Group are detailed in chapter 5 of the Universal Registration Document under *Proprietary securitisation activities (originator)*;
- **Funds managed by the Group:** the BNP Paribas Group structures different types of funds for which it may act as fund manager, investor, custodian or guarantor. These funds are consolidated when the Group is both the manager and a significant investor and is therefore exposed to variable returns.

Unconsolidated structured entities

The BNP Paribas Group has entered into relations with unconsolidated structured entities in the course of its business activities to meet the needs of its customers.

Information relative to interests in sponsored structured entities

The main categories of unconsolidated sponsored structured entities are as follows:

- **Securitisation:** the BNP Paribas Group structures securitisation vehicles for the purposes of offering customers financing solutions for their assets, either directly or through consolidated ABCP conduits. Each vehicle finances the purchase of customers' assets (receivables, bonds, *etc.*) primarily by issuing bonds backed by these assets and whose redemption is linked to their performance;
- **Funds:** the Group structures and manages funds to offer investment opportunities to its customers. Dedicated or public funds are offered to institutional and individual customers and are distributed and commercially monitored by the BNP Paribas Group. The entities of the BNP Paribas Group responsible for managing these funds may receive management fees and performance commission. The BNP Paribas Group may hold units in these funds, as well as units in funds dedicated to the insurance activity not managed by the BNP Paribas Group;
- **Asset financing:** the BNP Paribas Group establishes and finances structured entities that acquire assets (aircraft, ships, *etc.*) intended for lease, and the lease payments received by the structured entity are used to repay the financing, which is guaranteed by the asset held by the structured entity;
- **Other:** on behalf of its customers, the Group may also structure entities which invest in assets or are involved in debt restructuring.

An interest in an unconsolidated structured entity is a contractual or non-contractual link that exposes the BNP Paribas Group to variable returns from the performance of the entity.

The Group's assets and liabilities related to the interests held in sponsored structured entities are as follows:

In millions of euros, at 31 December 2022	Securitisation	Funds	Asset Financing	Others	Total
INTERESTS ON THE GROUP BALANCE SHEET					
ASSETS					
Financial instruments at fair value through profit or loss	7	1,468		449	1,924
Derivatives used for hedging purposes	9	1,067	13	19	1,108
Financial instruments at fair value through equity	147				147
Financial assets at amortised cost	21,058	278	2,150	228	23,714
Other assets	2	110	26		138
Financial investments of insurance activities		34,933			34,933
TOTAL ASSETS	**21,223**	**37,856**	**2,189**	**696**	**61,964**
LIABILITIES					
Financial instruments at fair value through profit or loss	14	597	53	230	894
Derivatives used for hedging purposes					
Financial liabilities at amortised cost	553	10,907	181	27	11,668
Other liabilities	4	296	117		417
TOTAL LIABILITIES	**571**	**11,800**	**351**	**257**	**12,979**
MAXIMUM EXPOSURE TO LOSS	**29,679**	**38,505**	**3,527**	**753**	**72,464**
SIZE OF STRUCTURED ENTITIES(1)	**163,455**	**308,773**	**5,755**	**4,365**	**482,348**

In millions of euros, at 31 December 2021	Securitisation	Funds	Asset Financing	Others	Total
INTERESTS ON THE GROUP BALANCE SHEET					
ASSETS					
Financial instruments at fair value through profit or loss	5	1,009	4	95	1,113
Derivatives used for hedging purposes	11	1,404	23	18	1,456
Financial instruments at fair value through equity	190				190
Financial assets at amortised cost	14,230	117	1,709	9	16,065
Other assets	3	93			96
Financial investments of insurance activities		24,114			24,114
TOTAL ASSETS	**14,439**	**26,737**	**1,736**	**122**	**43,034**
LIABILITIES					
Financial instruments at fair value through profit or loss	18	542	3	54	617
Derivatives used for hedging purposes					
Financial liabilities at amortised cost	1,058	12,809	140	27	14,034
Other liabilities	5	140	118		263
TOTAL LIABILITIES	**1,081**	**13,491**	**261**	**81**	**14,914**
MAXIMUM EXPOSURE TO LOSS	**21,888**	**27,061**	**3,047**	**212**	**52,208**
SIZE OF STRUCTURED ENTITIES(1)	**121,665**	**332,150**	**4,933**	**5,263**	**464,011**

(1) The size of sponsored structured entities equals the total assets of the structured entity for securitisation vehicles, the net asset value for funds (excluding management mandates) and the structured entity's total assets or the amount of the BNP Paribas Group's commitment for asset financing and other structures.

The BNP Paribas Group's maximum exposure to losses on sponsored structured entities is the carrying amount of the assets, excluding, for financial assets at fair value through equity, changes in value taken directly to equity, as well as the nominal amount of the financing commitments and guarantee commitments given and the notional amount of credit default swaps (CDS) sold.

Information relative to interests in non-sponsored structured entities

The main interests held by the BNP Paribas Group when it acts solely as an investor in non-sponsored structured entities are detailed below:

- **Units in funds that are not managed by the Group, which are held by the Insurance business line:** as part of the asset allocation strategy corresponding to investments related to the premiums for unit-linked contracts or for the general fund, the Insurance business line subscribes to units of structured entities. These short- or medium-term investments are held for their financial performance and meet the risk diversification criteria inherent to the business. They amounted to EUR 30 billion at 31 December 2022 (EUR 39 billion at 31 December 2021). Changes in value and the majority of the risks associated with these investments are borne by policyholders in the case of assets representative of unit-linked contracts, and by the insurer in the case of assets representative of the general fund;
- **Other investments in funds not managed by the Group:** as part of its trading business, the BNP Paribas Group invests in structured entities without any involvement in either managing or structuring these entities (investments in mutual funds, securities funds or alternative funds), particularly as economic hedge for structured products sold to customers. The Group also invests in minority holdings in investment funds, in support of companies, as part of its venture capital business. These investments amounted to EUR 8 billion at 31 December 2022 (10 billion at 31 December 2021);
- **Investments in securitisation vehicles:** the breakdown of the Group's exposure and the nature of the securities held are presented in chapter 5 of the Universal Registration Document in the section *Securitisation as investor*.

Besides, in the framework of its asset financing activity, the BNP Paribas Group provides financing to structured entities that are established by and for its clients and whose purpose is to acquire assets (aircraft, ships, *etc.*) intended for lease to those same clients. These financings amount to EUR 4 billion at 31 December 2022 (EUR 5 billion at 31 December 2021).

7.i COMPENSATION AND BENEFITS AWARDED TO THE GROUP'S CORPORATE OFFICERS

The Group's corporate officers, their spouse and their dependent children are considered related parties.

The remuneration and benefits policy relating to the Group's corporate officers, as well as the detailed information on an individual basis, are presented in chapter 2 *Corporate Governance* of the Universal Registration Document.

REMUNERATION AND BENEFITS AWARDED TO THE GROUP'S CORPORATE OFFICERS

	Year to 31 Dec. 2022	Year to 31 Dec. 2021
Gross remuneration, including remuneration linked to the term of directorship and benefits in kind		
payable for the year	€9,845,772	€8,486,731
paid during the year	€8,779,813	€6,526,149
Post-employment benefits		
Retirement bonuses: present value of the benefit obligation (payroll taxes excluded)	€840,720	€788,884
Defined contribution pension plan: contributions paid by BNP Paribas during the year	€7,075	€6,400
Welfare benefits: premiums paid by BNP Paribas during the year	€20,343	€18,836
Share-based payments		
Stock subscription options	Nil	Nil
Performance shares	Nil	Nil
Long-term compensation		
fair value at grant date(*)	€1,748,965	€1,327,391

(*) Valuation according to the method described in note 6.e.

At 31 December 2022, no corporate officer is eligible for a contingent collective defined-benefit top-up pension plan.

Remuneration linked to the term of directorship paid to members of the Board of directors

Remuneration linked to the term of directorship paid to all members of the Board of directors in 2022 amounts to EUR 1,540,000. This amount was EUR 1,362,000 in 2021 (excluding the remuneration of EUR 40,804 linked to the censor role of Mr. Noyer for the period between 1 January and 17 May 2021). The amount paid in 2022 to members other than corporate officers was EUR 1,413,560 compared with EUR 1,233,136 in 2021.

REMUNERATION AND BENEFITS AWARDED TO DIRECTORS REPRESENTING THE EMPLOYEES

In euros	Year to 31 December 2022	Year to 31 December 2021
Gross remuneration paid during the year	125,832	120,963
Remuneration linked to the term of directorship (paid to the trade unions)	200,547	190,887
Premiums paid by BNP Paribas during the year into schemes related to *Garantie Vie Professionnelle Accidents* benefits and healthcare expense coverage	2,140	2,092
Contributions paid by BNP Paribas during the year into the defined-contribution plan	1,452	1,423

Loans, advances and guarantees granted to the Group's corporate officers

At 31 December 2022, the total outstanding loans granted directly or indirectly to the Group's corporate officers and their spouse and dependent children amounted to EUR 5,179,096 (EUR 6,392,970 at 31 December 2021). These loans representing normal transactions were carried out on an arm's length basis.

7.j OTHER RELATED PARTIES

Other related parties of the BNP Paribas Group comprise consolidated companies (including entities consolidated under the equity method) and entities managing post-employment benefit plans offered to Group employees (except for multi-employer and multi-industry schemes).

Transactions between the BNP Paribas Group and related parties are carried out on an arm's length basis.

Relations between consolidated companies

A list of companies consolidated by the BNP Paribas Group is provided in note 7.l *Scope of consolidation*. Transactions and outstanding balances between fully-consolidated entities are eliminated. The tables below show transactions with entities accounted for under the equity method.

OUTSTANDING BALANCES OF RELATED-PARTY TRANSACTIONS

	31 December 2022		**31 December 2021**	
In millions of euros	**Joint ventures**	**Associates**	**Joint ventures**	**Associates**
ASSETS				
On demand accounts	-	4		118
Loans	3,436	91	3,923	116
Securities	440	-	516	268
Other assets	3	72	1	74
Financial investments of insurance activities	1	-	1	2
TOTAL	**3,880**	**167**	**4,441**	**578**
LIABILITIES				
On demand accounts	166	1,243	137	525
Other borrowings	73	826	48	1,034
Other liabilities	2	30	7	26
Technical reserves and other insurance liabilities	1	190	1	159
TOTAL	**242**	**2,289**	**193**	**1,744**
FINANCING COMMITMENTS AND GUARANTEE COMMITMENTS				
Financing commitments given	24	143	23	553
Guarantee commitments given	65	120	1,469	41
TOTAL	**89**	**263**	**1,492**	**594**

The Group also carries out trading transactions with related parties involving derivatives (swaps, options and forwards, *etc.*) and financial instruments purchased or underwritten and issued by them (equities, bonds, *etc.*).

RELATED-PARTY PROFIT AND LOSS ITEMS

	Year to 31 Dec. 2022		Year to 31 Dec. 2021	
In millions of euros	**Joint ventures**	**Associates**	**Joint ventures**	**Associates**
Interest income	43	9	26	7
Interest expense	(2)	(15)	(5)	(2)
Commission income	1	288	5	305
Commission expense	(1)	(78)		(76)
Services provided		29		47
Services received				(7)
Lease income				
Net income from insurance activities	(2)	(2)	(2)	(3)
TOTAL	**39**	**231**	**24**	**271**

Group Entities involved in certain post-employment benefit plans offered to Group employees

In Belgium, BNP Paribas Fortis funds a number of pension schemes managed by AG Insurance in which the BNP Paribas Group has a 25% equity interest.

In other countries, post-employment benefit plans are generally managed by independent fund managers or independent insurance companies, and occasionally by Group companies, in particular BNP Paribas Asset Management.

At 31 December 2022, the value of plan assets managed by Group companies or by companies over which the Group exercises significant influence was EUR 3,689 million (EUR 4,048 million at 31 December 2021). Amounts received by Group companies in the year to 31 December 2022 totalled EUR 5 million and were mainly composed of management and custody fees (EUR 4 million at 31 December 2021).

7.k FAIR VALUE OF FINANCIAL INSTRUMENTS CARRIED AT AMORTISED COST

The information supplied in this note must be used and interpreted with the greatest caution for the following reasons:

- these fair values are an estimate of the value of the relevant instruments at 31 December 2022. They are liable to fluctuate from day to day as a result of changes in various parameters, such as interest rates and credit quality of the counterparty. In particular, they may differ significantly from the amounts actually received or paid on maturity of the instrument. In most cases, the fair value is not intended to be realised immediately, and in practice might not be realised immediately. Consequently, this fair value does not reflect the actual value of the instrument to BNP Paribas as a going concern;
- most of these fair values are not meaningful, and hence are not taken into account in the management of the commercial banking activities which use these instruments;
- estimating a fair value for financial instruments carried at historical cost often requires the use of modelling techniques, hypotheses and assumptions that may vary from bank to bank. This means that comparisons between the fair values of financial instruments carried at historical cost as disclosed by different banks may not be meaningful;
- the fair values shown below do not include the fair values of finance lease transactions, non-financial instruments such as property, plant and equipment, goodwill and other intangible assets such as the value attributed to demand deposit portfolios or customer relationships. Consequently, these fair values should not be regarded as the actual contribution of the instruments concerned to the overall valuation of the BNP Paribas Group.

In millions of euros, at 31 December 2022	Estimated fair value				Carrying value
	Level 1	Level 2	Level 3	Total	
FINANCIAL ASSETS					
Loans and advances to credit institutions and customers(1)		92,635	731,555	824,190	848,145
Debt securities at amortised cost *(note 4.e)*	85,758	26,235	771	112,764	114,014
Assets held for sale	4,440	9,980	53,325	67,746	72,176
FINANCIAL LIABILITIES					
Deposits from credit institutions and customers		1,132,280		1,132,280	1,132,772
Debt securities *(note 4.h)*	64,889	88,999		153,888	154,143
Subordinated debt *(note 4.h)*	17,193	6,624		23,817	24,156
Liabilities associated with assets held for sale		74,567		74,567	74,563

(1) Finance leases excluded.

In millions of euros, at 31 December 2021	Estimated fair value				Carrying value
	Level 1	Level 2	Level 3	Total	
FINANCIAL ASSETS					
Loans and advances to credit institutions and customers(1)		88,058	716,147	804,205	795,845
Debt securities at amortised cost *(note 4.e)*	89,374	17,203	3,172	109,749	108,510
Assets held for sale	4,587	11,081	49,838	65,507	64,847
FINANCIAL LIABILITIES					
Deposits from credit institutions and customers		1,123,937		1,123,937	1,123,383
Debt securities *(note 4.h)*	64,660	86,854		151,514	149,723
Subordinated debt *(note 4.h)*	18,211	7,360		25,571	24,720
Liabilities associated with assets held for sale		73,077		73,077	73,041

(1) Finance leases excluded.

The valuation techniques and assumptions used by BNP Paribas ensure that the fair value of financial assets and liabilities carried at amortised cost is measured on a consistent basis throughout the Group. Fair value is based on prices quoted in an active market when these are available. In other cases, fair value is determined using valuation techniques such as discounting of estimated future cash flows for loans, liabilities and debt securities at amortised cost, or specific valuation models for other financial instruments as described in note 1, *Summary of significant accounting policies applied by the BNP Paribas Group*. The description of the fair value hierarchy levels is also presented in the accounting principles (see note 1.e.10). In the case of loans, liabilities and debt securities at amortised cost that have an initial maturity of less than one year (including demand deposits) or of most regulated savings products, fair value equates to carrying amount. These instruments have been classified in Level 2, except for loans to customers, which are classified in Level 3.

7.l SCOPE OF CONSOLIDATION

BNP Paribas, a *société anonyme* (Public Limited Company), registered in France, is the Group's lead company, which holds key positions in its three operating divisions: Corporate & Institutional Banking (CIB), Commercial, Personal Banking & Services (CPBS) and Investment & Protection Services (IPS).

During the year, the parent company did not change its name. BNP Paribas has its principal place of business in France and its head office is located at 16 boulevard des Italiens 75009 Paris, France.

		31 December 2022				31 December 2021			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNP Paribas SA	France	Full (1)	100%	100%		(1)			
BNPP SA (Argentina branch)	Argentina	Full	100%	100%		Full	100%	100%	
BNPP SA (Australia branch)	Australia	Full	100%	100%		Full	100%	100%	
BNPP SA (Austria branch)	Austria	Full	100%	100%		Full	100%	100%	
BNPP SA (Bahrain branch)	Bahrain	Full	100%	100%		Full	100%	100%	
BNPP SA (Belgium branch)	Belgium	Full	100%	100%		Full	100%	100%	
BNPP SA (Bulgaria branch)	Bulgaria	Full	100%	100%		Full	100%	100%	
BNPP SA (Canada branch)	Canada	Full	100%	100%		Full	100%	100%	
BNPP SA (Czech Republic branch)	Czech Rep.	Full	100%	100%		Full	100%	100%	
BNPP SA (Denmark branch)	Denmark	Full	100%	100%		Full	100%	100%	
BNPP SA (Finland branch)	Finland	Full	100%	100%		Full	100%	100%	
BNPP SA (Germany branch)	Germany	Full	100%	100%		Full	100%	100%	
BNPP SA (Greece branch)	Greece	Full	100%	100%	E2				
BNPP SA (Guernsey branch)	Guernsey	Full	100%	100%	E2				
BNPP SA (Hong Kong branch)	Hong Kong	Full	100%	100%		Full	100%	100%	
BNPP SA (Hungary branch)	Hungary	Full	100%	100%		Full	100%	100%	
BNPP SA (India branch)	India	Full	100%	100%		Full	100%	100%	
BNPP SA (Ireland branch)	Ireland	Full	100%	100%		Full	100%	100%	
BNPP SA (Italy branch)	Italy	Full	100%	100%		Full	100%	100%	
BNPP SA (Japan branch)	Japan	Full	100%	100%		Full	100%	100%	
BNPP SA (Jersey branch)	Jersey	Full	100%	100%	E2				S1
BNPP SA (Kuwait branch)	Kuwait	Full	100%	100%		Full	100%	100%	
BNPP SA (Luxembourg branch)	Luxembourg	Full	100%	100%		Full	100%	100%	
BNPP SA (Malaysia branch)	Malaysia	Full	100%	100%		Full	100%	100%	
BNPP SA (Monaco branch)	Monaco	Full	100%	100%		Full	100%	100%	
BNPP SA (Netherlands branch)	Netherlands	Full	100%	100%		Full	100%	100%	
BNPP SA (Norway branch)	Norway	Full	100%	100%		Full	100%	100%	
BNPP SA (Panama branch)	Panama				S1	Full	100%	100%	
BNPP SA (Philippines branch)	Philippines	Full	100%	100%		Full	100%	100%	
BNPP SA (Poland branch)	Poland	Full	100%	100%		Full	100%	100%	
BNPP SA (Portugal branch)	Portugal	Full	100%	100%		Full	100%	100%	
BNPP SA (Qatar branch)	Qatar	Full	100%	100%		Full	100%	100%	
BNPP SA (Republic of Korea branch)	Rep. of Korea	Full	100%	100%		Full	100%	100%	
BNPP SA (Romania branch)	Romania	Full	100%	100%		Full	100%	100%	
BNPP SA (Saudi Arabia branch)	Saudi Arabia	Full	100%	100%		Full	100%	100%	
BNPP SA (Singapore branch)	Singapore	Full	100%	100%		Full	100%	100%	
BNPP SA (South Africa branch)	South Africa	Full	100%	100%		Full	100%	100%	
BNPP SA (Spain branch)	Spain	Full	100%	100%		Full	100%	100%	
BNPP SA (Sweden branch)	Sweden	Full	100%	100%		Full	100%	100%	
BNPP SA (Switzerland branch)	Switzerland	Full	100%	100%	E2				
BNPP SA (Taiwan branch)	Taiwan	Full	100%	100%		Full	100%	100%	
BNPP SA (Thailand branch)	Thailand	Full	100%	100%		Full	100%	100%	

		31 December 2022				31 December 2021			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP SA (United Arab Emirates branch)	United Arab Emirates	Full	100%	100%		Full	100%	100%	
BNPP SA (United Kingdom branch)	UK	Full	100%	100%		Full	100%	100%	
BNPP SA (United States branch)	USA	Full	100%	100%		Full	100%	100%	
BNPP SA (Viet Nam branch)	Viet Nam	Full	100%	100%		Full	100%	100%	

		31 December 2022					31 December 2021				
Name	**Country**	**Method**		**Voting (%)**	**Interest (%)**	**Ref.**	**Method**		**Voting (%)**	**Interest (%)**	**Ref.**
CORPORATE & INSTITUTIONAL BANKING											
EMEA (Europe, Middle East, Africa)											
France											
Atargatis (s)	France					S4	Full		-	-	
Austin Finance (s)	France	Full		-	-		Full		-	-	
BNPP Arbitrage	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Securities Services	France					S4	Full	(1)	100%	100%	
BNPP Securities Services (Australia branch)	Australia					S4	Full	(1)	100%	100%	
BNPP Securities Services (Belgium branch)	Belgium					S4	Full	(1)	100%	100%	
BNPP Securities Services (Germany branch)	Germany					S4	Full	(1)	100%	100%	
BNPP Securities Services (Greece branch)	Greece					S4	Full	(1)	100%	100%	
BNPP Securities Services (Guernsey branch)	Guernsey					S4	Full	(1)	100%	100%	
BNPP Securities Services (Hong Kong branch)	Hong Kong					S4	Full	(1)	100%	100%	
BNPP Securities Services (Hungary branch)	Hungary					S4	Full	(1)	100%	100%	
BNPP Securities Services (Ireland branch)	Ireland					S4	Full	(1)	100%	100%	
BNPP Securities Services (Italy branch)	Italy					S4	Full	(1)	100%	100%	
BNPP Securities Services (Jersey branch)	Jersey					S4	Full	(1)	100%	100%	
BNPP Securities Services (Luxembourg branch)	Luxembourg					S4	Full	(1)	100%	100%	
BNPP Securities Services (Netherlands branch)	Netherlands					S4	Full	(1)	100%	100%	
BNPP Securities Services (Poland branch)	Poland					S4	Full	(1)	100%	100%	
BNPP Securities Services (Portugal branch)	Portugal					S4	Full	(1)	100%	100%	
BNPP Securities Services (Singapore branch)	Singapore					S4	Full	(1)	100%	100%	
BNPP Securities Services (Spain branch)	Spain					S4	Full	(1)	100%	100%	
BNPP Securities Services (Switzerland branch)	Switzerland					S4	Full	(1)	100%	100%	
BNPP Securities Services (United Kingdom branch)	UK					S4	Full	(1)	100%	100%	
Compagnie d'Investissement Italiens (s)	France					S4	Full		-	-	
Compagnie d'Investissement Opéra (s)	France					S4	Full		-	-	
Ellipsis Asset Management	France					S2	Full		100%	100%	V1/D3
Eurotitrisation	France	Equity		21.7%	21.7%		Equity		21.7%	21.7%	V3
Exane	France	Full		100%	100%		Full		100%	100%	V1/D3
Exane (Germany branch)	Germany	Full		100%	100%		Full		100%	100%	V1/D3
Exane (Italy branch)	Italy	Full		100%	100%		Full		100%	100%	V1/D3
Exane (Spain branch)	Spain	Full		100%	100%		Full		100%	100%	V1/D3
Exane (Sweden branch)	Sweden	Full		100%	100%		Full		100%	100%	V1/D3
Exane (Switzerland branch)	Switzerland	Full		100%	100%		Full		100%	100%	V1/D3
Exane (United Kingdom branch)	UK	Full		100%	100%		Full		100%	100%	V1/D3
Exane Asset Management	France	Equity		51%	51%	V1	Equity		50%	50%	V1/D3
Exane Derivatives	France	Full		100%	100%		Full		100%	100%	V1/D3
Exane Derivatives (Italy branch)	Italy					S1	Full		100%	100%	V1/D3

		31 December 2022				31 December 2021			
Name	**Country**	**Method**	**Voting (%)**	**Interest (%)**	**Ref.**	**Method**	**Voting (%)**	**Interest (%)**	**Ref.**
Exane Derivatives (Switzerland branch)	Switzerland	Full	100%	100%		Full	100%	100%	V1/D3
Exane Derivatives (United Kingdom branch)	UK	Full	100%	100%		Full	100%	100%	V1/D3
Exane Derivatives Gerance	France	Full	100%	100%		Full	100%	100%	V1/D3
Exane Finance	France	Full	100%	100%		Full	100%	100%	V1/D3
Exane Participations	France				S4	Full	99%	99%	V1/D3
FCT Juice (t)	France	Full	-	-		Full	-	-	
Financière des Italiens (s)	France	Full	-	-		Full	-	-	
Financière du Marché Saint Honoré	France	Full	100%	100%		Full	100%	100%	
Financière Paris Haussmann (s)	France				S4	Full	-	-	
Financière Taitbout (s)	France				S4	Full	-	-	
Mediterranea (s)	France				S4	Full	-	-	
Optichamps (s)	France	Full	-	-		Full	-	-	
Parilease	France	Full (1)	100%	100%		Full (1)	100%	100%	
Participations Opéra (s)	France	Full	-	-		Full	-	-	
Services Logiciels d'Intégration Boursière	France	Equity (3)	66.6%	66.6%		Equity (3)	66.6%	66.6%	
SNC Taitbout Participation 3	France	Full	100%	100%		Full	100%	100%	
Société Orbaisienne de Participations	France	Full	100%	100%		Full	100%	100%	
Verner Investissements	France				S4	Full	100%	100%	V1/D3
Verner Investissements NewCo1	France				S4	Full	100%	100%	E3
Verner Investissements NewCo2	France				S4	Full	100%	100%	E3
Other European countries									
Alectra Finance PLC (t)	Ireland								S3
Allfunds Group PLC	UK	Equity	12.1%	12%	V2	Equity	13.8%	13.7%	V2
Aquarius + Investments PLC (t)	Ireland				S3	Full	-	-	
Aries Capital DAC (s)	Ireland	Full	-	-		Full	-	-	
AssetMetrix	Germany	Equity	20.8%	20.8%	V4	Equity	14.9%	14.9%	V4
Auseter Real Estate Opportunities SARL (t)	Luxembourg				S2	Full	-	-	
BNP PUK Holding Ltd	UK	Full	100%	100%		Full	100%	100%	
BNPP Bank JSC	Russia	Full	100%	100%		Full	100%	100%	
BNPP Emissions Und Handels GmbH (s)	Germany	Full	-	-		Full	-	-	
BNPP Fund Administration Services Ireland Ltd	Ireland	Full	100%	100%		Full	100%	100%	
BNPP Invest Holdings BV	Netherlands				S1	Full	100%	100%	
BNPP Ireland Unlimited Co	Ireland	Full	100%	100%		Full	100%	100%	
BNPP Islamic Issuance BV (s)	Netherlands	Full	-	-		Full	-	-	
BNPP Issuance BV (s)	Netherlands	Full	-	-		Full	-	-	
BNPP Net Ltd	UK	Full	100%	100%		Full	100%	100%	
BNPP Prime Brokerage International Ltd	Ireland	Full	100%	100%		Full	100%	100%	
BNPP Suisse SA	Switzerland	Full	100%	100%		Full	100%	100%	
BNPP Suisse SA (Guernsey branch)	Guernsey	Full	100%	100%		Full	100%	100%	
BNPP Technology LLC	Russia	Full	100%	100%		Full	100%	100%	
BNPP Trust Corp UK Ltd	UK	Full	100%	100%	E1				
BNPP Vartry Reinsurance DAC	Ireland	Full (2)	100%	100%		Full (2)	100%	100%	
Diamante Re SRL	Italy	Full	100%	100%		Full	100%	100%	
Ejesur SA	Spain	Full	100%	100%		Full	100%	100%	
Ellipsis AM Suisse SARL	Switzerland				S2	Full	100%	100%	V1/D3

		31 December 2022					31 December 2021				
Name	**Country**	**Method**		**Voting (%)**	**Interest (%)**	**Ref.**	**Method**		**Voting (%)**	**Interest (%)**	**Ref.**
Exane Solutions Luxembourg SA	Luxembourg	Full		100%	100%		Full		100%	100%	V1/D3
Expo Atlantico EAII Investimentos Imobiliarios SA (s)	Portugal	Full		-	-	E2					
Expo Indico EIII Investimentos Imobiliarios SA (s)	Portugal	Full		-	-	E2					
FScholen	Belgium	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
Greenstars BNPP	Luxembourg	Full	(2)	100%	100%		Full	(2)	100%	100%	
Kantox Holding Ltd (Ex- Kantox Ltd)	UK	Equity		9.5%	9.5%		Equity		9.5%	9.5%	V4
Madison Arbor Ltd (t)	Ireland	Full		-	-		Full		-	-	
Matchpoint Finance PLC (t)	Ireland	Full		-	-		Full		-	-	
Ribera Del Loira Arbitrage	Spain	Full		100%	100%		Full		100%	100%	
Securasset SA (s)	Luxembourg	Full		-	-		Full		-	-	E1
Single Platform Investment Repackaging Entity SA (s)	Luxembourg	Full		-	-		Full		-	-	
Utexam Logistics Ltd	Ireland	Full		100%	100%		Full		100%	100%	
Utexam Solutions Ltd	Ireland	Full		100%	100%		Full		100%	100%	
Middle East											
BNPP Investment Co KSA	Saudi Arabia	Full		100%	100%		Full		100%	100%	
AMERICAS											
Banco BNPP Brasil SA	Brazil	Full		100%	100%		Full		100%	100%	
BNPP Canada Corp	Canada	Full		100%	100%		Full		100%	100%	
BNPP Capital Services Inc	USA	Full		100%	100%		Full		100%	100%	
BNPP Colombia Corporacion Financiera SA	Colombia	Full		100%	100%		Full		100%	100%	
BNPP EQD Brazil Fund Fundo de Investmento Multimercado (s)	Brazil	Full		-	-		Full		-	-	
BNPP Financial Services LLC	USA	Full		100%	100%		Full		100%	100%	
BNPP FS LLC	USA	Full		100%	100%		Full		100%	100%	
BNPP IT Solutions Canada Inc	Canada	Full		100%	100%		Full		100%	100%	
BNPP Mexico Holding	Mexico	Full		100%	100%		Full		100%	100%	E1
BNPP Mexico SA Institucion de Banca Multiple	Mexico	Full		100%	100%		Full		100%	100%	E1
BNPP Proprietario Fundo de Investimento Multimercado (s)	Brazil	Full		-	-		Full		-	-	
BNPP RCC Inc	USA	Full		100%	100%		Full		100%	100%	
BNPP Securities Corp	USA	Full		100%	100%		Full		100%	100%	
BNPP US Investments Inc	USA	Full		100%	100%		Full		100%	100%	
BNPP US Wholesale Holdings Corp	USA	Full		100%	100%		Full		100%	100%	
BNPP USA Inc	USA	Full		100%	100%		Full		100%	100%	
BNPP VPG Brookline Cre LLC (s)	USA	Full		-	-		Full		-	-	
BNPP VPG EDMC Holdings LLC (s)	USA	Full		-	-		Full		-	-	
BNPP VPG Express LLC (s)	USA	Full		-	-		Full		-	-	
BNPP VPG I LLC (s)	USA	Full		-	-		Full		-	-	
BNPP VPG II LLC (s)	USA	Full		-	-		Full		-	-	
BNPP VPG III LLC (s)	USA	Full		-	-		Full		-	-	
BNPP VPG Master LLC (s)	USA	Full		-	-		Full		-	-	
Dale Bakken Partners 2012 LLC	USA	FV		4.9%	23.8%	V3	FV		23.8%	23.8%	
Decart Re Ltd (s)	Bermuda	Full	(2)	-	-		Full	(2)	-	-	
Exane Inc	USA					S1	Full		100%	100%	V1/D3
FSI Holdings Inc	USA	Full		100%	100%		Full		100%	100%	
Starbird Funding Corp (t)	USA	Full		-	-		Full		-	-	
PACIFIC ASIA											

		31 December 2022					31 December 2021				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
Bank BNPP Indonesia PT	Indonesia	Full		100%	100%		Full		100%	100%	
BNPP Arbitrage Hong Kong Ltd	Hong Kong	Full		100%	100%		Full		100%	100%	
BNPP China Ltd	China	Full		100%	100%		Full		100%	100%	
BNPP Finance Hong Kong Ltd	Hong Kong	Full		100%	100%		Full		100%	100%	
BNPP Fund Services Australasia Pty Ltd	Australia	Full		100%	100%		Full		100%	100%	
BNPP Fund Services Australasia Pty Ltd (New Zealand branch)	New Zealand	Full		100%	100%		Full		100%	100%	
BNPP Global Securities Operations Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP India Holding Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP India Solutions Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP Malaysia Berhad	Malaysia	Full		100%	100%		Full		100%	100%	
BNPP Securities Asia Ltd	Hong Kong	Full		100%	100%		Full		100%	100%	
BNPP Securities India Private Ltd	India	Full		100%	100%		Full		100%	100%	
BNPP Securities Japan Ltd	Japan	Full		100%	100%		Full		100%	100%	
BNPP Securities Korea Co Ltd	Rep. of Korea	Full		100%	100%		Full		100%	100%	
BNPP Securities Taiwan Co Ltd	Taiwan	Full		100%	100%		Full		100%	100%	
BNPP Sekuritas Indonesia PT	Indonesia	Full		100%	100%	V4	Full		99%	99%	
BPP Holdings Pte Ltd	Singapore	Full		100%	100%		Full		100%	100%	
Contour Pte Ltd	Singapore										S2
Pt Andalan Multi Guna	Indonesia	Full		100%	100%	D1					
COMMERCIAL, PERSONAL BANKING & SERVICES											
COMMERCIAL & PERSONAL BANKING IN THE EUROZONE											
Commercial & Personal Banking in France											
2SF - Société des Services Fiduciaires	France	Equity		33.3%	33.3%	E2					
Banque de Wallis et Futuna	France	Full	(1)	51%	51%		Full	(1)	51%	51%	
BNPP Antilles Guyane	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Développement	France	Full		100%	100%		Full		100%	100%	
BNPP Développement Oblig	France	Full		100%	100%		Full		100%	100%	
BNPP Factor	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Factor (Spain branch)	Spain	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Factor Sociedade Financeira de Credito SA	Portugal	Full		100%	100%		Full		100%	100%	
BNPP Nouvelle Calédonie	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Réunion	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Compagnie pour le Financement des Loisirs	France	Full		100%	100%	V1/D5	Equity		46%	46%	
Copartis	France	Full		100%	100%		Full		100%	100%	
Euro Securities Partners	France	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
GIE Ocean	France	Full		100%	100%		Full		100%	100%	
Jivago Holding	France	Full		100%	100%		Full		100%	100%	E3
Partecis	France	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
Paylib Services	France	Equity		14.3%	14.3%		Equity		14.3%	14.3%	
Portzamparc	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Protection 24	France										S2
Société Lairoise de Participations	France					S4	Full		100%	100%	
BNL banca commerciale											
Artigiancassa SPA	Italy	Full		73.9%	73.9%		Full		73.9%	73.9%	
Banca Nazionale Del Lavoro SPA	Italy	Full		100%	100%		Full		100%	100%	
EMF IT 2008 1 SRL (t)	Italy	Full		-	-		Full		-	-	
Era Uno SRL (t)	Italy	Full		-	-		Full		-	-	E2

Name	Country	31 December 2022 Method	Voting (%)	Interest (%)	Ref.	31 December 2021 Method	Voting (%)	Interest (%)	Ref.
Eutimm SRL	Italy	Full	100%	100%		Full	100%	100%	
Financit SPA	Italy	Full	60%	60%		Full	60%	60%	V2
Immera SRL (t)	Italy	Full	-	-		Full	-	-	E1
International Factors Italia SPA	Italy	Full	99.7%	99.7%		Full	99.7%	99.7%	
Permicro SPA	Italy	Equity	21.9%	21.9%	V4	Equity	21.6%	21.6%	
Serfactoring SPA	Italy								S2
Servizio Italia SPA	Italy	Full	100%	100%		Full	100%	100%	
Sviluppo HQ Tiburtina SRL	Italy	Full	100%	100%		Full	100%	100%	
Tierre Securitisation SRL (t)	Italy	Full	-	-		Full	-	-	
Vela Consumer 2 SRL (t)	Italy								S1
Vela Home SRL (t)	Italy				S3	Full	-	-	
Vela Mortgages SRL (t)	Italy				S3	Full	-	-	
Vela OBG SRL (t)	Italy	Full	-	-		Full	-	-	
Vela RMBS SRL (t)	Italy	Full	-	-		Full	-	-	
Worldline Merchant Services Italia SPA (Ex-Axepta SPA)	Italy	Equity	20%	20%	V2/D6	Full	100%	100%	
Commercial & Personal Banking in Belgium									
Axepta BNPP Benelux	Belgium	Full	100%	99.9%		Full	100%	99.9%	
Bancontact Paytoniq Company	Belgium	Equity	22.5%	22.5%		Equity	22.5%	22.5%	
Banking Funding Company SA	Belgium				S3	Equity	33.5%	33.5%	
BASS Master Issuer NV (t)	Belgium	Full	-	-		Full	-	-	
Batopin	Belgium	Equity	25%	25%		Equity	25%	25%	E1
Belgian Mobile ID	Belgium	Equity	12.2%	12.2%		Equity	12.2%	12.2%	V3
BNPP Commercial Finance Ltd	UK	Full	100%	99.9%		Full	100%	99.9%	
BNPP Factor AB	Sweden								S1
BNPP Factor AS	Denmark	Full	100%	99.9%		Full	100%	99.9%	
BNPP Factor GmbH	Germany	Full	100%	99.9%		Full	100%	99.9%	
BNPP Factor NV	Netherlands								S1
BNPP Factoring Support	Netherlands	Full	100%	99.9%		Full	100%	99.9%	
BNPP Fortis	Belgium	Full	99.9%	99.9%		Full	99.9%	99.9%	
BNPP Fortis (Spain branch)	Spain	Full	99.9%	99.9%		Full	99.9%	99.9%	
BNPP Fortis (United States branch)	USA	Full	99.9%	99.9%		Full	99.9%	99.9%	
BNPP Fortis Factor NV	Belgium	Full	100%	99.9%		Full	100%	99.9%	
BNPP Fortis Film Finance	Belgium	Full	100%	99.9%		Full	100%	99.9%	V4
BNPP Fortis Funding SA	Luxembourg	Full	100%	99.9%		Full	100%	99.9%	
BNPP FPE Belgium	Belgium	Full	100%	99.9%		Full	100%	99.9%	
BNPP FPE Expansion	Belgium	Full	100%	99.9%		Full	100%	99.9%	
BNPP FPE Management	Belgium	Full	100%	99.9%		Full	100%	99.9%	
Bpost Bank	Belgium	Full	100%	99.9%	V1/D7	Equity (3)	50%	50%	
Credissimo	Belgium	Full	100%	99.9%		Full	100%	99.9%	
Credissimo Hainaut SA	Belgium	Full	99.7%	99.7%		Full	99.7%	99.7%	
Crédit pour Habitations Sociales	Belgium	Full	81.7%	81.6%		Full	81.7%	81.6%	
Demetris NV	Belgium	Full	100%	99.9%	E1				
Epimede (s)	Belgium	Equity	-	-		Equity	-	-	
Esmee Master Issuer (t)	Belgium	Full	-	-		Full	-	-	
Immobilière Sauveniere SA	Belgium	Full	100%	99.9%		Full	100%	99.9%	
Isabel SA NV	Belgium	Equity	25.3%	25.3%		Equity	25.3%	25.3%	
Microstart	Belgium	Full	42.3%	76.8%		Full	42.3%	76.8%	V4
Private Equity Investments (a)	BE/FR/LU	FV	-	-		FV	-	-	
Sagip	Belgium	Full	100%	100%		Full	100%	100%	

Name	Country	31 December 2022 Method		Voting (%)	Interest (%)	Ref.	31 December 2021 Method		Voting (%)	Interest (%)	Ref.
Sowo Invest SA NV	Belgium	Full		87.5%	87.5%		Full		87.5%	87.5%	
Commercial & Personal Banking in Luxembourg											
BGL BNPP	Luxembourg	Full		66%	65.9%		Full		66%	65.9%	
BGL BNPP (Germany branch)	Germany	Full		66%	65.9%		Full		66%	65.9%	
BNPP Lease Group Luxembourg SA	Luxembourg	Full		100%	65.9%		Full		100%	65.9%	
BNPP SB Re	Luxembourg	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cofhylux SA	Luxembourg	Full		100%	65.9%		Full		100%	65.9%	
Compagnie Financière Ottomane SA	Luxembourg	Full		97.3%	97.3%		Full		97.3%	97.3%	
Le Sphinx Assurances Luxembourg SA	Luxembourg	Full	(2)	100%	100%		Full	(2)	100%	100%	
Lion International Investments SA	Luxembourg					S4	Full		100%	100%	
Luxhub SA	Luxembourg	Equity		28%	18.5%		Equity		28%	18.5%	
Visalux	Luxembourg	Equity		25.3%	16.7%		Equity		25.3%	16.7%	
COMMERCIAL & PERSONAL BANKING IN THE REST OF THE WORLD											
Europe-Mediterranean											
Bank of Nanjing	China	Equity		13.9%	13.9%	V3	Equity		15%	15%	V1
Banque Internationale pour le Commerce et l'Industrie de la Côte d'Ivoire	Ivory Coast	Full		59.8%	59.8%		Full		59.8%	59.8%	
Banque Internationale pour le Commerce et l'Industrie de la Guinée	Guinea										S2
Banque Internationale pour le Commerce et l'Industrie du Burkina Faso	Burkina Faso										S2
Banque Internationale pour le Commerce et l'Industrie du Sénégal	Senegal	Full		54.1%	54.1%		Full		54.1%	54.1%	
Banque Marocaine pour le Commerce et l'Industrie	Morocco	Full		67%	67%		Full		67%	67%	
Banque Marocaine pour le Commerce et l'Industrie Banque Offshore	Morocco	Full		100%	67%		Full		100%	67%	
Bantas Nakit AS	Türkiye	Equity	(3)	33.3%	16.7%		Equity	(3)	33.3%	16.7%	
BDSI	Morocco	Full		100%	96.4%		Full		100%	96.4%	
BGZ Poland ABS1 DAC (t)	Ireland	Full		-	-		Full		-	-	
BICI Bourse	Ivory Coast	Full		90%	52%		Full		90%	52%	V4
BMCI Leasing	Morocco	Full		86.9%	58.2%		Full		86.9%	58.2%	
BNPP Bank Polska SA	Poland	Full		87.4%	87.4%		Full		87.4%	87.4%	V3
BNPP El Djazair	Algeria	Full		100%	100%		Full		100%	100%	
BNPP Faktoring Spolka ZOO	Poland	Full		100%	100%		Full		100%	100%	
BNPP Fortis Yatirimlar Holding AS	Türkiye	Full		100%	99.9%		Full		100%	99.9%	
BNPP Group Service Center SA	Poland	Full		100%	87.4%	E1					
BNPP IRB Participations	France	Full		100%	100%		Full		100%	100%	
BNPP Solutions Spolka ZOO	Poland					S3	Full		100%	87.4%	V3
BNPP Yatirimlar Holding AS	Türkiye	Full		100%	100%		Full		100%	100%	
Dreams Sustainable AB	Sweden	Full		57.5%	57.5%	E3					
Joint Stock Company Ukrsibbank	Ukraine	Equity		60%	60%	D1	Full		60%	60%	
TEB ARF Teknoloji Anonim Sirketi	Türkiye	Full		100%	72.5%		Full		100%	72.5%	E2
TEB Faktoring AS	Türkiye	Full		100%	72.5%		Full		100%	72.5%	
TEB Holding AS	Türkiye	Full		50%	50%		Full		50%	50%	
TEB SH A	Serbia	Full		100%	50%		Full		100%	50%	
TEB Yatirim Menkul Degerler AS	Türkiye	Full		100%	72.5%		Full		100%	72.5%	
Turk Ekonomi Bankasi AS	Türkiye	Full		100%	72.5%		Full		100%	72.5%	
Union Bancaire pour le Commerce et l'Industrie	Tunisia										S2
BancWest											

		31 December 2022				31 December 2021			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BancWest Holding Inc	USA	Full	100%	100%	D2	Full	100%	100%	D2
BancWest Holding Inc Grantor Trust ERC Subaccount (s)	USA	Full	-	-	D2	Full	-	-	D2
BancWest Holding Inc Umbrella Trust (s)	USA	Full	-	-	D2	Full	-	-	D2
BancWest Investment Services Inc	USA	Full	100%	100%	D2	Full	100%	100%	D2
Bank of the West	USA	Full	100%	100%	D2	Full	100%	100%	D2
Bank of the West Auto Trust 2018-1 (t)	USA				S1	Full	-	-	D2
Bank of the West Auto Trust 2019-1 (t)	USA	Full	-	-	D2	Full	-	-	D2
Bank of the West Auto Trust 2019-2 (t)	USA	Full	-	-	D2	Full	-	-	D2
BNPP Leasing Solutions Canada Inc	Canada	Full	100%	100%	D2	Full	100%	100%	
BOW Auto Receivables LLC (t)	USA	Full	-	-	D2	Full	-	-	D2
BWC Opportunity Fund 2 Inc (t)	USA	Full	-	-	D2	Full	-	-	D2
BWC Opportunity Fund Inc (t)	USA	Full	-	-	D2	Full	-	-	D2
CFB Community Development Corp	USA	Full	100%	100%	D2	Full	100%	100%	D2
Claas Financial Services LLC	USA	Full	51%	51%	D2	Full	51%	51%	D2
Commercial Federal Affordable Housing Inc	USA	Full	100%	100%	D2	Full	100%	100%	D2
Commercial Federal Community Development Corp	USA								S1
Commercial Federal Insurance Corp	USA								S1
Commercial Federal Investment Service Inc	USA								S1
First Santa Clara Corp (s)	USA	Full	-	-	D2	Full	-	-	D2
Liberty Leasing Co	USA								S1
United California Bank Deferred Compensation Plan Trust (s)	USA	Full	-	-	D2	Full	-	-	D2
Ursus Real Estate Inc	USA	Full	100%	100%	D2	Full	100%	100%	D2
SPECIALISED BUSINESSES									
Personal Finance									
Alpha Crédit SA	Belgium	Full	100%	99.9%		Full	100%	99.9%	
AutoFlorence 1 SRL (t)	Italy	Full	-	-		Full	-	-	
AutoFlorence 2 SRL (t)	Italy	Full	-	-		Full	-	-	E2
Autonoria 2019 (t)	France	Full	-	-		Full	-	-	
Autonoria Spain 2019 (t)	Spain	Full	-	-		Full	-	-	
Autonoria Spain 2021 FT (t)	Spain	Full	-	-		Full	-	-	E2
Autonoria Spain 2022 FT (t)	Spain	Full	-	-	E2				
Autop Ocean Indien	France				S4	Full	100%	97.8%	
Axa Banque Financement	France	Equity	35%	35%		Equity	35%	35%	
Banco Cetelem SA	Spain	Full	100%	100%		Full	100%	100%	
Banco Cetelem SA	Brazil	Full	100%	100%		Full	100%	100%	
BGN Mercantil E Servicos Ltda	Brazil	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance	France	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Austria branch)	Austria	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Bulgaria branch)	Bulgaria	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Czech Republic branch)	Czech Rep.	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Portugal branch)	Portugal	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Romania branch)	Romania	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance (Slovakia	Slovakia	Full	100%	100%		Full	100%	100%	

Name	Country	31 December 2022 Method	Voting (%)	Interest (%)	Ref.	31 December 2021 Method	Voting (%)	Interest (%)	Ref.
branch)									
BNPP Personal Finance BV	Netherlands	Full	100%	100%		Full	100%	100%	
BNPP Personal Finance South Africa Ltd	South Africa	Full	100%	100%		Full	100%	100%	
BON BNPP Consumer Finance Co Ltd (Ex-Suning Consumer Finance Co Ltd)	China	Equity	18%	18%	V1	Equity	15%	15%	
Cafineo	France	Full (1)	51%	50.8%		Full (1)	51%	50.8%	
Carrefour Banque	France	Equity	40%	40%		Equity	40%	40%	
Central Europe Technologies SRL	Romania	Full	100%	100%		Full	100%	100%	E1
Cetelem Algérie	Algeria								S1
Cetelem America Ltda	Brazil	Full	100%	100%		Full	100%	100%	
Cetelem Business Consulting Shanghai Co Ltd	China	Full	100%	100%	E1				
Cetelem Gestion AIE	Spain	Full	100%	96%		Full	100%	96%	
Cetelem SA de CV	Mexico	Full	100%	100%		Full	100%	100%	
Cetelem Servicios Informaticos AIE	Spain	Full	100%	81%		Full	100%	81%	
Cetelem Servicios SA de CV	Mexico				S4	Full	100%	100%	
Cetelem Servicos Ltda	Brazil	Full	100%	100%		Full	100%	100%	
Cofica Bail	France	Full (1)	100%	100%		Full (1)	100%	100%	
Cofinoga Funding Two LP (s)	UK								S1
Cofiplan	France	Full (1)	100%	100%		Full (1)	100%	100%	
Creation Consumer Finance Ltd	UK	Full	100%	100%		Full	100%	100%	
Creation Financial Services Ltd	UK	Full	100%	100%		Full	100%	100%	
Crédit Moderne Antilles Guyane	France	Full (1)	100%	100%		Full (1)	100%	100%	
Crédit Moderne Océan Indien	France	Full (1)	97.8%	97.8%		Full (1)	97.8%	97.8%	
Domofinance	France	Full (1)	55%	55%		Full (1)	55%	55%	
Domos 2017 (t)	France				S1	Full	-	-	
E Carat 10 (t)	France	Full	-	-		Full	-	-	
E Carat 7 PLC (t)	UK								S3
E Carat 8 PLC (t)	UK								S3
E Carat 9 PLC (t)	UK								S3
E Carat 10 PLC (t)	UK				S3	Full	-	-	
E Carat 11 PLC (t)	UK	Full	-	-		Full	-	-	
E Carat 12 PLC (t)	UK	Full	-	-		Full	-	-	E2
E Carat SA (t)	Luxembourg								S3
Ekspres Bank AS	Denmark	Full	100%	100%		Full	100%	100%	
Ekspres Bank AS (Norway branch)	Norway	Full	100%	100%		Full	100%	100%	
Ekspres Bank AS (Sweden branch)	Sweden	Full	100%	100%		Full	100%	100%	
Eos Aremas Belgium SA NV	Belgium	Equity	50%	49.9%		Equity	50%	49.9%	
Evollis	France	Equity	41%	41%		Equity	41%	41%	E3
Findomestic Banca SPA	Italy	Full	100%	100%		Full	100%	100%	
Florence Real Estate Developments SPA	Italy	Full	100%	100%		Full	100%	100%	E1
Florence SPV SRL (t)	Italy	Full	-	-		Full	-	-	
GCC Consumo Establecimiento Financiero de Credito SA	Spain	Full	51%	51%		Full	51%	51%	
Genius Auto Finance Co Ltd	China	Equity (3)	20%	20%		Equity (3)	20%	20%	
International Development Resources AS Services SA	Spain	Full	100%	100%		Full	100%	100%	E1
Iqera Services	France	Equity	24.5%	24.5%		Equity	24.5%	24.5%	
Loisirs Finance	France	Full (1)	51%	51%		Full (1)	51%	51%	
Magyar Cetelem Bank ZRT	Hungary	Full	100%	100%		Full	100%	100%	

Name	Country	31 December 2022 Method		Voting (%)	Interest (%)	Ref.	31 December 2021 Method		Voting (%)	Interest (%)	Ref.
Neuilly Contentieux	France	Full		95.9%	95.6%		Full		95.9%	95.6%	
Noria 2018-1 (t)	France	Full		-	-		Full		-	-	
Noria 2020 (t)	France	Full		-	-		Full		-	-	
Noria 2021 (t)	France	Full		-	-		Full		-	-	E2
Noria Spain 2020 FT (t)	Spain	Full		-	-		Full		-	-	
Olympia SAS	France										S3
Opel Bank	France	Full		50%	50%		Full		50%	50%	
Opel Bank (Austria branch)	Austria	Full		50%	50%		Full		50%	50%	
Opel Bank (Germany branch)	Germany	Full		50%	50%		Full		50%	50%	
Opel Bank (Greece branch)	Greece										S1
Opel Bank (Italy branch)	Italy	Full		50%	50%		Full		50%	50%	
Opel Bank (Spain branch)	Spain	Full		50%	50%		Full		50%	50%	
Opel Finance BV	Belgium					S3	Full		100%	50%	
Opel Finance NV	Netherlands	Full		100%	50%		Full		100%	50%	
Opel Finance SA	Switzerland	Full		100%	50%		Full		100%	50%	
Personal Finance Location	France	Full		100%	100%		Full		100%	100%	E1
PF Services GmbH	Germany	Full		100%	100%		Full		100%	100%	E1
Phedina Hypotheken 2010 BV (t)	Netherlands	Full		-	-		Full		-	-	
RCS Botswana Pty Ltd	Botswana	Full		100%	100%		Full		100%	100%	
RCS Cards Pty Ltd	South Africa	Full		100%	100%		Full		100%	100%	
RCS Investment Holdings Namibia Pty Ltd	Namibia	Full		100%	100%		Full		100%	100%	
Securitisation funds UCI and RMBS Prado (b) (t)	Spain	Equity	(3)	-	-		Equity	(3)	-	-	
Servicios Financieros Carrefour EFC SA	Spain	Equity		37.3%	40%		Equity		37.3%	40%	
Solfinéa	France										S3
Sygma Fundings Two Ltd	UK										S3
Symag	France										S2
TEB Finansman AS	Türkiye	Full		100%	92.8%		Full		100%	92.8%	
Union de Creditos Inmobiliarios SA	Spain	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
United Partnership	France	Equity	(3)	50%	50%		Equity	(3)	50%	50%	
Vauxhall Finance PLC	UK	Full		100%	50%		Full		100%	50%	
XFERA Consumer Finance EFC SA	Spain	Full		51%	51%		Full		51%	51%	
Zhejiang Wisdom Puhua Financial Leasing Co Ltd	China	Equity	(3)	20%	20%		Equity	(3)	20%	20%	E3
Arval											
Artel	France	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval AB	Sweden	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval AS	Denmark	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval AS Norway	Norway	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Austria GmbH	Austria	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Belgium NV SA	Belgium	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Benelux BV	Netherlands					S4	Full	(2)	100%	99.9%	
Arval Brasil Ltda	Brazil	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval BV	Netherlands	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval CZ SRO	Czech Rep.	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Deutschland GmbH	Germany	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Fleet Services	France	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Fuhrparkmanagement GmbH	Austria										S4
Arval Hellas Car Rental SA	Greece	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	

		31 December 2022					31 December 2021				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
Arval India Private Ltd	India										S3
Arval LLC	Russia	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Luxembourg SA	Luxembourg	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Magyarorszag KFT	Hungary	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Maroc SA	Morocco	Full	(2)	100%	89%		Full	(2)	100%	89%	
Arval OY	Finland	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Relsa SPA	Chile	Equity		50%	50%		Equity		50%	50%	
Arval Schweiz AG	Switzerland	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Service Lease	France	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Service Lease Aluger Operational Automoveis SA	Portugal	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Service Lease Italia SPA	Italy	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Service Lease Polska SP ZOO	Poland	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Service Lease Romania SRL	Romania	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Service Lease SA	Spain	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Slovakia SRO	Slovakia	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval Trading	France	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval UK Group Ltd	UK	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval UK Leasing Services Ltd	UK	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Arval UK Ltd	UK	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
BNPP Fleet Holdings Ltd	UK	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Cent ASL	France	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	E2
Cofiparc	France	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
FCT Pulse France 2022 (s)	France	Full	(2)	-	-	E2					
Greenval Insurance DAC	Ireland	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Locadif	Belgium	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Louveo	France	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
Personal Car Lease BV	Netherlands	Full	(2)	100%	99.9%	E3					
Public Location Longue Durée	France	Full	(2)	100%	99.9%		Full	(2)	100%	99.9%	
TEB Arval Arac Filo Kiralama AS	Türkiye	Full	(2)	100%	75%		Full	(2)	100%	75%	
Terberg Busines Lease Group BV	Netherlands	Full	(2)	100%	99.9%	E3					
Terberg Leasing Justlease Belgium BV	Belgium	Full	(2)	100%	99.9%	E3					
Leasing Solutions											
All In One Vermietung GmbH	Austria	Full		100%	83%		Full		100%	83%	
Aprolis Finance	France	Full		51%	42.3%		Full		51%	42.3%	
Artegy	France	Full		100%	83%		Full		100%	83%	
BNL Leasing SPA	Italy	Full		100%	95.5%		Full		100%	95.5%	
BNPP 3 Step IT	France	Full		51%	42.3%		Full		51%	42.3%	
BNPP 3 Step IT (Belgium branch)	Belgium	Full		51%	42.3%		Full		51%	42.3%	
BNPP 3 Step IT (Germany branch)	Germany	Full		51%	42.3%		Full		51%	42.3%	
BNPP 3 Step IT (Italy branch)	Italy	Full		51%	42.3%		Full		51%	42.3%	
BNPP 3 Step IT (Netherlands branch)	Netherlands	Full		51%	42.3%		Full		51%	42.3%	
BNPP 3 Step IT (United Kingdom branch)	UK	Full		51%	42.3%		Full		51%	42.3%	
BNPP Finansal Kiralama AS	Türkiye	Full		100%	82.5%		Full		100%	82.5%	
BNPP Lease Group	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Germany branch)	Germany	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Italy branch)	Italy	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Portugal branch)	Portugal	Full	(1)	100%	83%		Full	(1)	100%	83%	
BNPP Lease Group (Spain branch)	Spain	Full	(1)	100%	83%		Full	(1)	100%	83%	

		31 December 2022					31 December 2021				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
BNPP Lease Group Belgium	Belgium	Full		100%	83%		Full		100%	83%	
BNPP Lease Group GmbH & Co KG	Austria										S4
BNPP Lease Group Leasing Solutions SPA	Italy	Full		100%	95.5%		Full		100%	95.5%	
BNPP Lease Group PLC	UK	Full		100%	83%		Full		100%	83%	
BNPP Lease Group Rentals Ltd	UK										S1
BNPP Lease Group SP ZOO	Poland	Full		100%	83%		Full		100%	83%	
BNPP Leasing Services	Poland	Full		100%	87.4%		Full		100%	87.4%	V3
BNPP Leasing Solution AS	Norway	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions	Luxembourg	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions AB	Sweden	Full		100%	83%		Full		100%	83%	E1
BNPP Leasing Solutions AS	Denmark	Full		100%	83%	E1					
BNPP Leasing Solutions IFN SA	Romania	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions Ltd	UK	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions NV	Netherlands	Full		100%	83%		Full		100%	83%	
BNPP Leasing Solutions Suisse SA	Switzerland	Full		100%	83%		Full		100%	83%	
BNPP Rental Solutions Ltd	UK	Full		100%	83%		Full		100%	83%	
BNPP Rental Solutions SPA	Italy	Full		100%	83%		Full		100%	83%	
Claas Financial Services	France	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Claas Financial Services (Germany branch)	Germany	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Claas Financial Services (Italy branch)	Italy	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Claas Financial Services (Poland branch)	Poland	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Claas Financial Services (Spain branch)	Spain	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Claas Financial Services Ltd	UK	Full		51%	42.3%		Full		51%	42.3%	
CNH Industrial Capital Europe	France	Full	(1)	50.1%	41.6%		Full	(1)	50.1%	41.6%	
CNH Industrial Capital Europe (Belgium branch)	Belgium	Full	(1)	50.1%	41.6%		Full	(1)	50.1%	41.6%	
CNH Industrial Capital Europe (Germany branch)	Germany	Full	(1)	50.1%	41.6%		Full	(1)	50.1%	41.6%	
CNH Industrial Capital Europe (Italy branch)	Italy	Full	(1)	50.1%	41.6%		Full	(1)	50.1%	41.6%	
CNH Industrial Capital Europe (Poland branch)	Poland	Full	(1)	50.1%	41.6%		Full	(1)	50.1%	41.6%	
CNH Industrial Capital Europe (Spain branch)	Spain	Full	(1)	50.1%	41.6%		Full	(1)	50.1%	41.6%	
CNH Industrial Capital Europe BV	Netherlands	Full		100%	41.6%		Full		100%	41.6%	
CNH Industrial Capital Europe GmbH	Austria	Full		100%	41.6%		Full		100%	41.6%	
CNH Industrial Capital Europe Ltd	UK	Full		100%	41.6%		Full		100%	41.6%	
ES Finance	Belgium	Full		100%	99.9%		Full		100%	99.9%	
FL Zeebrugge (s)	Belgium	Full		-	-		Full		-	-	
Folea Grundstucksverwaltungs und Vermietungs Gmbh & Co (s)	Germany					S1	Full		-	-	
Fortis Lease	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
Fortis Lease Belgium	Belgium	Full		100%	83%		Full		100%	83%	
Fortis Lease Deutschland GmbH	Germany	Full		100%	83%		Full		100%	83%	
Fortis Lease Iberia SA	Spain	Full		100%	86.6%		Full		100%	86.6%	
Fortis Lease Portugal	Portugal	Full		100%	83%		Full		100%	83%	
Fortis Lease UK Ltd	UK	Full		100%	83%		Full		100%	83%	
Fortis Vastgoedlease BV	Netherlands	Full		100%	83%		Full		100%	83%	
Heffiq Heftruck Verhuur BV	Netherlands	Full		50.1%	41.5%		Full		50.1%	41.5%	

		31 December 2022					31 December 2021				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
JCB Finance	France	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance (Germany branch)	Germany	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance (Italy branch)	Italy	Full	(1)	100%	41.6%		Full	(1)	100%	41.6%	
JCB Finance Holdings Ltd	UK	Full		50.1%	41.6%		Full		50.1%	41.6%	
Manitou Finance Ltd	UK	Full		51%	42.3%		Full		51%	42.3%	
MGF	France	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
MGF (Germany branch)	Germany	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
MGF (Italy branch)	Italy	Full	(1)	51%	42.3%		Full	(1)	51%	42.3%	
Natio Energie 2	France	Full		100%	100%		Full		100%	100%	
Natiocredibail	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
Pixel 2021 (t)	France	Full		-	-		Full		-	-	E2
RD Leasing IFN SA	Romania										S4
Same Deutz Fahr Finance	France	Full	(1)	100%	83%		Full	(1)	100%	83%	
SNC Natiocredimurs	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
New Digital Businesses											
Financière des Paiements Électroniques	France	Full		95%	95%		Full		95%	95%	
Financière des Paiements Électroniques (Belgium branch)	Belgium	Full		95%	95%		Full		95%	95%	E2
Financière des Paiements Électroniques (Germany branch)	Germany	Full		95%	95%	E2					
Financière des Paiements Électroniques (Portugal branch)	Portugal	Full		95%	95%		Full		95%	95%	E2
Financière des Paiements Électroniques (Spain branch)	Spain	Full		95%	95%		Full		95%	95%	
Floa	France	Full		100%	100%	E3					
Lyf SA	France	Equity	(3)	43.8%	43.8%		Equity	(3)	43.8%	43.8%	
Lyf SAS	France	Equity	(3)	49.9%	49.9%	V4	Equity	(3)	49.1%	49.1%	
Personal Investors											
Espresso Financial Services Private Ltd	India	Full		100%	100%		Full		100%	100%	
Geojit Technologies Private Ltd	India	Equity		35%	35%		Equity		35%	35%	
Human Value Developers Private Ltd	India	Full		100%	100%		Full		100%	100%	
Sharekhan BNPP Financial Services Ltd	India	Full		100%	100%		Full		100%	100%	
Sharekhan Ltd	India	Full		100%	100%		Full		100%	100%	
INVESTMENT & PROTECTION SERVICES											
Insurance											
AEW Immocommercial (s)	France	FV		-	-		FV		-	-	
AG Insurance	Belgium	Equity		25%	25%		Equity		25%	25%	
Agathe Retail France	France	FV		33.3%	33.3%		FV		33.3%	33.3%	
Ambrosia Avril 2025 (s)	France										S1
Ambrosia Mars 2026 (s)	France										S1
Astridplaza	Belgium	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
Batipart Participations SAS	Luxembourg	FV		29.7%	29.7%		FV		29.7%	29.7%	
Becquerel (s)	France	Full	(4)	-	-		Full	(4)	-	-	
BNPP Actions Croissance (s)	France	Full	(4)	-	-		Full	(4)	-	-	
BNPP Actions Entrepreneurs (s)	France					S3	Full	(4)	-	-	
BNPP Actions Euro (s)	France	Full	(4)	-	-		Full	(4)	-	-	
BNPP Actions Monde (s)	France	Full	(4)	-	-		Full	(4)	-	-	
BNPP Actions PME (s)	France					S3	Full	(4)	-	-	
BNPP Actions PME ETI (s)	France	Full	(4)	-	-		Full	(4)	-	-	E1

		31 December 2022				31 December 2021			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP Aqua (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Best Selection Actions Euro (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Cardif	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif BV	Netherlands	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Compania de Seguros y Reaseguros SA	Peru	Equity *	100%	100%		Equity *	100%	100%	
BNPP Cardif Emeklilik AS	Türkiye	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif General Insurance Co Ltd	Rep. of Korea				S2	Equity *	94.5%	94.5%	V4
BNPP Cardif Hayat Sigorta AS	Türkiye	Equity *	100%	100%		Equity *	100%	100%	
BNPP Cardif Levensverzekeringen NV	Netherlands								S4
BNPP Cardif Livforsakring AB	Sweden	Full (2)	100%	100%		Full (2)	100%	100%	D1
BNPP Cardif Livforsakring AB (Denmark branch)	Denmark	Full (2)	100%	100%		Full (2)	100%	100%	D1
BNPP Cardif Livforsakring AB (Norway branch)	Norway	Full (2)	100%	100%		Full (2)	100%	100%	D1
BNPP Cardif Pojistovna AS	Czech Rep.	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Schadeverzekeringen NV	Netherlands								S4
BNPP Cardif Seguros de Vida SA	Chile	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Seguros Generales SA	Chile	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Cardif Services SRO	Czech Rep.	Equity *	100%	100%		Equity *	100%	100%	
BNPP Cardif Servicios y Asistencia Ltda	Chile	Equity *	100%	100%		Equity *	100%	100%	
BNPP Cardif Sigorta AS	Türkiye	Equity *	100%	100%		Equity *	100%	100%	
BNPP Cardif TCB Life Insurance Co Ltd	Taiwan	Equity	49%	49%		Equity	49%	49%	
BNPP Cardif Vita Compagnia di Assicurazione E Riassicurazione SPA	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Convictions (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP CP Cardif Alternative (s)	France				S3	Full (2)	-	-	
BNPP CP Cardif Private Debt (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP CP Infrastructure Investments Fund (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Deep Value (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Développement Humain (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Diversipierre (s)	France	Full (2)	-	-		Full (2)	-	-	
BNPP Europe High Conviction Bond (s)	France								S1
BNPP France Crédit (s)	France	Full (2)	-	-		Full (2)	-	-	
BNPP Global Senior Corporate Loans (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Indice Amerique du Nord (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Indice Euro (s)	France								S3
BNPP Midcap France (s)	France								S3
BNPP Moderate Focus Italia (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Monétaire Assurance (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Multistratégies Protection 80 (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Next Tech (s)	France	Full (4)	-	-		Full (4)	-	-	E1
BNPP Protection Monde (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Sélection Dynamique Monde (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Sélection Flexible (s)	France				S3	Full (4)	-	-	
BNPP Smallcap Euroland (s)	France	Full (4)	-	-		Full (4)	-	-	
BNPP Social Business France (s)	France	Full (4)	-	-		Full (4)	-	-	
BOB Cardif Life Insurance Co Ltd	China	Equity	50%	50%		Equity	50%	50%	

		31 December 2022				31 December 2021			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
C Santé (s)	France	Full (2)	-	-		Full (2)	-	-	
Camgestion Obliflexible (s)	France	Full (2)	-	-		Full (2)	-	-	
Capital France Hotel	France	Full (2)	98.5%	98.5%		Full (2)	98.5%	98.5%	V4
Cardif Alternatives Part I (s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif Assurance Vie	France	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Austria branch)	Austria	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Belgium branch)	Belgium	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Bulgaria branch)	Bulgaria	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Germany branch)	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Italy branch)	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Netherlands branch)	Netherlands	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Portugal branch)	Portugal	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Romania branch)	Romania	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Spain branch)	Spain	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Switzerland branch)	Switzerland	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurance Vie (Taiwan branch)	Taiwan	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers	France	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Austria branch)	Austria	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Belgium branch)	Belgium	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Bulgaria branch)	Bulgaria	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Germany branch)	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Italy branch)	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Netherlands branch)	Netherlands	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Poland branch)	Poland	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Portugal branch)	Portugal	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Romania branch)	Romania	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Spain branch)	Spain	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Switzerland branch)	Switzerland	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Assurances Risques Divers (Taiwan branch)	Taiwan	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif Biztosito Magyarorszag ZRT	Hungary	Equity *	100%	100%		Equity *	100%	100%	
Cardif BNPP AM Emerging Bond (s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif BNPP AM Global Senior Corporate Loans (s)	France	Full (4)	-	-		Full (4)	-	-	
Cardif BNPP IP Convertibles World (s)	France				S3	Full (2)	-	-	
Cardif BNPP IP Signatures (s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif BNPP IP Smid Cap Euro (s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif BNPP IP Smid Cap Europe (s)	France				S3	Full (4)	-	-	E1
Cardif Colombia Seguros Generales SA	Colombia	Full (2)	100%	100%		Full (2)	100%	100%	
Cardif CPR Global Return (s)	France	Full (2)	-	-		Full (2)	-	-	
Cardif do Brasil Seguros e	Brazil	Full (2)	100%	100%		Full (2)	100%	100%	

		31 December 2022					31 December 2021				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
Garantias SA											
Cardif do Brasil Vida e Previdencia SA	Brazil	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Edrim Signatures (s)	France	Full	(2)	-	-		Full	(2)	-	-	
Cardif El Djazair	Algeria	Equity	*	100%	100%		Equity	*	100%	100%	
Cardif Forsakring AB	Sweden	Full	(2)	100%	100%		Full	(2)	100%	100%	D1
Cardif Forsakring AB (Denmark branch)	Denmark	Full	(2)	100%	100%		Full	(2)	100%	100%	D1
Cardif Forsakring AB (Norway branch)	Norway	Full	(2)	100%	100%		Full	(2)	100%	100%	D1
Cardif IARD	France	Full	(2)	66%	66%		Full	(2)	66%	66%	
Cardif Insurance Co LLC	Russia	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Life Insurance Co Ltd	Rep. of Korea	Full	(2)	85%	85%		Full	(2)	85%	85%	
Cardif Life Insurance Japan	Japan	Full	(2)	75%	75%		Full	(2)	75%	75%	
Cardif Ltda	Brazil	Equity	*	100%	100%		Equity	*	100%	100%	
Cardif Lux Vie	Luxembourg	Full	(2)	100%	88.6%		Full	(2)	100%	88.6%	
Cardif Mexico Seguros de Vida SA de CV	Mexico	Equity	*	100%	100%		Equity	*	100%	100%	
Cardif Mexico Seguros Generales SA de CV	Mexico	Equity	*	100%	100%		Equity	*	100%	100%	
Cardif Non Life Insurance Japan	Japan	Full	(2)	100%	75%		Full	(2)	100%	75%	
Cardif Nordic AB	Sweden	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Pinnacle Insurance Holdings PLC	UK	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Pinnacle Insurance Management Services PLC	UK					S2	Full	(2)	100%	100%	
Cardif Polska Towarzystwo Ubezpieczen Na Zycie SA	Poland	Equity	*	100%	100%		Equity	*	100%	100%	
Cardif Retraite	France	Full	(2)	100%	100%	E1					
Cardif Seguros SA	Argentina	Equity	*	100%	100%		Equity	*	100%	100%	D1
Cardif Services AEIE	Portugal	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cardif Servicios SAC	Peru	Equity	*	100%	100%		Equity	*	100%	100%	
Cardif Vita Convex Fund Eur (s)	France	Full	(2)	-	-		Full	(2)	-	-	
Cardimmo	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cargeas Assicurazioni SPA	Italy										S2
Carma Grand Horizon SARL	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Cedrus Carbon Initiative Trends (s)	France	Full	(2)	-	-		Full	(2)	-	-	
Centre Commercial Francilia	France	FV		21.7%	21.7%	E3					
CFH Algonquin Management Partners France Italia	Italy	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
CFH Bercy	France	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
CFH Bercy Hotel	France	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
CFH Bercy Intermédiaire	France	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
CFH Berlin Holdco SARL	Luxembourg	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	E2
CFH Boulogne	France	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
CFH Cap d’Ail	France	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
CFH Milan Holdco SRL	Italy	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
CFH Montmartre	France	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
CFH Montparnasse	France	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
Corosa	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Darnell DAC	Ireland	Full	(2)	100%	100%		Full	(2)	100%	100%	
Défense CB3 SAS	France	FV		25%	25%		FV		25%	25%	
Diversipierre DVP 1	France	Full	(2)	100%	88.1%	V3	Full	(2)	100%	88.7%	E1
Diversipierre Germany GmbH	Germany	Equity	*	100%	88.1%	V3	Equity	*	100%	88.7%	E1

		31 December 2022				31 December 2021			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
DVP European Channel	France	Equity *	100%	88.1%	V3	Equity *	100%	88.7%	E1
DVP Green Clover	France	Equity *	100%	88.1%	V3	Equity *	100%	88.7%	E1
DVP Haussmann	France	Equity *	100%	88.1%	V3	Equity *	100%	88.7%	E1
DVP Heron	France	Equity *	100%	88.1%	V3	Equity *	100%	88.7%	E1
Eclair (s)	France	Full (4)	-	-		Full (4)	-	-	
Elegia Septembre 2028 (s)	France								S1
EP L (s)	France	Full (2)	-	-		Full (2)	-	-	
EP1 Grands Moulins (s)	France	Equity *	-	-		Equity *	-	-	
FDI Poncelet	France	Full (2)	100%	100%		Full (2)	100%	100%	
Fleur SAS	France	FV	33.3%	33.3%		FV	33.3%	33.3%	
Foncière Partenaires (s)	France	FV	-	-		FV	-	-	
Fonds d'Investissements Immobiliers pour le Commerce et la Distribution	France	FV	25%	25%		FV	25%	25%	
FP Cardif Convex Fund USD (s)	France	Full (2)	-	-		Full (2)	-	-	
Fundamenta (s)	Italy	Full (2)	-	-		Full (2)	-	-	
G C Thematic Opportunities II (s)	Ireland	Full (2)	-	-		Full (2)	-	-	
GIE BNPP Cardif	France	Full (2)	100%	100%	V4	Full (2)	99.9%	99.9%	V2
GPinvest 10	France	FV	50%	50%		FV	50%	50%	E3
Harewood Helena 2 Ltd	UK	Full (2)	100%	100%		Full (2)	100%	100%	
Hemisphere Holding	France	Equity	20%	20%		Equity	20%	20%	
Hibernia France	France	Full (2)	100%	98.5%		Full (2)	100%	98.5%	V4
High Street Retail	France								S2
Horizon Development GmbH	Germany	FV	66.7%	62.9%		FV	66.7%	62.9%	V3
Icare	France	Full (2)	100%	100%		Full (2)	100%	100%	
Icare Assurance	France	Full (2)	100%	100%		Full (2)	100%	100%	
ID Cologne A1 GmbH	Germany	Equity *	79.2%	74.1%		Equity *	79.2%	74.1%	E3
ID Cologne A2 GmbH	Germany	Equity *	79.2%	74.1%		Equity *	79.2%	74.1%	E3
Karapass Courtage	France	Equity *	100%	100%		Equity *	100%	100%	
Korian et Partenaires Immobilier 1	France	FV	24.5%	24.5%		FV	24.5%	24.5%	
Korian et Partenaires Immobilier 2	France	FV	24.5%	24.5%		FV	24.5%	24.5%	
Luizaseg	Brazil	Equity	50%	50%		Equity	50%	50%	
Natio Assurance	France	Full (2)	100%	100%		Full (2)	100%	100%	
Natio Fonds Ampère 1 (s)	France	Full (4)	-	-		Full (4)	-	-	
Natio Fonds Athenes Investissement N 5 (s)	France	Full (2)	-	-		Full (2)	-	-	
Natio Fonds Colline International (s)	France	Full (2)	-	-		Full (2)	-	-	
Natio Fonds Collines Investissement N 1 (s)	France	Full (2)	-	-		Full (2)	-	-	
Natio Fonds Collines Investissement N 3 (s)	France	Full (2)	-	-		Full (2)	-	-	
NCVP Participacoes Societarias SA	Brazil	Full (2)	100%	100%		Full (2)	100%	100%	
New Alpha Cardif Incubator Fund (s)	France	Full (2)	-	-		Full (2)	-	-	
OC Health Real Estate GmbH	Germany	FV	35%	31%		FV	35%	31%	E3
Opéra Rendement (s)	France	Full (2)	-	-		Full (2)	-	-	
Paris Management Consultant Co Ltd	Taiwan	Equity *	100%	100%		Equity *	100%	100%	
Permal Cardif Co Investment Fund (s)	France	Full (2)	-	-		Full (2)	-	-	
Pinnacle Insurance PLC	UK				S2	Full (2)	100%	100%	
Pinnacle Pet Holding Ltd	UK	Equity	30%	30%	E3				
Poistovna Cardif Slovakia AS	Slovakia	Equity *	100%	100%		Equity *	100%	100%	
Preim Healthcare SAS (s)	France	FV	-	-		FV	-	-	
PWH	France	FV	47.5%	47.5%		FV	47.5%	47.5%	

		31 December 2022					31 December 2021				
Name	Country	Method		Voting (%)	Interest (%)	Ref.	Method		Voting (%)	Interest (%)	Ref.
Reumal Investissements	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Rubin SARL	Luxembourg	FV		50%	50%		FV		50%	50%	
Rueil Ariane	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SAS HVP	France	Full	(2)	100%	98.5%		Full	(2)	100%	98.5%	V4
Schroder European Operating Hotels Fund 1 (s)	Luxembourg	FV		-	-		FV		-	-	E1
SCI 68/70 rue de Lagny – Montreuil	France	Full	(2)	99.9%	99.9%	V3	Full	(2)	100%	100%	
SCI Alpha Park	France	FV		50%	50%		FV		50%	50%	
SCI Batipart Chadesrent	France	FV		20%	20%		FV		20%	20%	E2
SCI Biv Malakoff	France	FV		23.3%	23.3%		FV		23.3%	23.3%	E3
SCI BNPP Pierre I	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI BNPP Pierre II	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Bobigny Jean Rostand	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Bouleragny	France	FV		50%	50%		FV		50%	50%	
SCI Cardif Logement	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Citylight Boulogne	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Clichy Nuovo	France	FV		50%	50%		FV		50%	50%	
SCI Défense Étoile	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Défense Vendôme	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Étoile du Nord	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Fontenay Plaisance	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Imefa Velizy	France	FV		21.8%	21.8%		FV		21.8%	21.8%	
SCI Le Mans Gare	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Liberté	France										S2
SCI Nanterre Guilleraies	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Nantes Carnot	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Odyssée	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Pantin Les Moulins	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Paris Batignolles	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Paris Cours de Vincennes	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Paris Grande Armée	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Paris Turenne	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Portes de Claye	France	Equity		45%	45%		Equity		45%	45%	
SCI Rue Moussorgski	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Rueil Caudron	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Saint Denis Landy	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Saint Denis Mitterrand	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI Saint-Denis Jade	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
SCI SCOO	France	Equity		46.4%	46.4%		Equity		46.4%	46.4%	
SCI Vendôme Athènes	France	FV		50%	50%		FV		50%	50%	
SCI Villeurbanne Stalingrad	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Secar	France	FV		55.1%	55.1%		FV		55.1%	55.1%	
Seniorenzentren Deutschland Holding SARL	Luxembourg	FV		20%	17.7%		FV		20%	17.7%	
Seniorenzentren Reinbeck Oberursel München Objekt GmbH	Germany	FV		35%	31%		FV		35%	31%	
Seniorenzentrum Butzbach Objekt GmbH	Germany	FV		35%	31%		FV		35%	31%	
Seniorenzentrum Heilbronn Objekt GmbH	Germany	FV		35%	31%		FV		35%	31%	
Seniorenzentrum Kassel Objekt GmbH	Germany	FV		35%	31%		FV		35%	31%	

Name	Country	31 December 2022				31 December 2021			
		Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
Seniorenzentrum Wolfratshausen Objekt GmbH	Germany	FV	35%	31%		FV	35%	31%	
Services Epargne Entreprise	France	Equity	35.6%	35.6%		Equity	35.6%	35.6%	
SNC Batipart Mermoz	France	FV	25%	25%		FV	25%	25%	E2
SNC Batipart Poncelet	France	FV	25%	25%		FV	25%	25%	V1
Société Francaise d'Assurances sur la Vie	France	Equity	50%	50%		Equity	50%	50%	
Société Immobilière du Royal Building SA	Luxembourg	Full (2)	100%	88.6%		Full (2)	100%	88.6%	
Tikehau Cardif Loan Europe (s)	France	Full (2)	-	-		Full (2)	-	-	
Valeur Pierre Epargne	France	Full (2)	100%	100%		Full (2)	100%	100%	
Valtitres FCP (s)	France	Full (2)	-	-		Full (2)	-	-	
Velizy Holding	France	FV	33.3%	33.3%		FV	33.3%	33.3%	
Wealth Management									
BNPP Wealth Management DIFC Ltd	United Arab Emirates				S3	Full	100%	100%	
BNPP Wealth Management Monaco	Monaco	Full (1)	100%	100%		Full (1)	100%	100%	
Asset Management									
Alfred Berg Kapitalforvaltning AS	Norway	Full	100%	98.2%		Full	100%	98.2%	
Alfred Berg Kapitalforvaltning AS (Sweden branch)	Sweden	Full	100%	98.2%		Full	100%	98.2%	
Bancoestado Administradora General de Fondos SA	Chile	Equity	50%	49.1%		Equity	50%	49.1%	
Baroda BNPP AMC Private Ltd (Ex-BNPP Asset Management India Private Ltd)	India	Equity (3)	49.9%	49%	V3/D8	Full	100%	98.2%	
BNPP AM International Hedged Strategies (s)	France	Full (4)	-	-		Full (4)	-	-	E1
BNPP Asset Management Asia Ltd	Hong Kong	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management Be Holding	Belgium	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management Belgium	Belgium				S4	Full	100%	98.2%	
BNPP Asset Management Brasil Ltda	Brazil	Full	100%	99.5%		Full	100%	99.5%	
BNPP Asset Management France	France	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management France (Austria branch)	Austria	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management France (Belgium branch)	Belgium	Full	100%	98.2%	E2				
BNPP Asset Management France (Germany branch)	Germany	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management France (Italy branch)	Italy	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management France (Netherlands branch)	Netherlands	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management Holding	France	Full	99.9%	98.2%		Full	99.9%	98.2%	
BNPP Asset Management Japan Ltd	Japan	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management Luxembourg	Luxembourg	Full	99.7%	97.9%		Full	99.7%	97.9%	
BNPP Asset Management Nederland NV	Netherlands								S4
BNPP Asset Management NL Holding NV	Netherlands	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management PT	Indonesia	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management Services Grouping	France	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management UK Ltd	UK	Full	100%	98.2%		Full	100%	98.2%	
BNPP Asset Management USA Holdings Inc	USA	Full	100%	100%		Full	100%	100%	

		31 December 2022				31 December 2021			
Name	**Country**	**Method**	**Voting (%)**	**Interest (%)**	**Ref.**	**Method**	**Voting (%)**	**Interest (%)**	**Ref.**
BNPP Asset Management USA Inc	USA	Full	100%	100%		Full	100%	100%	
BNPP B Institutional II (s)	Belgium	Full (4)	-	-		Full (4)	-	-	
BNPP Capital Partners	France								S4
BNPP Dealing Services	France	Full	100%	98.2%		Full	100%	98.2%	
BNPP Diversiflex (s)	France	Full (4)	-	-	E1				
BNPP Easy (s)	Luxembourg	Full (4)	-	-	E1				
BNPP European SME Debt Fund 2 SCSp RAIF (s)	Luxembourg				S2	Full (4)	-	-	E1
BNPP Flexi I (s)	Luxembourg	Full (4)	-	-		Full (4)	-	-	
BNPP Funds (s)	Luxembourg	Full (4)	-	-		Full (4)	-	-	
BNPP L1 (s)	Luxembourg								S3
BNPP Multigestion (s)	France				S3	Full (4)	-	-	
BNPP Perspectives (s)	France								S3
Drypnir AS	Norway	Full	100%	0%		Full	100%	0%	
EAB Group PLC	Finland				S2	Equity	17.6%	17.3%	
Fundquest Advisor	France				S4	Full	100%	98.2%	
Fundquest Advisor (United Kingdom branch)	UK				S1	Full	100%	98.2%	
Gambit Financial Solutions	Belgium	Full	100%	98.2%		Full	100%	98.2%	V1
Groeivermogen NV	Netherlands								S3
Haitong Fortis Private Equity Fund Management Co Ltd	China	Equity	33%	32.4%		Equity	33%	32.4%	
Harewood Helena 1 Ltd	UK	Full	100%	100%		Full	100%	100%	
Harmony Prime (s)	France	Full (4)	-	-	E1				
HFT Investment Management Co Ltd	China	Equity	49%	48.1%		Equity	49%	48.1%	
Impax Asset Management Group PLC	UK	Equity	13.8%	13.5%		Equity	13.8%	13.5%	V3
Shinhan BNPP Asset Management Co Ltd	Rep. of Korea								S2
SME Alternative Financing DAC (s)	Ireland	Full	-	-		Full	-	-	
Theam Quant (s)	Luxembourg	Full (4)	-	-		Full (4)	-	-	
Theam Quant Europe Climate Carbon Offset Plan (s)	France	Full (4)	-	-	E1				
Real Estate									
Auguste Thouard Expertise	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Immobilier Promotion Immobilier d'Entreprise	France				S4	Full (2)	100%	100%	
BNPP Immobilier Résidences Services	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Immobilier Résidentiel	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Immobilier Résidentiel Service Clients	France				S4	Full (2)	100%	100%	
BNPP Real Estate	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate (United Arab Emirates branch)	United Arab Emirates	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Advisory & Property Management Luxembourg SA	Luxembourg	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Advisory & Property Management UK Ltd	UK	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Advisory and Property Management Ireland Ltd	Ireland	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Advisory Belgium SA	Belgium								S4
BNPP Real Estate Advisory Italy SPA	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Advisory Netherlands BV	Netherlands	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate APM CR SRO	Czech Rep.								S2

		31 December 2022				31 December 2021			
Name	Country	Method	Voting (%)	Interest (%)	Ref.	Method	Voting (%)	Interest (%)	Ref.
BNPP Real Estate Conseil Habitation & Hospitality	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Consult France	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Consult GmbH	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Facilities Management Ltd	UK	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Financial Partner	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate GmbH	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Holding Benelux SA	Belgium	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Holding GmbH	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Investment Management Belgium	Belgium	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Investment Management France	France	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Germany GmbH	Germany	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management Germany GmbH (Italy branch)	Italy	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management Germany GmbH (Spain branch)	Spain	Full	94.9%	94.9%		Full	94.9%	94.9%	
BNPP Real Estate Investment Management Germany GmbH Lisbon Representative Office	Portugal	Full	94.9%	94.9%	E1				
BNPP Real Estate Investment Management Italy SPA	Italy	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Ltd	UK	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Investment Management Luxembourg SA	Luxembourg	Full	100%	100%		Full	100%	100%	
BNPP Real Estate Investment Management Spain SA	Spain	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Investment Management UK Ltd	UK	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Italy SRL	Italy				S4	Full (2)	100%	100%	
BNPP Real Estate Magyarorszag Tanacsado Es Ingatlankezelo ZRT	Hungary								S2
BNPP Real Estate Poland SP ZOO	Poland	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Portugal Unipersonal LDA	Portugal	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Property Development & Services GmbH	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Property Development UK Ltd	UK	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Property Developpement Italy SPA	Italy				S4	Full (2)	100%	100%	
BNPP Real Estate Property Management Belgium	Belgium								S4
BNPP Real Estate Property Management France SAS	France	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Property Management GmbH	Germany	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Property Management Italy SRL	Italy	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Singapore Pte Ltd	Singapore	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Spain SA	Spain	Full (2)	100%	100%		Full (2)	100%	100%	
BNPP Real Estate Transaction France	France	Full (2)	96.8%	96.8%	V1	Full (2)	96.6%	96.6%	V2
BNPP Real Estate Valuation France	France	Full (2)	100%	100%		Full (2)	100%	100%	
Cariboo Development SL	Spain	Equity	65%	65%		Equity	65%	65%	

Name	Country	31 December 2022 Method		Voting (%)	Interest (%)	Ref.	31 December 2021 Method		Voting (%)	Interest (%)	Ref.
Construction-Sale Companies (c)	France	Full/Equity	(2)	-	-		Full/Equity	(2)	-	-	
Exeo Aura & Echo Offices Lda	Portugal	Equity		31%	31%	E2					
GIE BNPP Real Estate (Ex-GIE Siège Issy)	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Horti Milano SRL	Italy	Full	(2)	100%	100%		Full	(2)	100%	100%	
Lifizz	France										S4
Nanterre Arboretum	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
Parker Tower Ltd	UK	Full	(2)	100%	100%		Full	(2)	100%	100%	
Partner's & Services	France	Full	(2)	100%	100%		Full	(2)	100%	100%	
REPD Parker Ltd	UK	Full	(2)	100%	100%		Full	(2)	100%	100%	
Sviluppo Residenziale Italia SRL	Italy	Full	(2)	100%	100%		Full	(2)	100%	100%	
Wapiti Development SL	Spain	Equity		65%	65%		Equity		65%	65%	E1
Principal Investments											
BNPP Agility Capital	France	Full		100%	100%		Full		100%	100%	
BNPP Agility Fund Equity SLP (s)	France	Full	(4)	-	-		Full	(4)	-	-	
BNPP Agility Fund Private Debt SLP (s)	France	Full	(4)	-	-		Full	(4)	-	-	
OTHER BUSINESS UNITS											
Property Companies (Property Used In Operations) and Others											
Antin Participation 5	France	Full		100%	100%		Full		100%	100%	
BNPP Home Loan SFH	France	Full	(1)	100%	100%		Full	(1)	100%	100%	
BNPP Partners for Innovation	France	Full		100%	100%		Full		100%	100%	V1/D4
BNPP Partners for Innovation Belgium	Belgium	Full		100%	100%		Full		100%	100%	V1/D4
BNPP Partners for Innovation Italia SRL	Italy	Full		100%	100%		Full		100%	100%	V1/D4
BNPP Procurement Tech	France	Full		100%	100%		Full		100%	100%	
BNPP Public Sector SA	France	Full		100%	100%		Full		100%	100%	
Euro Secured Notes Issuer (s)	France					S3	Full		-	-	
FCT Lafayette 2021 (t)	France	Full		-	-		Full		-	-	E2
FCT Laffitte 2016 (t)	France										S1
FCT Laffitte 2021 (t)	France	Full		-	-		Full		-	-	E2
FCT Opéra 2014 (t)	France	Full		-	-		Full		-	-	
FCT Pyramides 2022 (t)	France	Full		-	-	E2					
GIE Groupement Auxiliaire de Moyens	France	Full		100%	100%		Full		100%	100%	
GIE Groupement d'Etudes et de Prestations	France	Full		100%	100%		Full		100%	100%	
Transvalor	France	Equity		20.2%	20.2%		Equity		20.2%	20.2%	E1

(a) At 31 December 2022, 14 Private Equity investment entities versus 11 Private Equity investment entities at 31 December 2021.

(b) At 31 December 2022, the securitisation funds UCI and RMBS Prado include 14 funds (FCC UCI 11, 12, 14 to 17, RMBS Prado V to X, Green Belem I and RMBS Belem No 2) versus 15 funds (FCC UCI 11, 12, 14 to 17, Fondo de Titulizacion Structured Covered Bonds, RMBS Prado III to IX and Green Belem I) at 31 December 2021.

(c) At 31 December 2022, 125 Construction-sale companies (91 Full and 34 Equity) versus 115 (89 Full and 26 Equity) at 31 December 2021.

As requested by the ANC 2016 regulation, the list of entities that are controlled by the Group, jointly controlled or under significant influence, but excluded from the scope of consolidation since their contribution to the consolidated financial statements would be immaterial to the Group, and the list of equity investments, are available on the "Regulated Information" page of the https://invest.bnpparibas.com website.

7.m FEES PAID TO THE STATUTORY AUDITORS

Year to 31 Dec. 2022 *Excluding tax, in thousands of euros*	**Deloitte**		**PricewaterhouseCoopers**		**Mazars**		**TOTAL**	
	Total	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**
Statutory audits and contractual audits, including	17,529	74%	19,920	72%	11,565	88%	49,014	76%
Issuer	4,501		5,870		2,919		13,290	
Consolidated subsidiaries	13,028		14,050		8,646		35,724	
Services other than those required for their statutory audit engagement, including	6,142	26%	7,669	28%	1,606	12%	15,417	24%
Issuer	2,062		2,021		897		4,980	
Consolidated subsidiaries	4,080		5,648		709		10,437	
TOTAL	**23,671**	**100%**	**27,589**	**100%**	**13,171**	**100%**	**64,431**	**100%**
of which fees paid to Statutory Auditors in France for the statutory audit and contractual audit	*6,509*		*6,216*		*5,359*		*18,084*	
of which fees paid to Statutory Auditors in France for services other than those required for their statutory audit engagements	*1,739*		*2,353*		*1,046*		*5,138*	

Changes in the scope of consolidation
New entries (E) in the scope of consolidation
E1 Passing qualifying thresholds
E2 Incorporation
E3 Purchase, gain of control or significant influence
Removals (S) from the scope of consolidation
S1 Cessation of activity (dissolution, liquidation, etc.)
S2 Disposal, loss of control or loss of significant influence
S3 Passing qualifying thresholds
S4 Merger, Universal transfer of assets and liabilities
Variance (V) in voting or ownership interest
V1 Additional purchase
V2 Partial disposal
V3 Dilution
V4 Increase in %
Miscellaneous
D1 Consolidation method change not related to fluctuation in voting or ownership interest
D2 Entities of a business held for sale
D3 The Verner Investissements group was consolidated under the equity method in BNP Paribas Group until
13 July 2021. Following the additional purchase of interest by BNP Paribas Group, the Verner Investments group was fully consolidated (see note 7.c)
D4 The BNPP Partners for Innovation group was consolidated under the equity method in BNP Paribas Group until 31 December 2021. Following the additional purchase of interest by BNP Paribas Group, the BNPP Partners for Innovation group was fully consolidated.
D5 Compagnie pour le Financement des Loisirs was consolidated under the equity method in BNP Paribas Group until 31 December 2021. Following the additional purchase of interest by BNP Paribas Group, Compagnie pour le Financement des Loisirs was fully consolidated.
D6 Worldline Merchant Services Italia SPA was fully consolidated in BNP Paribas Group until 31 December 2021. Following the partial disposal by the Group, Worldline Merchant Services Italia SPA was consolidated under the equity method.
D7 bpost bank was consolidated under the equity method in BNP Paribas Group until 31 December 2021. Following the additional purchase of interest by BNP Paribas Group, bpost bank was fully consolidated.
D8 Baroda BNPP AMC Private Ltd was fully consolidated in BNP Paribas Group until 31 December 2021. Following the partial disposal by the Group, Baroda BNPP AMC Private Ltd was consolidated under the equitymethod.
Equity Controlled but non material entities consolidated under the equity method as associates
FV Joint control or investment in associates measured at Fair Value through P&L
(s) Structured entities
(t) Securitisation funds
Prudential scope of consolidation
(1) French subsidiaries for which supervision of prudential requirements is complied with through the supervision on a consolidated basis of BNP Paribas SA, in accordance with article 7.1 of Regulation n°575/2013 of the European Parliament and of the Council.
(2) Entities consolidated under the equity method in the prudential scope
(3) Jointly controlled entities under proportional consolidation in the prudential scope
(4) Collective investment undertaking excluded from the prudential scope.

Year to 31 Dec. 2021 ***Excluding tax, in thousands of euros***	**Deloitte**		**PricewaterhouseCoopers**		**Mazars**		**TOTAL**	
	Total	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**
Statutory audits and contractual audits, including	16,037	76%	17,925	70%	12,979	88%	46,941	76%
Issuer	3,774		4,780		3,179		11,733	
Consolidated subsidiaries	12,263		13,145		9,800		35,208	
Services other than those required for their statutory audit engagement, including	5,081	24%	7,727	30%	1,694	12%	14,502	24%
Issuer	1,801		2,310		825		4,936	
Consolidated subsidiaries	3,280		5,417		869		9,566	
TOTAL	**21,118**	**100%**	**25,652**	**100%**	**14,673**	**100%**	**61,443**	**100%**
of which fees paid to Statutory Auditors in France for the statutory audit and contractual audit	*5,710*		*5,225*		*5,962*		*16,897*	
of which fees paid to Statutory Auditors in France for services other than those required for their statutory audit engagements	*1,634*		*2,427*		*983*		*5,044*	

The audit fees paid to auditors which are not members of the network of one of the auditors certifying the consolidated financial statements and the non-consolidated financial statements of BNP Paribas SA, mentioned in the table above, amount to EUR 786 thousand for the year 2022 (EUR 373 thousand in 2021).

Services other than those required for the statutory audit engagement are mainly composed this year of reviews of the entity's compliance with regulatory requirements, and reviews of internal control quality by comparison with international standards (such as ISAE 3402) as part of services provided to customers, particularly in the Securities and Asset Management businesses, and expertise on the Bank's transformation projects.

4.7 Statutory Auditors' report on the consolidated financial statements

For the year ended 31 December 2022

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of BNP Paribas SA for the year ended 31 December 2022.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group at 31 December 2022 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Financial Statements Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules provided for in the French Commercial Code (*Code de commerce*) and the French Code of Ethics (*Code de déontologie*) for Statutory Auditors for the period from 1 January 2022 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by article 5(1) of Regulation (EU) No. 537/2014.

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant in our audit of the consolidated financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the consolidated financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the consolidated financial statements.

Assessment of credit risk and measurement of impairment losses (stages 1, 2 and 3) on customer loan portfolios

(See Notes 1.e.5, 1.e.6, 1.o, 2.h, 4.e, 4.f, 4.p and 7.d to the consolidated financial statements)

Description of risk	How our audit addressed this risk

BNP Paribas recognises impairment losses to hedge the credit risks inherent to its banking intermediation activities.
In a context still marked by considerable uncertainty relating to the macro-economic environment, the measurement of expected credit losses for customer loan portfolios required the BNP Paribas Group to exercise greater judgement and to take into account assumptions, in particular in order to:
▪ assess the significant deterioration in credit risk to classify outstandings in stage 1, stage 2, or stage 3 according to geographical region and industry. As specified in Note 2.h to the consolidated financial statements, the bank has updated its criteria for assessing the material increase in credit risk in line with the recommendations issued by the European Banking Authority and the European Central Bank.
▪ prepare macro-economic projections which are integrated into both the criteria for recognising deterioration and in the measurement of expected losses;
▪ estimate the amount of expected losses according to the different stages and taking into account the current macro-economic environment and the absence of any comparable historical situation. In particular, as specified in Note 2.h, certain additional adjustments were made in 2022 to take into account the impacts of inflation and rate hikes where these effects are not directly estimated by the models.
At 31 December 2022, total outstanding customer loans exposed to credit risk amounted to EUR 932 billion, while total impairment losses stood at EUR 19 billion (of which EUR 56 billion and EUR 0.3 billion regarding BancWest).
We deemed the assessment of credit risk and the measurement of impairment losses to be a key audit matter insofar as management is required to exercise judgement and make estimates as regards credit granted to companies, particularly in the context of persistent uncertainty related to the war in Ukraine, pressures on raw materials and energy prices, the return of inflation and a rapid increase in interest rates.
	We assessed the relevance of BNP Paribas' internal control system, particularly its adaptation to the uncertain environment, and tested the manual and computerised controls for assessing credit risk and measuring expected losses.
	During our work, we focused on:
	▪ classification of outstandings by stage: we assessed whether the change of risks was taken into account in estimating the indicators applicable to the various business lines to measure the significant deterioration in credit risk, particularly following the implementation of the new criteria for 2022.
	▪ measurement of expected losses (stages 1, 2 and 3):
	  ▪ assisted by our credit risk experts and relying on the internal system for independent validation of BNP Paribas' models, we assessed the methodologies as well as the assumptions underlying the macro economic projections used by BNP Paribas across the various business lines, the proper integration of said projections into the information system and the effectiveness of the data quality controls; we paid particular attention to additional impairments recorded to take into account the current context of uncertainty.
	  ▪ with regard to impairment losses on outstanding loans to companies classified in stage 3, we verified that a periodic review of the counterparties under surveillance had been carried out by BNP Paribas and, based on a sample of counterparties, assessed the assumptions and data used by management to estimate impairment.
	In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to credit risk and particularly the disclosures required by IFRS 9.

Valuation of financial instruments

(See Notes 1.e.7, 1.e.10, 1.o, 2.a, 2.c, 4.a and 4.d to the consolidated financial statements)

Description of risk	How our audit addressed this risk
As part of its trading activities, BNP Paribas holds financial instruments (assets and liabilities) which are recognised in the balance sheet at market value. Market value is determined according to different approaches, depending on the type of instrument and its complexity: (i) using directly observable quoted prices (instruments classified in level 1 of the fair value hierarchy); (ii) using valuation models whose main inputs are observable (instruments classified in level 2); and (iii) using valuation models whose main inputs are unobservable (instruments classified in level 3). The valuations obtained may be subject to additional value adjustments to take into account certain specific trading, liquidity or counterparty risks. The techniques adopted by management to measure these instruments may therefore involve significant judgement as regards the models and data used. At 31 December 2022, financial instruments represented EUR 672 billion (of which EUR 7 billion for level 3 instruments) under assets and EUR 632 billion (of which EUR 10 billion for level 3 instruments) under liabilities. In light of the materiality of the outstandings and the judgement used to determine market value, we deemed the measurement of financial instruments to be a key audit matter, in particular the measurement of level 3 instruments given the use of unobservable inputs.	Assisted by our valuation experts, we verified that the key controls used by BNP Paribas with respect to the valuation of financial instruments function properly, in particular those relating to: ▪ the approval and regular review by management of the risks of the valuation models; ▪ the independent verification of the valuation inputs; ▪ the determination of value adjustments. Based on a sample, our valuation experts: ▪ analysed the relevance of the assumptions and inputs used; ▪ analysed the results of the independent review of the inputs by BNP Paribas; ▪ performed independent counter valuations using our own models. We also analysed, on a sample basis, any differences between the valuations obtained and collateral calls with counterparties. In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to the valuation of financial instruments.

Goodwill impairment

(See Notes 1.b.4, 1.o and 4.o to the consolidated financial statements)

Description of risk	How our audit addressed this risk
When recognising acquisitions, BNP Paribas records goodwill under assets, corresponding to the excess of the acquisition price of the shares of acquired companies over the value of the Group's interest. At 31 December 2022, goodwill amounted to EUR 5.3 billion. Goodwill is tested for impairment at least once a year or more frequently if there is an indication of impairment. Comparing the carrying amount of the cash-generating units to which goodwill is allocated with their recoverable amount is a key step in the process of determining if an impairment charge should be recorded. We deemed goodwill impairment to be a key audit matter because management is required to exercise judgement in order to determine assumptions of future earnings of acquirees and to measure the recoverable amount of the cash-generating units.	Our audit approach consisted in assessing the procedures implemented within BNP Paribas to test goodwill for impairment as well as the controls designed to identify indications of goodwill impairment. Assisted by our valuation experts, our work on the goodwill balances at 31 December 2022 consisted primarily in: ▪ analysing the methods adopted by BNP Paribas; ▪ critically assessing the provisional business plans approved by Executive Management to ensure the reasonableness of the future cash flow estimates set out therein (in particular when projections do not match past performance); ▪ critically analysing the main assumptions and inputs used (growth rate, cost of capital and discount rate) with respect to available external information; ▪ assessing the analyses of the sensitivity of estimates to key inputs (in particular when the recoverable amount approximates the carrying amount). Lastly, we verified the appropriateness of the disclosures in the notes to the consolidated financial statements with respect to the results of impairment and sensitivity tests.

General IT controls

Description of risk	How our audit addressed this risk
The reliability and security of IT systems plays a key role in the preparation of BNP Paribas SA's consolidated financial statements. We thus deemed the assessment of the general IT controls of the infrastructures and applications that contribute to the preparation of accounting and financial information to be a key audit matter. In particular, a system for controlling access rights to IT systems and authorisation levels based on employee profiles represents a key control for limiting the risk of inappropriate changes to application settings or underlying data.	For the main systems used to prepare accounting and financial information, assisted by our IT specialists, our work consisted primarily in: ▪ obtaining an understanding of the systems, processes and controls which underpin accounting and financial data; ▪ assessing the general IT controls (application and data access management, application changes/developments management and IT operations management) on key systems (in particular accounting, consolidation and automatic reconciliation applications); ▪ examining the control for the authorisation of manual accounting entries; ▪ performing additional audit procedures, where appropriate; ▪ taking into account the cybersecurity risk related to the crisis in Ukraine and the widespread use of remote working.

Technical reserves of insurance companies

(See Notes 1.f.3, 1.o and 4.j to the consolidated financial statements)

Description of risk	How our audit addressed this risk
At the year-end, a liability adequacy test is performed by BNP Paribas for its insurance activities. The purpose of this test is to ensure that liabilities in respect of insurance contracts and investment contracts with discretionary profit-sharing are adequate in light of current estimates of the future cash flows to be generated by those contracts. If the test indicates that the carrying amount of insurance liabilities is inadequate in relation to the estimated future cash flows, the total amount of the potential losses is recognised in profit or loss. We deemed the implementation of the liability adequacy test for the Savings business to be a key audit matter because it involves using actuarial models as well as modelling options and guarantees which are specific to BNP Paribas and requires management to exercise judgement to determine certain key assumptions (e.g., discount rate, return on assets, surrender rate and fees). These estimates are particularly sensitive in the current economic climate, which is marked by highly volatile markets. At 31 December 2022, total technical insurance reserves and other liabilities amounted to EUR 227 billion. The test performed at 31 December 2022 confirmed that the carrying amount of the reserves was sufficient.	Based on a sample, we assessed the amount of net future cash flows used in the calculation, in particular by: ▪ assessing the validity of the data on asset portfolios and contracts used as a starting point for the modelling exercise; ▪ identifying the main changes made to the actuarial models, assessing the relevance of said changes and obtaining an understanding of their impact on the result of the test; ▪ analysing differences in the models' results between 2021 and 2022 based on analyses prepared by BNP Paribas. We verified that the most material differences were justified by changes in the portfolio, the assumptions or the models; ▪ examining the results of the sensitivity analyses performed by BNP Paribas, notably those concerning rate assumptions and their consistency with market rates. In addition, we examined the disclosures in the notes to the consolidated financial statements with respect to insurance liabilities.

Specific verifications

As required by legal and regulatory provisions and in accordance with professional standards applicable in France, we have also verified the information pertaining to the Group presented in the Board of Directors' management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the Group management report includes the consolidated non-financial information statement required under article L.225-102-1 of the French Commercial Code. However, in accordance with article L.823-10 of the French Commercial Code, we have not verified the fair presentation and consistency with the consolidated financial statements of the information given in that statement, which will be the subject of a report by an independent third party.

Other verifications and information pursuant to legal and regulatory requirements

Presentation of the consolidated financial statements included in the annual financial report

In accordance with professional standards applicable to the Statutory Auditors' procedures for annual and consolidated financial statements presented according to the European single electronic reporting format, we have verified that the presentation of the consolidated financial statements included in the annual financial report referred to in paragraph I of article L.451-1-2 of the French Monetary and Financial Code (*Code monétaire et financier*) and prepared under the Chief Executive Officer's responsibility, complies with this format, as defined by European Delegated Regulation No. 2019/815 of 17 December 2018. As it relates to the consolidated financial statements, our work included verifying that the markups in the financial statements comply with the format defined by the aforementioned Regulation.

On the basis of our work, we conclude that the presentation of the consolidated financial statements to be included in the annual financial report complies, in all material respects, with the single European electronic reporting format.

Due to the technical limitations inherent to block tagging the consolidated financial statements in the European single electronic reporting format, the content of some of the tags in the notes may not be rendered identically to the accompanying consolidated financial statements.

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of BNP Paribas SA by the Annual General Meetings held on 23 May 2006 for Deloitte & Associés, 26 May 1994 for PricewaterhouseCoopers Audit and 23 May 2000 for Mazars.

At 31 December 2022, Deloitte & Associés, PricewaterhouseCoopers Audit and Mazars were in the seventeenth, the twenty-ninth and the twenty-third consecutive year of their engagement, respectively.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for preparing consolidated financial statements giving a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and for implementing the internal control procedures it deems necessary for the preparation of consolidated financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Financial Statements Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems relating to accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Responsibilities of the Statutory Auditors relating to the audit of the consolidated financial statements

Objective and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these consolidated financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit.

They also:

- identify and assess the risks of material misstatement in the consolidated financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the consolidated financial statements;
- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the consolidated financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The Statutory Auditors are responsible for the management, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed thereon.

Report to the Financial Statements Committee

We submit a report to the Financial Statements Committee which includes, in particular, a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Financial Statements Committee includes the risks of material misstatement that, in our professional judgement, were the most significant for the audit of the consolidated financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Financial Statements Committee with the declaration provided for in article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Financial Statements Committee.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 13 March 2023

The Statutory Auditors

Deloitte & Associés	**PricewaterhouseCoopers Audit**	**Mazars**
Laurence Dubois	Patrice Morot	Virginie Chauvin

5 RISKS AND CAPITAL ADEQUACY – PILLAR 3

The purpose of Pillar 3 – market discipline is to complement the minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2) with a set of disclosures completing the usual financial disclosures.

This chapter presents the information relative to the BNP Paribas Group's risks and in this respect meets:

- the requirements of part 8 of Regulation (EU) No. 2019/876 of 20 May 2019 on prudential requirements for credit institutions and investment firms[1]. This regulation is set out in the various technical standards published by the European Commission and European Banking Authority aimed at improving the comparability of information published by the institutions. The format and references of the Pillar 3 tables are in line with the entry into application on 28 June 2021 of Commission Implementing Regulation (EU) No. 2021/637;
- the accounting standards requirements relating to the nature and the extent of the risks. Some information required by accounting standards IFRS 7, IFRS 4 and IAS 1 is included in this chapter and covered by the opinion of the Statutory Auditors on the consolidated financial statements. This information is identified by the mention "[Audited]" and should be read as being part of the notes to the consolidated financial statements;
- the transparency and disclosure requirements for prudential information on the management of ESG risks and, in particular, the physical and transition risks related to climate change, in accordance with article 49 bis of Regulation (EU) 2019/876 (CRR 2) and in accordance with the content provided by the European Banking Authority in the technical implementation standard (ITS) adopted on 28 November 2022.

The Basel current measures (known as Basel 3), approved in November 2010, strengthen the ability of banks to withstand economic and financial shocks of all kinds by introducing a series of regulatory provisions. The content of this reform was transposed into European law in Directive 2013/36/EU (CRD 4) and Regulation (EU) No. 575/2013 of 26 June 2013 (CRR), supplemented in June 2019 by Directive (EU) No. 2019/878 (CRD 5) and Regulation (EU) No. 2019/876 (CRR 2).

The regulatory framework of Basel 3 had the following main impacts:

- **strengthened solvency:**

  The Basel 3 rules lead to harmonise the definition of capital and strengthen the ability of financial institutions to absorb losses.

  A detailed description of the composition of regulatory capital is given under *Regulatory capital* in section 5.2.

  Rules on calculating risk-weighted assets were also revised to strengthen related capital requirements. These calculation rules are detailed by risk type in the corresponding sections.

  Strengthened solvency is implemented through the Single Supervisory Mechanism (SSM) overseen by the ECB and the application of the European Banking Authority (EBA) Supervisory Review and Evaluation Process (SREP) guidelines.

  The BNP Paribas Group, identified as a "financial conglomerate", is subject to additional supervision. As a financial conglomerate, the Group's own funds cover the capital requirements for banking activities as well as insurance activities (see *Capital adequacy and capital planning* in section 5.2);
- **introduction of a leverage ratio:**

  The main purpose of the leverage ratio is to act as a supplementary measure to the risk-based capital requirements (backstop principle). It has been subject to a minimum requirement at 3% since 28 June 2021 and 3.75% since 1 January 2023.

  The Group's leverage ratio as at 31 December 2022 is presented in section 5.2 *Capital adequacy and capital planning*;
- **liquidity management:**

  The implementation of liquidity requirements with the introduction of a short-term liquidity ratio (Liquidity Coverage Ratio – LCR) and a long-term liquidity ratio (Net Stable Funding Ratio – NSFR) is presented in section 5.8 *Liquidity risk*.

  The minimum liquidity coverage ratio has been set at 100% of total net cash outflows during the 30-day stress period.

  The NSFR, the one-year minimum liquidity coverage ratio is applicable since 28 June 2021;
- **introduction of the new bank resolution scheme:**

  The new bank resolution scheme introduced on 1 January 2016 has been accompanied, since 27 June 2019, by a TLAC (Total Loss Absorbing Capacity) minimum ratio applicable to global systemically important banks (G-SIBs).

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[1] *The disclosures required under article 450 concerning the Group's compensation policy are available in the Compensation of regulated employees section of the Investor Relations website: https://invest.bnpparibas.com/en/compensation-regulated-employees.*

This requirement is supplemented in Europe by the introduction of an MREL (Minimum Requirement for own funds and Eligible Liabilities) ratio applicable from 1 January 2024, with a intermediate requirement applicable from 1 January 2022 (see *Capital adequacy and capital planning* in section 5.2).

Furthermore, on 7 December 2017, the Group of Governors and Heads of Supervision (GHOS) approved the reforms finalising the Basel 3 regulatory framework. They consist of a revision of the framework for credit risk, credit valuation adjustment (CVA – Credit Value Adjustment) risk, and operational risk, as well as the introduction of a floor for the calculation of risk-weighted assets when an internal method is used. These proposals were supplemented by the fundamental review of the trading book (FRTB) in January 2019 and the CVA risk in July 2020. Transposition of Basel 3 finalisation into European law was initiated by the European Commission with the publication on 27 October 2021 of draft CRR 3 and CRD 6 amendments providing for gradual entry into force from 1 January 2025.

In chapter 5, the figures shown may not appear to add up in certain columns and rows due to rounding.

Certification and governance

I, the undersigned, Lars Machenil, Chief Financial Officer (CFO) of the BNP Paribas Group, hereby confirm, after taking all reasonable steps to this effect, that the information contained in chapter 5 *Risks and capital adequacy – Pillar 3* is, to the best of my knowledge, compliant with the requirements of Part 8 of Regulation (EU) No. 2019/876 (CRR 2).

Paris, 13 March 2023

The BNP Paribas Group operates all of its activities within the framework of a robust internal control system.

Control plans and procedures are in place within the Group to ensure the proper compliance of the information contained in the management report.

A committee, chaired by the Deputy Chief Financial Officer, has examined chapter 5 and verified that the controls have been carried out and that the regulatory requirements in terms of publication have been complied with, including the provisions of article 432 of Regulation (EU) No. 2019/876 (CRR 2) relating to non-material, sensitive and confidential information.

The financial information and elements contained in chapter 5 reflect a prudential vision and, in particular, include activity relating to BancWest. Unless otherwise stated, information and financial elements include in particular the activity relating to BancWest to reflect an operational vision. They are therefore presented excluding the effects of the application of IFRS 5 on groups of assets and liabilities held for sale. Table EU LI1-A/EU CC2 of section 5.2 *Capital management and capital adequacy* includes a reconciliation between the regulatory vision presented excluding the application of IFRS 5 and the consolidated financial statements applying IFRS 5. In addition, the risk-weighted assets of the BancWest cash-generating unit are presented in Appendix 4 of this chapter.

5.1 Annual risk survey

KEY FIGURES

REGULATORY RATIOS

The Group has a solid financial structure. The CET1 ratio stands at 12.3%[1] as at 31 December 2022, with an decrease of 60 basis point compared to 31 December 2021. This is mainly explained by:

- the placing into reserves of 2022 net income after taking into account a 60% dividend pay-out ratio net of risk-weighted assets intrinsic growth (+30 bps);
- the economy support and growth acceleration (-20 bps);
- the market prices impact on changes in assets and liabilities recognised directly in equity (-40 bps);
- the impact related to updates of models and regulations[2] (-30 bps).

The Group's CET1 ratio is significantly higher than requirements at 31 December 2022 at 9.45 % and as well requirements notified by the European Central Bank at 9.56% applicable from 1 January 2023.

The leverage ratio stands at 4.36% at 31 December 2022, compared to 4.10% at 31 December 2021, an increase of +25 bps. It is well above the 3% leverage requirement in force at 31 December 2022. As of 1 January 2023, the leverage ratio requirement includes an additional leverage requirement equal to 50% of the G-SIB buffer in accordance with the provisions set out in the CRR and CRR 2 is 3.75% for the BNP Paribas Group.

As at 31 December 2022, the Group's TLAC ratio stands at 26.74% of risk-weighted assets, without using the preferred senior debt eligible within the limit of 3.5% of the risk-weighted assets. The Group is thus above the applicable minimum level of requirement as at 31 December 2022 of 22.17%. This minimum level of requirement takes into account a 2.50% conservation buffer, a 1.50% G-SIBs buffer, a 0.09% countercyclical buffer and a 0.08% systemic risk buffer.

As at 31 December 2022, the TLAC ratio stands at 8.39% of the leverage ratio total exposure measure. This ratio should be compared to a minimum requirement of 6.75% at 1 January 2023.

The evolution of these ratios illustrates the Group's ability to continuously adapt and the very strong balance sheet.

Key regulatory ratios

The capital ratio data below take into account the transitional provisions relating to the introduction of IFRS 9 (article 473a of Regulation (EU) No. 2017/2395 and Regulation (EU) No. 2020/873). The impact of these transitional measures on regulatory capital and regulatory ratios is presented under *Regulatory capital* in section 5.2 *Capital management and capital adequacy* (see Table 16: *IFRS 9-FL*).

Since 1 January 2023, the Group's insurance entities apply IFRS 17 "Insurance Contracts" and IFRS 9, deferred for these entities until the entry into force of IFRS 17. The impact on Chapter 5 information is limited due to the consolidation of these entities under the equity method in the prudential scope.

On 1 February 2023, the Group announced the closing of the sale of its retail and commercial banking activities in the United States operated by the BancWest cash-generating unit to BMO Financial Group for total consideration of 16.3 billion US dollars. The transaction generated an exceptional (after-tax) capital gain of 2.9 billion euros, as well as a positive impact on the Group's Common Equity Tier 1 (CET1) ratio of 170 basis points, or 11.6 billion euros in Common Equity Tier 1 capital release.

On 31 March 2023, the Group announced the launch of the first tranche of the share buyback programme planned for 2023 for a maximum amount of EUR 2.5 billion and for which the approval was received from the European Central Bank. The Group plans to launch a second tranche in the second half of 2023, bringing the total maximum amount to EUR 5 billion, including EUR 4 billion, with the intent of compensating for the effect of the dilution of the net earnings per share related to the sale of 100% of its retail and commercial banking activities in the United States, operated by BancWest.

[1] *CRD 5; including IFRS 9 transitional provisions.*

[2] *In particular IRB Repair and application of the EBA recommendation regarding the foreign exchange risk on the structural position and including effects induced by the hyperinflation situation in Türkiye.*

TABLE 1: KEY INDICATORS (EU KM1)

In millions of euros		31 March 2023	31 December 2022	30 September 2022	30 June 2022	31 March 2022
Available own funds						
1	Common Equity Tier 1 (CET1) capital	94,098	91,828	92,752	91,992	92,057
2	Tier 1 capital	107,380	103,445	103,405	99,676	100,478
3	Total capital	124,179	120,562	121,824	118,682	119,270
Risk-weighted assets						
4	Total risk-weighted assets	694,407	744,851	766,166	755,989	745,284
Capital ratios (as a percentage of risk-weighted assets)						
5	Common Equity Tier 1 ratio	13.55%	12.33%	12.11%	12.17%	12.35%
6	Tier 1 ratio	15.46%	13.89%	13.50%	13.18%	13.48%
7	Total capital ratio	17.88%	16.19%	15.90%	15.70%	16.00%
Additional own funds requirements in relation to SREP (Pillar 2 requirement as a percentage of risk-weighted assets)						
EU 7a	Total Pillar 2 requirements	1.57%	1.39%	1.39%	1.39%	1.39%
EU 7b	Of which Additional CET1 SREP requirements	0.88%	0.78%	0.78%	0.78%	0.78%
EU 7c	Of which Additional AT1 SREP requirements	1.18%	1.04%	1.04%	1.04%	1.04%
EU 7d	Total SREP own funds requirements	9.60%	9.45%	9.40%	9.39%	9.39%
Combined buffer requirement (as a percentage of risk-weighted assets)						
8	Capital conservation buffer	2.50%	2.50%	2.50%	2.50%	2.50%
EU 8a	Conservation buffer due to macro-prudential or systemic risk identified at the level of a Member State (%)	-	0.00%	0.00%	0.00%	0.00%
9	Countercyclical capital buffer	0.14%	0.09%	0.04%	0.03%	0.03%
EU 9a	Systemic risk buffer(1)	0.07%	0.08%	0.08%	0.08%	0.00%
10	Global Systemically Important Institution buffer (G-SIB)	1.50%	1.50%	1.50%	1.50%	1.50%
EU 10a	Other Systemically Important Institution buffer (D-SIB)	1.50%	1.50%	1.50%	1.50%	1.50%
11	Combined buffer requirement (2)	4.21%	4.17%	4.12%	4.11%	4.03%
EU 11a	Total overall capital requirements (3)	13.78%	13.56%	13.51%	13.50%	13.42%
12	CET1 available after meeting the total SREP own funds requirements	8.17%	6.80%	6.45%	6.14%	6.44%
Leverage ratio						
13	Leverage ratio total exposure measure (4)	2,464,153	2,373,844	2,638,456	2,657,582	2,668,847
14	Leverage ratio	4.36%	4.36%	3.92%	3.75%	3.76%
	Leverage ratio excluding the effect of the temporary exemption of deposits with the Eurosystem central banks (4)					3.76%
Additional own funds requirements to address risks of excessive leverage (as a percentage of leverage ratio total exposure measure)						
EU 14a	Additional requirements to address risk of excessive leverage	-	0.00%	0.00%	0.00%	0.00%
EU 14b	Of which Additional AT1 leverage ratio requirements (%)	-	0.00%	0.00%	0.00%	0.00%

EU 14c	Total SREP leverage ratio requirements	3.00%	3.00%	3.00%	3.00%	3.00%
Buffer and total leverage ratio requirement (as a percentage of leverage ratio total exposure measure)						
EU 14d	Applicable leverage buffer	-	0.00%	0.00%	0.00%	0.00%
EU 14e	Overall leverage ratio requirements	3.75%	3.00%	3.00%	3.00%	3.00%
Liquidity Coverage Ratio						
15	Total high-quality liquid assets (HQLA) (Weighted value - average)	446,763	454,812	463,895	468,653	472,004
EU 16a	Cash outflows - Total weighted value	557,137	566,963	565,281	560,119	552,161
EU 16b	Cash inflows - Total weighted value	220,069	223,055	219,219	213,766	202,958
16	Total net cash outflows (adjusted value)	337,068	343,909	346,062	346,353	349,203
17	Liquidity coverage ratio	132.63%	132.26%	134.13%	135.39%	135.25%
Net Stable Funding Ratio						
18	Total available stable funding	1,004,613	1,043,285	1,099,120	1,072,837	1,117,444
19	Total required stable funding	864,714	906,821	930,728	918,008	956,138
20	NSFR ratio	116.18%	115.05%	118.09%	116.87%	116.87%

(1) Since 30 June 2022, a new capital requirement is linked to the introduction of a sectoral systemic risk buffer (SyRB) in Belgium of 9% on mortgage portfolios. It replaces the RWA penalty on these exposures. The impact of these two measures is overall neutral at Group level.

(2) The buffer requirements take into account the highest buffer between G-SIB and D-SIB.

(3) Excluding non-public Pillar 2 guidance (P2G)

(4) The temporary exemption of deposits with Eurosystem central banks in the measurement of exposure for the purpose of the leverage ratio was possible up to 31 March 2022. At 31 March 2022, the Group did not retain this option.

At 31 March 2023, CET1 capital requirement stands at 9.60% of RWA. The minimum requirement for LCR and NSFR ratios is 100%.

TABLE 2: TLAC RATIO (EU KM2)

In millions of euros		31 March 2023	31 December 2022	30 September 2022	30 June 2022	31 March 2022
1	Total capital and other TLAC-eligible liabilities	202,664	199,176	204,421	196,872	193,169
2	Risk-weighted assets	694,407	744,851	766,166	755,989	745,284
3	**TLAC RATIO** *(in percentage of risk-weighted assets)*	**29.19%**	**26.74%**	**26.68%**	**26.04%**	**25.92%**
4	Leverage ratio total exposure measure	2,464,153	2,373,844	2,638,456	2,657,582	2,668,847
5	**TLAC RATIO** *(in percentage of leverage ratio total exposure measure)*	**8.22%**	**8.39%**	**7.75%**	**7.41%**	**7.24%**
6a	Application of the exemption provided by Article 72b(4) of EU Regulation 2019/876[(*)]	n.a.	n.a.	n.a.	n.a.	n.a.
6b	In case of application of Article 72b, paragraph 3 of Regulation (UE) No. 2019/876: total amount of preferred senior debt eligible to TLAC ratio[(*)]	Not applied	Not applied	Not applied	Not applied	Not applied
6c	In case of application of Article 72b,	Not applied	Not applied	Not applied	Not applied	Not applied

paragraph 3 of Regulation (UE) No. 2019/876: proportion of preferred senior debt used in the calculation of the TLAC ratio(*)	

(*) In accordance with Regulation (EU) No. 2019/876, article 72b paragraphs 3 and 4, some preferred senior debt instruments (amounting to EUR 11,608 million as at 31 March 2023) are eligible within the limit of 3.5% of risk-weighted assets. The Group did not opt for this option as at 31 March 2023.

As at 31 March 2023, the Group's TLAC ratio stands at 29.19% of risk-weighted assets, without using the preferred senior debt eligible within the limit of 3.5% of the risk-weighted assets. The Group is thus above the applicable minimum level of requirement which is 22.21%. This minimum level of requirement takes into account a 2.50% conservation buffer, a 1.50% G-SIBs buffer, a 0.14% countercyclical buffer and a 0.07% systemic risk buffer.

TLAC ratio stands at 8.22 % of the leverage ratio total exposure measure. This ratio should be compared to a minimum requirement of 6.75%.

TABLE 3: DOUBTFUL LOANS ON GROSS OUTSTANDINGS RATIO

	31 December 2022	31 December 2021
DOUBTFUL LOANS(*)/LOANS(**)	**1.7%**	**2.0%**

(*) Impaired loans (stage 3) to customers and credit institutions, not netted of guarantees, on-balance sheet and off-balance sheet and including debt securities measured at amortised costs or at fair value through shareholders' equity (excluding insurance).

(**) Gross outstanding loans to customers and credit institutions, on-balance sheet and off-balance sheet and including debt securities measured at amortised costs or at fair value through shareholders' equity (excluding insurance).

TABLE 4: STAGE 3 COVERAGE RATIO

In billions of euros	31 December 2022	31 December 2021
Stage 3 provisions	14.0	16.1
Doubtful loans(*)	19.3	21.8
STAGE 3 COVERAGE RATIO	**72.5%**	**73.6%**

(*) Impaired loans (stage 3) to customers and credit institutions, on-balance sheet and off-balance sheet, netted of guarantees received, including debt securities measured at amortised costs or at fair value through shareholders' equity (excluding insurance).

TABLE 5: COST OF RISK ON OUTSTANDINGS

In annualised basis point	31 December 2022	31 December 2021
COST OF RISK/CUSTOMER LOANS(*)	**31**	**34**

(*) Cost of risk divided by customer loans at the beginning of the period (see section 3.8 Alternative performance measures (APM) – article 223-1 of the AMF's General Regulation of chapter 3).

TABLE 6: IMMEDIATELY AVAILABLE LIQUIDITY RESERVE

In billions of euros	31 December 2022	31 December 2021
IMMEDIATELY AVAILABLE LIQUIDITY RESERVE(*)	**461**	**452**

(*) Liquid market assets or eligible to central banks ("counterbalancing capacity") taking into account prudential standards, notably US standards, minus intra-day payment systems needs.

TOP AND EMERGING RISKS

The identification and monitoring of top and emerging risks are central to BNP Paribas' approach to risk management.

These risks are identified, analysed and managed thanks to different works and analyses carried out by the RISK Function, the divisions and the businesses, and through several committees which give rise to actions and decisions:

- a close follow-up of macroeconomic and financial conditions with the objective of organising them into a hierarchy with regard to the consequences for BNP Paribas portfolio, and designing adverse scenarios. This close monitoring is delivered quarterly to the General Management as well as to the Internal Control, Risk Management and Compliance Committee (CCIRC) through a dashboard presented by RISK;
- a close monitoring of the risk profile in accordance with the directives and thresholds approved by the Board of directors;
- cross-functional policies on concentration or corporate social responsibility among others;
- market and liquidity risk decisions made by Group ALM Treasury Committee (or Group ALCo, see *Governance* in section 5.3 *Risk management*) and the Financial Markets Risk Committee (FMRC);
- key decisions made by committees with respect to specific transactions at the highest level;
- proposals for new activities or new products;
- portfolio and businesses reviews by Risk & Development Policy Committees, on topics selected by the Group's Executive Management through the Risk Forum for the upcoming year;
- proactive and forward-looking discussions on emerging risks and their impacts on the Bank's risk profile in the Risk Anticipation Committee;
- an analysis and a monitoring of changes to the regulatory framework and their consequences on the Bank's capital and liquidity management as well as on its activities;
- the Group's sustainable finance strategy and commitments validated by the Sustainable Finance Strategic Committee (SFSC). This committee also decides on the main lines of sustainable Finance's commercial policie and monitors their operational implementation. Where necessary, it also validates cross-functional infrastructure choices ensuring the expertise and consistency of the implementation of regulatory requirements and the commitments made by the Group in methods, analyses, risk management, data, tools, standards and reporting related to sustainable finance.

TOP RISKS

A top risk is defined as having:

- the potential to have a material impact, across a business area or geographical area, on the financial results, reputation or sustainability of the Group;
- the potential to occur in the near future.

The top risks to which the Group is exposed are described below.

Macroeconomic environment

Macroeconomic and market conditions affect the Bank's results. The nature of the Bank's business makes it particularly sensitive to macroeconomic and market conditions in Europe.

After a sustained recovery in 2021, global activity decelerated in the course of 2022. According to the IMF released in January 2023, world GDP growth stood at +3.4% in 2022 (after +6.2% in 2021), reflecting a marked slowdown in both mature and emerging economies. In the eurozone, in particular, growth reached +3.5% in 2022, after +5.3% in 2021.

Several major developments have contributed to a more pronounced deterioration of growth than expected (after a global activity rebound in 2021). Thus, beyond the increase of inflation seen at the beginning of 2022 in both Europe and the United States, the economic consequences of the invasion of Ukraine are significant, particularly in Europe.

Strong disruptions in the energy and food markets have thus pushed inflation and inflation expectations to high levels, particularly in European countries. In response to these very high levels of inflation, central banks have experienced the most severe monetary tightening in recent decades. The strong tightening of financial conditions could penalise the level of activity in 2023. The measures put in place in the context of the health crisis in some countries with less vaccine protection or applying very strict measures to stem it continued to disrupt activity. These measures could continue to weigh on the activity in 2023. It cannot be ruled out that the lifting of these measures in certain countries with lower vaccination protection could also weigh on the activity in 2023.

While central banks have not yet completed their monetary policy tightening cycle at the end of 2022, both short- and long-term interest rates are at levels not seen since the 2000's and could rise further in 2023.

In this context, the following risk categories can be identified:

Risks related to high inflation and tensions on commodity markets

The consequences of the invasion of Ukraine have contributed to the sharp rise in energy and food prices. High inflation has a significant impact on household disposable income and business profits in the short term. In the longer term, the risk is that inflation may not decline as quickly as expected leading to “second round” effects such as higher wage growth.

Beyond the risks generated by the volatility of energy and other raw material prices, the risks weighing on the available volumes (*e.g.* natural gas) could lead the authorities of certain importing countries to resort to rationing in certain sectors, during the winter. Reduced quantities of available energy and raw materials could directly affect activity (lack of inputs or unprofitable production), and lead to difficulties in the most exposed sectors (losses, defaults).

Risks linked to the sharp rise in interest rates, in connection with sometimes high indebtedness

The return to strong inflation has led to a rebound in interest rates. These rapid developments generate risks for the economy and the financial system and are susceptible to trigger market reactions (equity market, foreign exchange, capital flows). Moreover, economic agents sensitive to interest rates are facing and may continue to face less favourable financing conditions. Finally, some economic agents with high levels of debt may find it more difficult to pay off their debt (especially in environments where variable interest rates are applied).

In many countries, the health crisis has led to a significant increase in government deficit and debt ratios, due to falling activity and exceptional government support measures. In mature economies, public debt ratios are at historically very high levels. These developments increase the risk of tensions in the sovereign debt market. In the private sector, the rise in interest rates is combined with the withdrawal of a number of support measures implemented in the context of the health crisis and could weaken some companies that have benefited from these. Finally, a risk of correction could occur in some real estate markets.

The Group’s exposure in emerging countries is limited. However, the vulnerability of some of these economies could lead to a deterioration in the rating of these countries by the agencies, followed by an increase in risk premiums and debt servicing, leading to disruptions in the global financial system. In many advanced and emerging countries, public policy support to avoid a wave of bankruptcies has contributed to additional debt. In the medium term, this increase in excessive debt could lead to a decline in repayment capacity, while the simultaneous increase in public debt would reduce the ability of states to support the economy. On the household side, job losses could also affect debt repayment capacity. Lastly, some major financial players (insurers, pension funds, asset managers, *etc.*) have an increasingly systemic dimension and, in the event of market turbulence, may have to unwind large positions in a context where market liquidity would be relatively fragile.

Risks related to the health crisis

The impact of the recent health crisis on the economy and the risk of extreme shocks have decreased since 2020. The dissemination of vaccination has allowed the reduction or the removal of restrictive measures in many countries. However, the emergence of a variant or other virus, resulting in restrictions, remains possible. If countries with low vaccination rates or strict restrictions are particularly exposed to the economic consequences of such developments, other countries could be affected by negative spillovers, due particularly to supply chain disruptions.

Risks of trade disruption with increased geopolitical risk

A number of developments suggest that trade and globalisation tensions related to increased geopolitical risk may persist in the coming years. In recent years, in particular, disagreements and tensions between the United States and China, the health crisis and the consequences of the invasion of Ukraine (see risk factor 5.3 *Given the global scope of its activities, the BNP Paribas Group is exposed to country risk and to changes in the political, macroeconomic or financial contexts of a region or country*) have encouraged many governments to strengthen their economic sovereignty, particularly in self-sufficient strategic areas. Different scenarios are plausible, ranging from moderate regionalisation (competing blocks) to more pronounced regionalisation (separate blocks). In this context, some economic agents could be encouraged to significantly revise their supply chain and location, which could weigh on the volumes traded and negatively affect agents’ and financial markets’ confidence and ultimately slow global growth.

Laws and regulations applicable to financial institutions

Recent and future changes in the laws and regulations applicable to financial institutions may have a significant impact on the Bank. Measures recently adopted or still under elaboration, that have or are likely to have an impact on the Bank notably include:

- prudential regulations: with the finalisation of Basel 3 published by the Basel Committee in December 2017, supplemented by the fundamental review of the trading book (FRTB) in January 2019 and of CVA risk (Credit Value Adjustment) in July 2020, which introduces a revision of the credit risk, operational risk, market risk and CVA risk measurement in the calculation of risk-weighted assets. The new Basel framework also provides for the gradual introduction of an overall floor which will be based on standardised approaches. These measures are due to come into force once they are transposed into European law. To this end, on 27 October 2021, the European Commission published a draft transposition of the Basel Accord in the form of amendments to the CRR and CRD, and the European Union Council reached its position on this legislative proposal on 8 November 2022;

- the Directive of 16 April 2014 related to deposit guarantee systems and its delegated and implementing acts, the Directive of 15 May 2014 (BRRD) and its revision on 20 May 2019 (BRRD 2) as well as the Regulation of 15 July 2014 (RMSR) and its revision of 20 May 2019 (RSRM 2) establishing a bank recovery and resolution framework, including the determination of MREL requirements (see *MREL* paragraph in section 5.2 *Capital management and capital adequacy*), the Single Resolution Mechanism establishing the Single Resolution Council and the Single Resolution Fund;
- the Final Rule by the US Federal Reserve imposing tighter prudential rules on the US transactions of large foreign banks, notably the obligation to have a separate intermediary holding company in the US (capitalised and subject to regulation) to hold their US subsidiaries;
- the regulation of over-the-counter derivative activities pursuant to Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the European Market Infrastructure Regulation (EMIR) in Europe, notably margin requirements for non-cleared derivative products, transparency and reporting requirements for derivatives transactions in securities; as well as the obligation to set off certain derivatives traded over the counter by clearing houses;
- the new regulations on financial instruments MiFID 2 and MiFIR;
- the General Data Protection Regulation (GDPR), which came into force on 25 May 2018. This Regulation aims to move the European data confidentiality environment forward and improve personal data protection within the European Union. Businesses run the risk of severe penalties if they do not comply with the standards set by the GDPR. This regulation applies to all banks and companies providing services to European citizens.

For a more detailed description, see risk factor *6.1 Laws and regulations adopted in recent years, as well as current and future legislative and regulatory developments, may significantly impact the BNP Paribas Group and the financial and economic environment in which it operates.*

Moreover, in this strengthened regulatory context, the risk of non-compliance with existing laws and regulations, in particular those relating to the protection of the interests of customers and personal data, is a significant risk for the banking industry, potentially resulting in significant losses and fines[1]. In addition to its compliance system, which specifically covers this type of risk, the Group places the interest of its customers, and more broadly that of its stakeholders, at the heart of its mechanism. Thus, the Code of conduct adopted by the Group in 2016, updated in 2021, sets out detailed values and rules of conduct in this area.

Environmental risks

Environmental risks and, more particularly, those associated with climate change are a financial risk for the Group.

The BNP Paribas Group is exposed to risks related to climate change, either directly through its own operations or for certain of its assets or indirectly through its financing and investment activities. The main typical risk factors related to climate change are as follows:

- transition risk factors resulting from a change in the behaviour of economic and financial agents in response to the implementation of energy policies, change in regulation, technological innovations or changes in consumer preferences;
- physical risk factors resulting from the direct impact of climate change on people and assets due to extreme weather events or long-term shifts in climate patterns such as rising sea levels or rising temperatures;
- in addition, consequences in terms of liability may arise from these two risk factors. They correspond to potential disputes, claims for compensation, legal proceedings brought against a company, a State or a financial institution that could be held liable by any stakeholder or citizen who has suffered from climate change. In line with international work and in particular that of the Network of Supervisors and Central Banks for Greening the Financial System (NGFS), BNP Paribas considers the risks associated with the emergence of legal proceedings related to climate change for companies and investors, including liability risks, as a subset of physical and transition risks.

BNP Paribas has set up a monitoring on the potential impact of these risk factors in the conduct of its business, in that of its counterparties or in its investments on its own behalf or on behalf of third parties. The Group thus integrates these risk factors into its risk management process and gradually strengthens their assessment, as the methodologies for measuring and analysing these factors and their impact on traditional risks, in particular, those relating to credit quality, are developed.

For more details, please see risk factor 7.4 *The BNP Paribas Group could experience business disruption and losses due to risks related to environmental, social and governance ("ESG") issues, particularly relating to climate change, such as transition risks, physical risks or liability risks*, as well as the measures taken and commitments made by the Group in this area in paragraph *Commitment 3: Robust management of Environmental, social and governance risks* of chapter 7.

Cyber security and technology risk

BNP Paribas' ability to do business is intrinsically tied to the fluidity of electronic transactions as well as the protection and security of information and technology assets.

The technological change is accelerating with the digital transformation and the resulting increase in the number of communications circuits, proliferation in data sources, growing process automation, and greater use of electronic banking transactions.

[1] *Risk factors: "6.2 The BNP Paribas Group may incur substantial fines and administrative and other criminal penalties for non-compliance with applicable laws and regulations and may also incur losses in related (or unrelated) litigation with private parties".*

The progress and acceleration of the technological changes needed to respond to customer requirements are giving cybercriminals new options for altering, stealing and disclosing data. Attacks are more frequent, with a bigger reach and sophistication across all sectors, including financial services.

The outsourcing of a number of processes also is likely to expose the Group to structural cybersecurity and technology risks which can lead to the appearance of potential attack vectors that cybercriminals can exploit.

In this context, the Group has reinforced its lines of defence dedicated to managing technological and cyber security risks (see the paragraph *Cyber security and technology* in section 5.9 *Operational Risk*) and operational standards are regularly adapted to support the Bank's digital evolution and innovation while managing existing and emerging threats (such as cyber-crime, espionage, *etc.*).

EMERGING RISKS

An emerging risk is defined as a new or evolving risk which potential impact could be material in the future but is currently not fully known or is difficult to quantify.

The Group identified emerging risks related to technological innovations, the evolving regulatory environment, as well as certain health, demographic and societal risks.

Technological innovations

Technological developments related to the growing use of data in all production, marketing, and distribution processes, and to data sharing among economic players (producers, suppliers, and customers) will impact the economic models of clients and counterparties in a lasting way. These impacts, which are sometimes hard to assess in a context where new standards, economic balances, and regulatory entities are in the process of evolving and adapting, are being analysed internally by industry experts focused on the economic sectors most exposed to this evolution.

In addition, the use of algorithms and artificial intelligence techniques, which are becoming increasingly sophisticated, considerably modifies decision-making and exposes people to risks of a new nature with standardised behaviour that can quickly affect certain markets. The emergence of decentralised finance and digital assets based on distributed ledger technologies (blockchain) are changes that may ultimately have a structural impact on the banking sector.

Furthermore, in this regard, the Group's competitive environment is undergoing profound change, with the presence of fintech, emerging new players in the activities of the financial sector as GAFAM (Google, Apple, Facebook, Amazon, Microsoft) and technological innovations which disrupt the traditional value chains of Group businesses, and place the quality of the customer experience, and the use of new technologies to reduce the cost of low added-value operations, as their competitive factors. Maintenance of the Group's information systems must be done in this context of evolving value chains and increasing protection needs (of systems, data, *etc.*). The Group is deploying a proactive strategy in this area to adapt its activities to these major technological developments and promote some industrial cooperation with fintech players. This strategy and the initiatives developed could nevertheless prove to be insufficient and introduce a risk of a competitive nature.

Evolving regulatory environments

In addition to the regulatory measures recently adopted or pending adoption, and already cited as top risks, the trend towards growing complexity and regional differences in the bank regulatory environment and related supervision is creating relative uncertainty over future developments, compliance costs, and proper performance risk concerning the various measures. The Group has established an active monitoring system for its regulatory environment, enabling it to minimise these risks.

Possible future divergence by type of regulated entity, for example, depending on their degree of innovation, may introduce risk of a competitive nature.

Health risks

The threat presented by bacteria, viruses, parasites or fungi that cause uncontrolled spread of infectious diseases leading to widespread fatalities and economic disruption, is a growing concern. It is aggravated by the resistance developed by bacteria to antibiotics, by viruses to antivirals or by fungi to antifungals, a situation that heightens the probability of large-scale health problems.

In this context, a new widespread infection or pandemic, with a bacterial, viral or fungal origin, potentially resistant to antibiotics, antiviral drugs or other treatments, and therefore difficult to eradicate, is an increasing concern, and that becomes more and more preoccupying.

Despite the experience gained with health crisis linked to the Covid-19, such an infection could lead to new failures in infrastructure and production chains, with significant consequences for all stakeholders.

Demographic risk

Demographic transition (decrease in fertility rate, increase in life expectancy) is a major underlying development in many countries. In the years and decades to come, it will have a significant impact on economic growth, but also on health and retirement budgets, and on savings and consumption behaviour.

Societal issues

In addition to responses designed to meet its customers' changing needs, the Group is, on a more general basis, adapting its responses to the expectations of the society in which it operates in terms of how it conducts its business, respect for human rights and environmental protection. Thus, banks must deal with the growing sensitivity of their customers and partners to environmental, social and governance issues.

The BNP Paribas Group Code of conduct defines standards of conduct in line with the values and missions determined by the Bank.

AREAS OF SPECIAL INTEREST IN 2022

Türkiye

The cumulative inflation over three years of the Turkish economy reached over 100%. The Turkish lira suffered from these conditions. Türkiye is also directly and indirectly affected by the consequences of the invasion in Ukraine. While these developments did not prevent the expansion of the Turkish economy in 2022, they could, at one point, affect investor confidence, financial volatility and ultimately economic growth and the country's rating.

BNP Paribas' presence in Türkiye is primarily through its TEB subsidiary. At 31 December 2022, the Group generated 3.5% of its pre-tax operating income in this country (see section 8.6 *Profit and loss account items and headcount by country* in chapter 8 *General information*). The TEB entity had a solvency ratio (Capital Adequacy Ratio – CAR) of 18.6% at 31 December 2022, in excess of the regulatory requirements.

In 2022, TEB group's balance sheet liquidity remained solid, with a Liquidity Coverage Ratio (LCR) of 211% at 31 December 2022, *versus* 196% at 31 December 2021. With loans outstandings of TRY 151 billion and deposits of TRY 211 billion, TEB Group's financing structure is largely self-financed.

With respect to exposure to counterparties whose main business is in Türkiye, commercial commitments as at 31 December 2022 represented 1.1% of the Group's total gross commitments, on- and off-balance sheet (see Table 29: *Credit risk exposure by geographic region*). Exposure to Turkish sovereign risk is contained at 2.6% of the banking book's sovereign exposure and is essentially borne by TEB group.

Others

While the invasion in Ukraine is one of the major current geopolitical risks, tensions are also palpable in Asia, in the Korean peninsula and the China Sea, and remain high in some other areas, such as the Middle East, with potential involvement of Western powers to varying degrees. Although the possible consequences of such risks are difficult to assess, the considered regional economies and the global economy could be affected through different channels (confidence, financial markets, trade, supply chains, commodity prices).

The risks associated with changes in the macroeconomic and market environment are described in the following section *Risk factors*[1].

The analyses relating to certain sectors are set out in the *Exposures, provisions and cost of risk* paragraph in section 5.4.

The risk principles are presented in the Risk Appetite Statement approved by the Board of directors (see *Risk Appetite* in section 5.3).

RISK FACTORS

Unless otherwise indicated, the information and financial elements contained in these risk factors specifically include the activity of BancWest to reflect a prudential vision. They are, therefore, presented excluding the effects of the application of IFRS 5 on groups of assets and liabilities held for sale. This document includes a reconciliation between the operational vision presented excluding the application of IFRS 5 and the consolidated financial statements applying IFRS 5 in chapter 3. The main categories of risk inherent in the BNP Paribas Group's business are presented below. They may be measured through risk-weighted assets or other quantitative or qualitative indicators, to the extent risk-weighted assets are not relevant (for example, for liquidity and funding risk).

	RWA	
In billions of euros	**31 December 2022**	**31 December 2021**
Credit risk	**580**	**554**

[1] *In particular risk factor 5.3 Given the global scope of its activities, the BNP Paribas Group is exposed to country risk and to changes in the political, macroeconomic or financial contexts of a region or country.*

Counterparty credit risk	**42**	**40**
Securitisation risk in the banking book	**16**	**14**
Operational risk	**62**	**63**
Market risk	**26**	**25**
Amounts below the thresholds for deduction (subject to 250% risk weight)	**20**	**18**
TOTAL	**745**	**714**

More generally, the risks to which the BNP Paribas Group is exposed may arise from a number of factors related, among others, to changes in its macroeconomic or regulatory environment or factors related to the implementation of its strategy and its business.

The material risks specific to the BNP Paribas Group's business, determined based on the circumstances known to the management as of the date of this document, are thus presented below under 7 main categories, in accordance with Article 16 of the UK Prospectus Regulation: credit risk, counterparty risk and securitisation risk in the banking book; operational risk; market risk; liquidity and funding risk; risks related to the macroeconomic and market environment; regulatory risks; and risks related to the BNP Paribas Group's growth in its current environment.

The Group's risk management policies have been taken into account in assessing the materiality of these risks; in particular, risk-weighted assets factor in risk mitigation elements to the extent eligible in accordance with applicable banking regulations.

1. CREDIT RISK, COUNTERPARTY RISK AND SECURITISATION RISK IN THE BANKING BOOK

BNP Paribas Group's credit risk is defined as the probability of a borrower or counterparty defaulting on its obligations to the BNP Paribas Group. Probability of default along with the recovery rate of the loan or debt in the event of default are essential elements in assessing credit quality. In accordance with the European Banking Authority recommendations, this category of risk also includes risks on equity investments, as well as those related to insurance activities. At 31 December 2022, the BNP Paribas Group's credit risk exposure broke down as follows: corporates (42%), central governments and central banks (26%), retail customers (25%), credit institutions (4%), other items (2%) and equities (1%). At 31 December 2022, 33% of the BNP Paribas Group's credit exposure was comprised of exposures in France, 15% in Belgium and Luxembourg, 9% in Italy, 19% in other European countries, 13% in North America, 6% in Asia and 5% in the rest of the world. The BNP Paribas Group's risk-weighted assets subject to this type of risk amounted to EUR 580 billion at 31 December 2022, or 78% of the total risk-weighted assets of the BNP Paribas Group, compared to EUR 554 billion representing 78% of the total risk-weighted assets at 31 December 2021.

BNP Paribas Group's counterparty risk arises from its credit risk in the specific context of market transactions, investments, and/or settlements. BNP Paribas Group's exposure to counterparty risk, excluding CVA (Credit Valuation Adjustment) risk at 31 December 2022, is comprised of: 42% to the corporate sector, 12% to governments and central banks, 13% to credit institutions and investment firms, and 33% to clearing houses. By product, BNP Paribas Group's exposure, excluding CVA ("**Credit Valuation Adjustment**") risk, at 31 December 2022 is comprised of: 47% in OTC derivatives, 29% in repurchase transactions and securities lending/borrowing, 17% in listed derivatives and 7% in contributions to the clearing houses' default funds. The amount of this risk varies over time, depending on fluctuations in market parameters affecting the potential future value of the covered transactions. In addition, CVA ("**Credit Valuation Adjustment**") risk measures the risk of losses related to CVA volatility resulting from fluctuations in credit spreads associated with the counterparties to which the BNP Paribas Group is subject to risk. The risk-weighted assets subject to counterparty credit risk amounted to EUR 42 billion at 31 December 2022, or 6% of the total risk-weighted assets of the BNP Paribas Group, compared to EUR 40 billion representing 6% of the total risk-weighted assets at 31 December 2021.

Securitisation risk in the banking book: securitisation is a transaction or arrangement by which the credit risk associated with a liability or set of liabilities is subdivided into tranches. Any commitment made by the BNP Paribas Group under a securitisation structure (including derivatives and liquidity lines) is considered to be a securitisation. The bulk of the BNP Paribas Group's commitments are in the prudential banking portfolio. Securitised exposures are essentially those generated by the BNP Paribas Group. The securitisation positions held or acquired by the BNP Paribas Group may also be categorised by its role: of the positions as at 31 December 2022, BNP Paribas was originator of 43%, was sponsor of 34% and was investor of 23%. The risk-weighted assets subject to this type of risk amounted to EUR 16 billion at 31 December 2022, or 2% of the total risk-weighted assets of the BNP Paribas Group, compared to EUR 14 billion representing 2% of the total risk-weighted assets at 31 December 2021.

1.1 A substantial increase in new provisions or a shortfall in the level of previously recorded provisions exposed to credit risk and counterparty risk could adversely affect the BNP Paribas Group's results of operations and financial condition.

Credit risk and counterparty risk impact the BNP Paribas Group's consolidated financial statements when a customer or counterparty is unable to honour its obligations and when the book value of these obligations in the BNP Paribas Group's records is positive. The customer or counterparty may be a bank, a financial institution, an industrial or commercial enterprise, a government or a government entity, an investment fund, or a natural person. If the default rate of customers or counterparties increases, the BNP Paribas Group may have to record increased charges or provisions in respect of irrecoverable or doubtful loans (Stage 3) or of performing loans (Stages 1 and 2), in response to a deterioration in economic conditions or other factors, which may affect its profitability.

As a result, in connection with its lending activities, the BNP Paribas Group regularly establishes provisions, which are recorded on its income statement in the line item Cost of Risk. In 2022, these provisions amounted to EUR 2,965 billion compared to EUR 2,925 billion in 2021. This amount was due in particular to the exceptional impact of the “borrower assistance law” in Poland (see section 5.3 *Given the global scope of its activities, the BNP Paribas Group is exposed to country risk and to changes in the political, macroeconomic or financial contexts of a region or country*), which led to the recording of an exceptional negative impact in the third quarter of EUR 204 million. Provisions recorded on performing loans (Stages 1 and 2) amounted to 463 million euro in the year ended 31 December 2022 and related in particular to the indirect effects of the invasion of Ukraine and the rise in inflation and interest rates, partially offset by write-backs related to the health crisis and the effects of changes in methods to align with European standards for EUR 251 million in the fourth quarter of 2022.

The BNP Paribas Group’s overall level of provisions is based on its assessment of prior loss experience, the volume and type of lending being conducted, industry standards, past due loans, economic conditions and other factors related to the recoverability of various loans or statistical analysis based on scenarios applicable to asset classes. The BNP Paribas Group seeks to establish an appropriate level of provisions.

Although the BNP Paribas Group seeks to establish an appropriate level of provisions, its lending businesses may have to increase their provisions for loan losses or sound receivables substantially in the future as a result of deteriorating economic conditions or other causes. For example, provisions increased in 2020 primarily due to the early ex-ante recognition of potential losses related to the effects of the health crisis (Stages 1 and 2 provisions on performing loans in accordance with IFRS 9). Any significant increase in provisions for loan losses or a significant change in the BNP Paribas Group’s estimate of the risk of loss inherent in its portfolio of non-impaired loans, as well as the occurrence of loan losses in excess of the related provisions, could have a material adverse effect on the BNP Paribas Group’s results of operations and financial condition.

For reference, at 31 December 2022, the ratio of doubtful loans to total loans outstanding was 1.7% and the coverage ratio of these doubtful commitments (net of guarantees received) by provisions was 72.5%, against 2.0% and 73.6%, respectively, as at 31 December 2021.

While the BNP Paribas Group seeks to reduce its exposure to credit risk and counterparty risk by using risk mitigation techniques such as collateralisation, obtaining guarantees, entering into credit derivatives and entering into netting agreements, it cannot be certain that these techniques will be effective to offset losses resulting from counterparty defaults that are covered by these techniques. Moreover, the BNP Paribas Group is also exposed to the risk of default by the party providing the credit risk coverage (such as a counterparty in a derivative or a loan insurance contract) or to the risk of loss of value of any collateral. In addition, only a portion of the BNP Paribas Group’s overall credit risk and counterparty risk is covered by these techniques. Accordingly, the BNP Paribas Group has very significant exposure to these risks.

1.2 The soundness and conduct of other financial institutions and market participants could adversely affect the BNP Paribas Group.

The BNP Paribas Group’s ability to engage in financing, investment and derivative transactions could be adversely affected by the soundness of other financial institutions or market participants. Financial institutions are interrelated as a result of trading, clearing, counterparty, funding or other relationships. As a result, defaults by one or more States or financial institutions, or even rumours or questions about one or more financial institutions, or the financial services industry generally, may lead to market-wide liquidity problems and could lead to further losses or defaults. The BNP Paribas Group has exposure to many counterparties in the financial industry, directly and indirectly, including clearing houses, brokers and dealers, commercial banks, investment banks, mutual and alternative investment funds, and other institutional clients with which it regularly executes transactions. The BNP Paribas Group may also be exposed to risks related to the increasing involvement in the financial sector of players and the introduction of new types of transactions subject to little or no regulation (*e.g.* unregulated funds, trading venues or crowdfunding platforms). Credit and counterparty risks could be exacerbated if the collateral held by the BNP Paribas Group cannot be realised, it decreases in value or it is liquidated at prices not sufficient to recover the full amount of the loan or derivative exposure due to the BNP Paribas Group or in the event of the failure of a significant financial market participant such as a central counterparty.

For reference, counterparty risk exposure related to financial institutions was EUR 28 billion at 31 December 2022, or 13% of the BNP Paribas Group’s total counterparty risk exposure, and counterparty risk exposure related to clearing houses was EUR 73 billion, or 33% of the BNP Paribas Group’s total counterparty risk exposure.

In addition, fraud or misconduct by financial market participants can have a material adverse effect on financial institutions due in particular to the interrelated nature of the financial markets. An example is the fraud perpetrated by Bernard Madoff that came to light in 2008, as a result of which numerous financial institutions globally, including the BNP Paribas Group, announced losses or exposure to losses in substantial amounts. The BNP Paribas Group remains the subject of various claims in connection with the Madoff matter; see note 7.b *Legal proceedings and arbitration* to its consolidated financial statements for the year ended 31 December 2022.

Losses resulting from the risks summarised above could materially and adversely affect the BNP Paribas Group's results of operations.

2. OPERATIONAL RISK

BNP Paribas Group's operational risk is the risk of loss resulting from failed or inadequate internal processes (particularly those involving personnel and information systems) or external events, whether deliberate, accidental or natural (floods, fires, earthquakes, terrorist attacks, *etc.*). BNP Paribas Group's operational risks cover fraud, human resources risks, legal and reputational risks, non-compliance risks, tax risks, information systems risks, risk of providing inadequate financial services (conduct risk), risk of failure of operational processes including credit processes, or from the use of a model (model risk), as well as potential financial consequences related to reputation risk management. From 2014 to 2022, BNP Paribas Group's main type of incidents involving operational risk were in "Clients, products and business practices", which represents more than half of the total financial impact, largely as a result of the BNP Paribas Group's agreement with US authorities regarding its review of certain dollar transactions concluded in June 2014. Process failures, including errors in execution or processing of transactions and external fraud are respectively the second and third types of incidents with the highest financial impact. Between 2014 and 2022, other types of risk in operational risk consisted of external fraud (14%), business disruption and systems failure (3%), employment practices and workplace safety (2%), internal fraud (1%) and damage to physical assets (1%).

The risk-weighted assets subject to this type of risk amounted to EUR 62 billion at 31 December 2022, representing 8% of the BNP Paribas Group's total risk-weighted assets, compared to EUR 63 billion representing 9% of total risk-weighted assets at 31 December 2021.

2.1 The BNP Paribas Group's risk management policies, procedures and methods may leave it exposed to unidentified or unanticipated risks, which could lead to material losses.

The BNP Paribas Group has devoted significant resources to developing its risk management policies, procedures and assessment methods and intends to continue to do so in the future. Nonetheless, the BNP Paribas Group's risk management techniques and strategies may not be fully effective in mitigating its risk exposure in all economic and market environments or against all types of risk, particularly risks that the BNP Paribas Group may have failed to identify or anticipate. The BNP Paribas Group's ability to assess the creditworthiness of its customers or to estimate the values of its assets may be impaired if, as a result of market turmoil such as that experienced in recent years, the models and approaches it uses become less predictive of future behaviour, valuations, assumptions or estimates. Some of the BNP Paribas Group's qualitative tools and metrics for managing risk are based on its use of observed historical market behaviour. The BNP Paribas Group applies statistical and other tools to these observations to arrive at quantifications of its risk exposures. The process the BNP Paribas Group uses to estimate losses inherent in its credit exposure or estimate the value of certain assets requires difficult, subjective, and complex judgments, including forecasts of economic conditions and how these economic predictions might impair the ability of its borrowers to repay their loans or impact the value of assets, which may, during periods of market disruption or substantial uncertainty, be incapable of accurate estimation and, in turn, impact the reliability of the process. These tools and metrics may fail to predict future risk exposures, *e.g.* if the BNP Paribas Group does not anticipate or correctly evaluate certain factors in its statistical models, or upon the occurrence of an event deemed extremely unlikely by the tools and metrics. This would limit the BNP Paribas Group's ability to manage its risks. The BNP Paribas Group's losses could therefore be significantly greater than the historical measures indicate. In addition, the BNP Paribas Group's quantified modelling does not take all risks into account. Its more qualitative approach to managing certain risks could prove insufficient, exposing it to material unanticipated losses.

2.2 An interruption in or a breach of the BNP Paribas Group's information systems may cause substantial losses of client or customer information, damage to the BNP Paribas Group's reputation and result in financial losses.

As with most other banks, the BNP Paribas Group relies heavily on communications and information systems to conduct its business. This dependency has increased with the spread of mobile and online banking services, the development of cloud computing, and more generally the use of new technologies. Any failure or interruption or breach in security of these systems could result in failures or interruptions in the BNP Paribas Group's customer relationship management, general ledger, deposit, servicing and/or loan organisation systems or could cause the BNP Paribas Group to incur significant costs in recovering and verifying lost data. The BNP Paribas Group cannot provide assurances that such failures or interruptions will not occur or, if they do occur, that they will be adequately addressed.

In addition, the BNP Paribas Group is subject to cybersecurity risk, or risk caused by a malicious and/or fraudulent act, committed virtually, with the intention of manipulating information (confidential data, bank/insurance, technical or strategic), processes and users, in order to cause material losses to the BNP Paribas Group's subsidiaries, employees, partners and clients and/or for the purpose of extortion (ransomware). An increasing number of companies (including financial institutions) have in recent years experienced intrusion attempts or even breaches of their information technology security, some of which have involved sophisticated and highly targeted attacks on their computer networks. Because the techniques used to obtain unauthorised access, disable or degrade service, steal confidential data or sabotage information systems have become more sophisticated, change frequently and often are not recognised until launched against a target, the BNP Paribas Group and its third-party service providers may be unable to anticipate these techniques or to implement in a timely manner effective and efficient countermeasures. Any failures of or interruptions in the BNP Paribas Group's information systems or those of its providers and any subsequent disclosure of confidential information related to any client, counterpart or employee of the BNP Paribas Group (or any other person) or any intrusion or attack against its communication system could cause significant losses and have an adverse effect on the BNP Paribas Group's reputation, financial condition and results of operations. Regulatory authorities now consider cybercriminality to be a growing systemic risk for the financial sector. They have stressed the need for financial institutions to improve their resilience to cyber-attacks by strengthening internal IT monitoring and control procedures. A successful cyber-attack could therefore expose the Group to a regulatory fine, especially should any personal data from customers be lost.

Moreover, the BNP Paribas Group is exposed to the risk of operational failure or interruption of a clearing agent, foreign markets, clearing houses, custodian banks or any other financial intermediary or external service provider used by the BNP Paribas Group to execute or facilitate financial transactions. Due to its increased interaction with clients, the BNP Paribas Group is also exposed to the risk of operational malfunction of the latter's information systems. The BNP Paribas Group's communications and data systems and those of its clients, service providers and counterparties may also be subject to malfunctions or interruptions as a result of cyber-crime or cyber-terrorism. The BNP Paribas Group cannot guarantee that these malfunctions or interruptions in its own systems or those of other parties will not occur or that in the event of a cyber-attack, these malfunctions or interruptions will be adequately resolved. These operational malfunctions or interruptions accounted for an average of 3% of operational risk losses over the 2014-2022 period.

2.3 Reputational risk could weigh on the BNP Paribas Group's financial strength and diminish the confidence of clients and counterparties in it.

Considering the highly competitive environment in the financial services industry, a reputation for financial strength and integrity is critical to the BNP Paribas Group's ability to attract and retain customers. The BNP Paribas Group's reputation could be harmed if the means it uses to market and promote its products and services were to be deemed inconsistent with client interests. The BNP Paribas Group's reputation could also be damaged if, as it increases its client base and the scale of its businesses, its overall procedures and controls dealing with conflicts of interest fail, or appear to fail, to address them properly. Moreover, the BNP Paribas Group's reputation could be damaged by employee misconduct, fraud or misconduct by financial industry participants to which the BNP Paribas Group is exposed, a restatement of, a decline in, or corrections to its results, as well as any adverse legal or regulatory action, such as the settlement the BNP Paribas Group entered into with the US authorities in 2014 for violations of US laws and regulations regarding economic sanctions. The loss of business that could result from damage to the BNP Paribas Group's reputation could have an adverse effect on its results of operations and financial position.

3. MARKET RISK

The BNP Paribas Group's market risk is the risk of loss of value caused by an unfavourable trend in prices or market parameters. The parameters affecting the BNP Paribas Group's market risk include, but are not limited to, exchange rates, prices of securities and commodities (whether the price is directly quoted or obtained by reference to a comparable asset), the price of derivatives on an established market and all benchmarks that can be derived from market quotations such as interest rates, credit spreads, volatility or implicit correlations or other similar parameters.

BNP Paribas Group is exposed to market risk mainly through trading activities carried out by the business lines of its Corporate & Institutional Banking (CIB) operating division, primarily in Global Markets, which represented 17% of the BNP Paribas Group's revenue in 2022. BNP Paribas Group's trading activities are directly linked to economic relations with clients of these business lines, or indirectly as part of its market making activity.

In addition, the market risk relating to the BNP Paribas Group's banking activities covers its interest rate and foreign exchange rate risks in connection with its activities as a banking intermediary. The "operating" foreign exchange risk exposure relates to net earnings generated by activities conducted in currencies other than the functional currency of the entity concerned. The "structural" foreign exchange risk position of an entity relates to investments in currencies other than the functional currency. In measuring interest rate risk, the BNP Paribas Group defines the concepts of standard rate risk and structural rate risk as the following: the standard rate risk corresponds to the general case, namely when it is possible to define the most appropriate hedging strategy for a given transaction, and the structural rate risk is the interest rate risk for equity and non-interest-bearing current accounts. If the BNP Paribas Group's hedging strategies prove ineffective or provide only a partial hedge, the BNP Paribas Group could incur losses. BNP Paribas' market risk based on its activities is measured by "Value at Risk" (VaR), and various other market indicators (stressed VaR, Incremental Risk Charge, Comprehensive Risk Measure for credit correlation portfolio) as well as by stress tests and sensitivity analysis compared with market limits.

The risk-weighted assets subject to this type of risk amounted to EUR 26 billion at 31 December 2022, representing 3% of the BNP Paribas Group's total risk-weighted assets, compared to EUR 25 billion representing 3% of the total risk-weighted assets at 31 December 2021.

3.1 The BNP Paribas Group may incur significant losses on its trading and investment activities due to market fluctuations and volatility.

The BNP Paribas Group maintains trading and investment positions in the debt, currency, commodity and equity markets, and in unlisted securities, real estate and other asset classes, including through derivative contracts. These positions could be adversely affected by extreme volatility in these markets, *i.e.* the degree to which prices fluctuate over a particular period in a particular market, regardless of market levels. Moreover, volatility trends that prove substantially different from the BNP Paribas Group's expectations may lead to losses relating to a broad range of other products that the BNP Paribas Group uses, including swaps, forward and future contracts, options and structured products.

To the extent that the BNP Paribas Group owns assets, or has net long positions, in any of those markets, a market downturn could result in losses from a decline in the value of its positions. Conversely, to the extent that the BNP Paribas Group has sold assets that it does not own, or has net short positions in any of those markets, a market upturn could, in spite of the existing limitation of risks and control systems, expose the BNP Paribas Group to potentially substantial losses as it attempts to cover its net short positions by acquiring assets in a rising market. The BNP Paribas Group may from time to time hold a long position in one asset and a short position in another, in order to hedge transactions with clients and/or in view of benefitting from changes in the relative value of the two assets. If, however, the relative value of the two assets changes in a direction or manner that the BNP Paribas Group did not anticipate or against which its positions are not hedged, it might realise a loss on those paired positions. Such losses, if significant, could adversely affect the BNP Paribas Group's results and financial condition. In addition, the BNP Paribas Group's hedging strategies may not be suitable for certain market conditions.

If any of the variety of instruments and strategies that the BNP Paribas Group uses to hedge its exposure to various types of risk in its businesses is not effective, the Group may incur losses. Many of its strategies are based on historical trading patterns and correlations. For example, if the BNP Paribas Group holds a long position in an asset, it may hedge that position by taking a short position in another asset where the short position has historically moved in a direction that would offset a change in the value of the long position. However, the hedge may only be partial, or the strategies used may not protect against all future risks or may not be fully effective in mitigating the BNP Paribas Group's risk exposure in all market environments or against all types of risk in the future. Unexpected market developments may also reduce the effectiveness of the BNP Paribas Group's hedging strategies. In addition, the manner in which gains and losses resulting from certain ineffective hedges are recorded may result in additional volatility in the BNP Paribas Group's reported earnings.

The BNP Paribas Group uses a "Value at Risk" (VaR) model to quantify its exposure to potential losses from market risks, and also performs stress testing with a view to quantifying its potential exposure in extreme scenarios (see *Market Risk Stress Testing Framework* in section 5.7 *Market risk*). However, these techniques rely on statistical methodologies based on historical observations, which may turn out to be unreliable predictors of future market conditions. Accordingly, the BNP Paribas Group's exposure to market risk in extreme scenarios could be greater than the exposures predicted by its quantification techniques.

More generally, the volatility of financial markets resulting from disruptions or deteriorations in macroeconomic conditions could adversely affect the BNP Paribas Group's trading and investment positions in the debt, currency, commodity and equity markets, as well as its positions in other investments. For reference, the revenues of Global Markets accounted for 17% of the BNP Paribas Group's revenues in 2022. Severe market disruptions and extreme market volatility have occurred often in recent years (including in 2022) and may persist or resurface, which could result in significant losses for the BNP Paribas Group. Such losses may extend to a broad range of trading and hedging products, including swaps, forward and future contracts, options and structured products. The volatility of financial markets makes it difficult to predict trends and implement effective trading strategies. It also weighs on the primary equity and bond markets, as in 2022, affecting the activity of Corporate & Institutional Banking.

3.2 The BNP Paribas Group may generate lower revenues from commission and fee-based businesses during market downturns and declines in activity.

Commissions represented 21% of the BNP Paribas Group's total revenues in 2022. Financial and economic conditions affect the number and size of transactions for which the BNP Paribas Group provides securities underwriting, financial advisory and other Investment Banking services. These revenues, which include fees from these services, are directly related to the number and size of the transactions in which the BNP Paribas Group participates and can thus be significantly affected by economic or financial changes that are unfavourable to its Investment Banking business and clients. In addition, because the fees that the BNP Paribas Group charges for managing its clients' portfolios are in many cases based on the value or performance of those portfolios, a market downturn that reduces the value of its clients' portfolios or increases the amount of withdrawals would reduce the revenues it receives from its asset management, equity derivatives and Private Banking businesses. Independently of market changes, the development of index portfolios or the below-market performance by the BNP Paribas Group's mutual funds may lead to reduced revenues from the BNP Paribas Group's asset management business, and increased withdrawals and reduced inflows for these vehicles. A reduced level of revenues from the abovementioned commission and fee-based businesses may have a material adverse impact on the BNP Paribas Group's financial results.

3.3 Adjustments to the carrying value of the BNP Paribas Group's securities and derivatives portfolios and the BNP Paribas Group's own debt could have an adverse effect on its net income and shareholders' equity.

The carrying value of the BNP Paribas Group's securities and derivatives portfolios and certain other assets, as well as its own debt, in its balance sheet is adjusted as of each financial statement date. As at 31 December 2022, on the assets side of the BNP Paribas Group's balance sheet, financial instruments at fair value through profit or loss, derivative financial instruments used for hedging purposes and financial assets at fair value through shareholders' equity amounted to EUR 685 billion, EUR 25 billion and EUR 38 billion respectively. In the liabilities column, financial instruments at fair value through profit or loss and derivative financial instruments used for hedging purposes amounted to EUR 704 billion and EUR 40 billion, respectively, at

31 December 2022. Most of the adjustments are made on the basis of changes in fair value of the BNP Paribas Group's assets or debt during an accounting period, with the changes recorded either in the income statement or directly in shareholders' equity. Changes that are recorded in the income statement, to the extent not offset by opposite changes in the value of other assets, affect the BNP Paribas Group's consolidated revenues and, as a result, its net income. A downward adjustment of the fair value of the BNP Paribas Group's securities and derivatives portfolios may lead to reduced shareholders' equity and, to the extent not offset by opposite changes in the value of the BNP Paribas Group's liabilities, the BNP Paribas Group's capital adequacy ratios may also be lowered. The fact that fair value adjustments are recorded in one accounting period does not mean that further adjustments will not be needed in subsequent periods.

4. LIQUIDITY AND FUNDING RISK

Liquidity risk is the risk that the BNP Paribas Group will not be able to meet its commitments or unwind or offset a position due to market or financial conditions or factors specific to it, within a given timeframe and at a reasonable cost. It reflects the risk of not being able to meet net cash outflows, including those related to collateral requirements, over all time horizons from short to long term. The Group's specific risk can be assessed through its short-term liquidity ratio (Liquidity Coverage Ratio "**LCR**") which analyses the coverage of net cash outflows at 30 days in a stress scenario. The Group's LCR was 129% at the end of 2022. The liquidity reserve was EUR 461 billion at the end of 2022.

4.1 The BNP Paribas Group's access to and cost of funding could be adversely affected by a resurgence of financial crises, worsening economic conditions, rating downgrades, increases in sovereign credit spreads or other factors.

The financial crisis, the eurozone sovereign debt crisis as well as the general macroeconomic environment, at times adversely affected the availability and cost of funding for European banks around ten years ago. This was due to several factors, including a sharp increase in the perception of bank credit risk due to exposure to sovereign debt in particular, credit rating downgrades of sovereigns and of banks, and debt market speculation. Many European banks, including the BNP Paribas Group, at various points during these periods experienced restricted access to wholesale debt markets for institutional investors and to the interbank market, as well as a general increase in their cost of funding. More recently, in the context of the health crisis, the European Central Bank ("ECB") also set up refinancing facilities designed to foster the banks' financing of the economy (Targeted Longer-Term Refinancing Options or "TLTRO"), on which the BNP Paribas Group has drawn. Such adverse credit market conditions may reappear in the event of a recession, prolonged stagnation of growth, deflation, "stagflation" (sluggish growth accompanied by inflation), a resurgence of the financial crisis, another sovereign debt crisis, new forms of financial crises, factors relating to the financial industry or the economy in general (including the economic consequences of the health crisis or the invasion of Ukraine and its impact on the world economy with the worsening of inflation or the rapid rise of market interest rates in 2022) or to the BNP Paribas Group in particular. In this case, the effect on the liquidity of the European financial sector in general or the BNP Paribas Group in particular could be materially adverse and have a negative impact on the BNP Paribas Group's results of operations and financial condition.

4.2 Protracted market declines can reduce the BNP Paribas Group's liquidity, making it harder to sell assets and possibly leading to material losses. Accordingly, the BNP Paribas Group must ensure that its assets and liabilities properly match in order to avoid exposure to losses.

In some of the BNP Paribas Group's businesses, particularly Global Markets (which represented 17% of the BNP Paribas Group's revenue in 2022) and Asset/Liability Management, protracted market movements, particularly asset price declines, can reduce the level of activity in the market or reduce market liquidity. These developments can lead to material losses if the BNP Paribas Group cannot close out deteriorating positions in a timely way. This is particularly true for assets that are intrinsically illiquid. Assets that are not traded on stock exchanges or other public trading markets, such as certain derivative contracts between financial institutions, may have values that the BNP Paribas Group calculates using models rather than publicly-quoted prices. Monitoring the deterioration of prices of assets like these is difficult and could lead to significant unanticipated losses (see section 5.8 *Liquidity risk*, paragraph *Stress tests and liquidity reserve*).

The BNP Paribas Group is exposed to the risk that the maturity, interest rate or currencies of its assets might not match those of its liabilities. The timing of payments on certain of the BNP Paribas Group's assets is uncertain, and if the BNP Paribas Group receives lower revenues than expected at a given time, it might require additional market funding in order to meet its obligations on its liabilities. While the BNP Paribas Group imposes strict limits on the gaps between its assets and its liabilities as part of its risk management procedures, it cannot be certain that these limits will be fully effective to eliminate potential losses arising from asset and liability mismatches.

4.3 Any downgrade of the Group's credit ratings could weigh heavily on the profitability of the Group.

Credit ratings have a significant impact on the BNP Paribas Group's liquidity. On 25 April 2022, Standard & Poor's confirmed the long-term rating of BNP Paribas SA's deposits and senior preferred debt rating as A+, and its short- term rating as A-1 with a stable outlook. On 13 September 2022, Fitch maintained its long-term deposits and senior preferred debt rating for BNP Paribas SA at AA- and its short term deposits and senior preferred debt rating for BNP Paribas SA at F1+ and revised its outlook to stable. On 5 July 2022, Moody's confirmed its long-term deposits and senior preferred debt rating as Aa3, and its short-term rating as P-1, with a stable outlook. On 28 June 2022, DBRS confirmed BNP Paribas SA's senior preferred debt rating as AA(low), and its short-term rating as R-1(middle), with a stable outlook. A downgrade in the BNP Paribas Group's credit rating could affect the liquidity and competitive position of the Group. It could also increase the BNP Paribas Group's borrowing costs, limit access to the capital markets or trigger additional obligations under its covered bonds or under certain bilateral provisions in some trading, derivative or collateralised financing contacts.

In addition, the BNP Paribas Group's cost of obtaining long-term unsecured funding from market investors is also directly related to its credit spreads, which in turn depend to a certain extent on its credit ratings. Increases in credit spreads can significantly increase the BNP Paribas Group's cost of funding. Changes in credit spreads are continuous, market-driven, and subject at times to unpredictable and highly volatile movements. Credit spreads are also influenced by market perceptions of the BNP Paribas Group's creditworthiness. Furthermore, credit spreads may be influenced by movements in the cost to purchasers of credit default swaps referenced to the BNP Paribas Group's debt obligations, which are influenced both by the credit quality of those obligations, and by a number of market factors that are beyond the control of the BNP Paribas Group.

5. RISKS RELATED TO THE MACROECONOMIC AND MARKET ENVIRONMENT

5.1 Adverse economic and financial conditions have in the past had and may in the future have an impact on the BNP Paribas Group and the markets in which it operates.

The BNP Paribas Group's business is sensitive to changes in the financial markets and more generally to economic conditions in France (30% of the Group's revenues at 31 December 2022), other countries in Europe (47% of the Group's revenues at 31 December 2022) and the rest of the world (23% of the Group's revenues at 31 December 2022, including 6% related to activities of Bank of the West in the United States, the sale of which was completed on 1 February 2023). A deterioration in economic conditions in the markets in the countries where the BNP Paribas Group operates and in the economic environment could in the future have some or all of the following impacts:

- adverse economic conditions affecting the business and operations of the BNP Paribas Group's customers, reducing credit demand and trading volume and resulting in an increased rate of default on loans and other receivables, in part as a result of the deterioration of the financial capacity of companies and households;
- a decline in market prices (or an increase in volatility) of bonds, equities and commodities affecting the businesses of the BNP Paribas Group, including in particular trading, Investment Banking and asset management revenues;
- macroeconomic policies adopted in response to actual or anticipated economic conditions having unintended effects, and are likely to impact market parameters such as interest rates and foreign exchange rates, which in turn can affect the BNP Paribas Group's businesses that are most exposed to market risk;
- perceived favourable economic conditions generally or in specific business sectors resulting in asset price bubbles, and the corrections when conditions become less favourable;
- a significant economic disruption (such as the global financial crisis of 2008, the European sovereign debt crisis of 2011, the recession caused, in 2020 and 2021, by the Covid-19 pandemic or high inflation and rising interest rates as well as geopolitical shocks (for example, the invasion of Ukraine) in 2022) having a substantial impact on all of the BNP Paribas Group's activities, which would be exacerbated if the disruption is characterised by an absence of market liquidity that makes it difficult to sell certain categories of assets at their estimated market value or at all. These disruptions could also lead to, in particular, a decline in transaction commissions and consumer loans;
- various adverse political and geopolitical events such as natural disasters, geopolitical tensions, health risks such as the Covid-19 pandemic and its aftermath, the fear or recurrence of new epidemics or pandemics, acts of terrorism, societal unrest, cyber-attacks, military conflicts or threats thereof and related risks (such as the invasion of Ukraine, related economic sanctions and the consequential impact on energy markets affecting Europe in particular), may affect the operating environment for the BNP Paribas Group episodically or for extended periods.

A number of risk factors could particularly affect the economy and the financial markets in 2023. They are the continuation of events that occurred or trends that began in 2022. Firstly, high inflation due to a number of factors, including bottlenecks in various supply chains coming out of the Covid-19 pandemic, abundant liquidity resulting from monetary policy and public aid during the pandemic, and the consequences of the invasion of Ukraine, particularly on the energy market. Inflation has had, and may continue to have, the effect of increasing costs (raw materials and wages) for companies (the Group's clients and the Group itself) and the cost of living for individuals, and the risk of a decline in corporate margins and the quality of corporate and consumer credit. Secondly, a significant and rapid monetary tightening affecting the financial markets and the economy more generally and increasing the cost of financing for companies and individuals, potentially leading to a sharp decline in growth or even a global or regional recession. Indeed, the International Monetary Fund ("**IMF**") stated in January 2023 that it expected the world and eurozone's growth to be 3.4% and 3.5% in 2022 and 2.9% and 0.7% in 2023, respectively. The IMF also stated that it expected global inflation to be 8.8% in 2022, 6.6% in 2023 and 4.3% in 2024.

Among the factors that could strongly influence the macroeconomic trajectory, including the existence, severity and duration of a recession, in 2023 are the course of the situation in Ukraine and of the Covid-19 pandemic. The invasion of Ukraine and the reaction of the international community (particularly the imposition of economic sanctions) have been and may continue to be a source of instability in global markets, impacting stock market indices, increasing the price of raw materials (such as electricity, oil, gas and agricultural commodities) or causing fears of shortages, thereby aggravating the disruption of supply chains and increasing production and transportation costs, as well as inflation more generally. The impact on the global energy market, particularly in Europe, will continue to be felt in 2023 (and possibly beyond) with risks of further crises (shortages, price increases, cascading effects in the economy, including liquidity and margin pressures for companies, even leading to production stoppages). After having caused a global recession in 2020 and a major disruption to the global economy in 2021, the Covid-19 pandemic had less of a macro-economic effect in 2022; its impact in 2023 will depend on a number of factors, including the potential resurgence of regional outbreaks, the possible emergence of new strains, and above all, public policy reactions. Finally, the risk of various types of crises exists, including that of sovereign debt (high level of post-pandemic public indebtedness, rapid increase in (re)financing costs, exchange rate effects particularly for borrowers exposed to the US dollar, and political risks – for example, of gridlock in the US congress); the bursting of various financial bubbles fostered by the previous environment of abundant liquidity and very low interest rates; and geopolitical events of different types and from different sources, in a context of increased political and societal tensions in various parts of the world.

It is difficult to predict economic or market declines or other market disruptions, and which markets will be most significantly impacted. If economic or market conditions in France or elsewhere in Europe, or Global Markets more generally, continue to deteriorate or become increasingly volatile, the BNP Paribas Group's operations could be disrupted, and its business, results of operations and financial condition could be materially and adversely affected.

5.2 Significant interest rate changes could adversely affect the BNP Paribas Group's revenues or profitability. There are risks associated with exiting or potentially returning to a prolonged low interest rate environment.

The net interest income recorded by the BNP Paribas Group during any given period significantly affects its overall revenues and profitability for that period. Interest rates are highly sensitive to many factors beyond the BNP Paribas Group's control, such as the rate of inflation, country-specific monetary policies and certain decisions concerning regulatory capital. Changes in market interest rates could affect the interest rates charged on interest-earning assets differently from the interest rates paid on interest-bearing liabilities and other resources such as deposits. Increases in the interest rates at which the BNP Paribas Group's short-term funding is available and maturity mismatches may adversely affect its profitability. Conversely, any adverse change in the yield curve could cause a decline in net interest income generated by the BNP Paribas Group's lending activities.

After a long period of low interest rates (in France, Europe and globally) culminating during the initial phases of the Covid-19 pandemic—due, in particular, to very accommodating central bank monetary policies—central banks, faced with the emergence of stronger and more lasting inflation than initially expected, have since the beginning of 2022 been tightening monetary policy, itself leading to a rapid and significant rise in market interest rates. For example, the US Federal Reserve raised its benchmark interest rate by 4.25% in 2022 and by 0.25% in January 2023. The ECB raised its benchmark interest rate by 2.5% in 2022 and by 0.5% in January 2023. In connection with the latest rate increases each indicated more to come. In addition, the ECB approved the creation of a new "transmission protection instrument" and announced the amendment of the conditions of its longer-term refinancing operations (TLTRO 3) starting from November 2022 until the end of each operation as well as the reduction of its asset purchase programme starting in March 2023. As the Group hedges its overall interest rate position, any change in the terms and conditions affecting these instruments may lead to adjustments in this hedge. These adjustments could have an adverse impact on the results of the BNP Paribas Group.

A tightening of monetary policy, particularly after a prolonged period of low interest rates creates risks. Tightening more than expected or more quickly than expected could have a negative impact on the economy and lead to a recession. Indeed, various institutions, such as the World Bank or the IMF, stated in the second half of 2022 that they see the possibility of a global recession in 2023 and a string of financial crises in emerging markets and developing economies as a result of the general and simultaneous rise in interest rates, as well as, for the former, currency movements (and in particular substantial appreciation of the U.S. dollar). The central scenario of the Organisation for Economic Cooperation and Development ("**OECD**"), in its November 2022 report, is for a sharp slowdown in global growth in 2023. In the eurozone, which has up until now been characterised by a unified monetary policy despite the varying risk profiles of the component countries, the widening of the spread between sovereign bonds could have an impact on the financing of countries experiencing the greatest rate increases and, in the long term, could have more serious macroeconomic (or political) consequences. The IMF announced in January 2023 that it expects growth in the eurozone to have been 3.5% in 2022 and to be 0.7% in 2023. In addition, a general increase in benchmark interest rates could prompt holders of low-interest debt or assets to switch to higher-interest bearing assets and further reduce the value of portfolios of fixed-interest debt or assets with lower interest rates. If the BNP Paribas Group's hedging strategies prove ineffective or provide only a partial hedge against this decline in value, the BNP Paribas Group could incur losses. Policy decisions to increase the rate of return on regulated savings (already underway in France) should increase the positive inflow of funds into such investments and, conversely, lead to a shift away from unregulated products, which earn lower rates of return or no returns. Such a scenario, combined with the fact that regulated savings would continue to be remunerated at a higher level than the level received by the BNP Paribas Group for these same deposits, could result in additional costs related to the amount of outstanding deposits and lead to a decrease in the funding resources of the BNP Paribas Group. With respect to the financing granted by the BNP Paribas Group, this could in particular test the resilience of the BNP Paribas Group's loan and bond portfolio and, possibly, lead to an increase in non-performing loans and loan defaults.

More generally, a very rapid rise in interest rates resulting in particular from central banks ending their accommodative monetary policies in light of an economic recovery or high inflation rates could adversely affect the Group's revenues and profitability by weighing, at least temporarily, on its margins. BNP Paribas may also have difficulty (in particular due to the usury rate in France) promptly reflecting higher interest rates in new mortgage or other fixed-rate consumer or corporate loans, while the cost of customer deposits and hedging costs would increase more rapidly. In addition, rising market interest rates increase the

BNP Paribas Group's funding costs and lead to higher rates on new loans due to the combined effects of a possible decline in new lending and increased competition.

More generally, the evolution of monetary policies, as currently implemented by central banks, has contributed to, and could continue to contribute to, the correction of certain markets or market sectors (for example, non-investment grade borrowers and sovereign borrowers, and equity and real estate markets and the leveraged finance market) and impact market participants who have particularly benefited from a prolonged environment of low interest rates and abundant liquidity. These corrections have, and could continue to, spread to all financial markets, particularly due to a significant increase in volatility.

A return in the medium term to a low interest rate environment, or a decline in interest rates, particularly following a recession, cannot be ruled out. Such a development would be likely to weigh significantly on the profitability of banks, as was the case during the recent long period of low interest rates. The relative impact on banks depends in particular on the proportion of revenues generated by net interest income; this proportion was 46% for BNP Paribas in 2022 (see *Alternative Performance Measures – IFRS 5 Transition Table* in chapter 3). The Group generates a significant portion of its revenues from its net interest margin and therefore remains exposed to interest rate fluctuations and changes in the yield curve. During periods of low interest rates, interest rate spreads tend to tighten, and the BNP Paribas Group may be unable to lower interest rates on deposits sufficiently to offset reduced income from lending at lower interest rates. Net interest income amounted to EUR 21,209 million in 2021 and EUR 23,168 million in 2022 respectively. On an indicative basis, over one-, two- and three-year timeframes, the sensitivity of revenues at 31 December 2022 to a parallel, instantaneous and definitive increase in market rates of +50 basis points (+0.5%) across all currencies had an impact of -EUR 22 million, -EUR 20 million and +EUR 125 million, respectively, or -0.04%, -0.04% and +0.25% of the Group's net banking income. The negative interest rate environment in which banks are charged for cash deposited with central banks, whereas banks typically do not charge clients for deposits, weighs significantly on banks' margins. In addition, the BNP Paribas Group has been facing and may continue to face an increase in early repayment and refinancing of mortgages and other fixed-rate consumer and corporate loans as clients take advantage of relatively low borrowing costs. This, along with the issuance of new loans at the low prevailing market interest rates, has resulted and may continue to result in a decrease in the average interest rate of the BNP Paribas Group's portfolio of loans thereby causing a decline in its net interest income from lending activities. Moreover, an environment of persistently low interest rates can also have the effect of flattening the yield curve in the market more generally, which could reduce the premium generated by the BNP Paribas Group from its funding activities. A flattening yield curve can also influence financial institutions to engage in riskier activities in an effort to earn the desired level of returns, which can increase overall market risk and volatility. Low interest rates may also affect the profitability and even the solvency of the insurance activities of banks in France, including the BNP Paribas Group, particularly due to the prevalence in the market of life insurance contracts backed by euro denominated funds, which may not be able to generate sufficient returns to be competitive with other investment products. Low interest rates may also adversely affect commissions charged by the BNP Paribas Group's asset management subsidiaries on money market and other fixed-income products. A reduction in credit spreads and decline in Retail Banking income resulting from lower portfolio interest rates may adversely affect the profitability of the BNP Paribas Group's Retail Banking operations.

5.3 Given the global scope of its activities, the BNP Paribas Group is exposed to country risk and to changes in the political, macroeconomic or financial contexts of a region or country.

The BNP Paribas Group is subject to country risk, meaning the risk that economic, financial, political, regulatory or social conditions in a given foreign country in which it operates could adversely affect the BNP Paribas Group's operations, or its results, or its financial condition, or its business. The BNP Paribas Group monitors country risk and takes it into account in the fair value adjustments and cost of risk recorded in its financial statements. However, a significant change in political or macroeconomic environments may require it to record additional charges or to incur losses beyond the amounts previously written down in its financial statements. In addition, factors specific to a country or region in which the BNP Paribas Group operates could make it difficult for it to carry out its business and lead to losses or impairment of assets.

At 31 December 2022, the BNP Paribas Group's loan portfolio consisted of receivables from borrowers located in France (33%), Belgium and Luxembourg (15%), Italy (9%), other European countries (19%), North America, including Bank of the West, (13%), Asia (6%) and the rest of the world (5%). Adverse economic or regulatory conditions that particularly affect these countries and regions would have a significant impact on the BNP Paribas Group. For example, the introduction by the Polish government in July 2022 of a law allowing borrowers under mortgage loans, generally at variable rates, to suspend their payments for eight months in the 2022-2024 period led the Group (operating in Poland through BNP Paribas Bank Polska) to record an exceptional negative impact in the third quarter of EUR 204 million. In addition, the BNP Paribas Group has significant exposures in countries outside the OECD, which are subject to risks that include political instability, unpredictable regulation and taxation, expropriation and other risks that are less present in more developed economies.

In addition, the BNP Paribas Group is present in Ukraine, a country invaded in February 2022, through its subsidiary UkrSibbank in which it holds a 60% stake alongside the European Bank for Reconstruction and Development (40%). At 31 December 2021, BNP Paribas Group's total gross on- and off-balance sheet exposures to Ukraine (which are concentrated on UkrSibbank) represented less than 0.09% of the Group's gross exposures. In the context of the conflict in Ukraine, the Group reassessed the nature of the control exercised over its subsidiary UkrSibbank and concluded that it would lose exclusive control and retain significant influence over the entity. This situation led the Group to consolidate it using the equity method from 1 March 2022. The loss of control resulted in the recognition of a capital loss of -EUR 159 million and the reclassification to profit or loss of the cumulative changes in assets and liabilities related to exchange rates of -EUR 274 million, recorded in "Net gain on non-current assets" as described in note 7.c to the financial statements for the year ended 31 December 2022.

With regard to Russia, which is subject to severe economic sanctions imposed notably by the European Union, USA and UK, gross on-and off-balance sheet exposures represented less than 0.04% of the BNP Paribas Group's gross exposures at 31 December 2022. The amount of net residual exposures, both in Russia and Ukraine, is more limited given the way in which the Bank operates in these two markets and how it secures its activities, with guarantees and collateral. In addition, various customers or counterparties of the BNP Paribas Group, in particular financial institutions and corporates, conduct business in these countries or have exposure to borrowers in these countries or have significant suppliers in those countries and could see their financial position weakened by the conflict and its consequences, particularly due to the cessation of their business in Ukraine and/or Russia or the reduction or termination (voluntarily or involuntarily) of their supplies from these countries. The Group is diligently monitoring developments in the situation in conjunction with the authorities concerned and, in particular, the reactions of the international community with regard to economic sanctions.

6. REGULATORY RISKS

6.1 Laws and regulations adopted in recent years, as well as current and future legislative and regulatory developments, may significantly impact the BNP Paribas Group and the financial and economic environment in which it operates.

Laws and regulations have been enacted in the past few years, in particular in France, Europe and the United States, with a view to introducing a number of changes, some permanent, in the financial environment. The impact of the measures has changed substantially the environment in which the BNP Paribas Group and other financial institutions operate.

The measures that have been adopted include:

- strengthening the powers of supervisory bodies, such as the French Prudential Supervision and Resolution Authority (the "**ACPR**") and the creation of new authorities, including the adoption of the Single Resolution Mechanism (the SRM) in October 2013, pursuant to which the BNP Paribas Group is under the direct supervision of the ECB;
- more stringent capital and liquidity requirements (particularly for global systemically important banks such as the BNP Paribas Group), as well as changes to the risk-weighting methodologies and the methods of using internal models that have led, could have led, or could lead to increased capital requirements;
- restrictions on certain types of activities considered as speculative undertaken by commercial banks that are prohibited or need to be ring-fenced in subsidiaries (particularly proprietary trading) and are subject to prudential requirements and autonomous funding;
- prohibitions or restrictions on fees for certain types of financial products or activities;
- enhanced recovery and resolution regimes, in particular the Bank Recovery and Resolution Directive of 15 May 2014 (the "BRRD"), as amended from time to time, which strengthens powers to prevent and resolve banking crises in order to ensure that losses are borne largely by the creditors and shareholders of the banks and in order to keep the costs incurred by taxpayers to a minimum;
- the establishment of the national resolution funds by the BRRD and the creation of the Single Resolution Board (the SRB) by the European Parliament and Council of the European Union in a resolution dated 15 July 2014 (the SRM Regulation), as amended from time to time, which can initiate resolution proceedings for banking institutions such as the BNP Paribas Group, and the Single Resolution Fund (the SRF), the financing of which by the BNP Paribas Group (up to its annual contribution) can be significant;
- the establishment of national deposit guarantee schemes and a proposed European deposit guarantee scheme or deposit insurance which will gradually cover all or part of the guarantee schemes of participating countries;
- increased internal control and reporting requirements with respect to certain activities;
- the implementation of regulatory stress tests (including in relation to climate change risk) which could lead to additional regulatory capital requirements (see *Market Risk Stress Testing Framework* in section 5.7 *Market risk*);
- greater powers granted to the relevant authorities to combat money laundering and terrorism financing, in particular through the creation of a new European anti-money laundering authority which should be established in 2023 and commence its activities between 2024 and 2026;
- more stringent governance and conduct of business rules and restrictions and increased taxes on employee compensation over specified levels;
- measures to improve the transparency, efficiency and integrity of financial markets and in particular the regulation of high frequency trading, more extensive market abuse regulations, increased regulation of certain types of financial products including mandatory reporting of derivative and securities financing transactions, requirements either to mandatorily clear, or otherwise mitigate risks in relation to, over-the-counter derivative transactions (including through posting of collateral in respect of non-centrally cleared derivatives);
- the taxation of financial transactions;
- enhanced protection of personal data and cybersecurity requirements;
- enhanced disclosure requirements, including through the introduction of new disclosure requirements on (i) how banking groups providing asset management services such as the BNP Paribas Group integrate sustainability risks or negative impacts, sustainable investment objectives or the promotion of environmental or social attributes when making investment

decisions, and (ii) how and to what extent banking groups themselves finance or develop economic activities that can be considered environmentally sustainable as defined in the European Taxonomy; and

- strengthened transparency and disclosure requirements on CSR risk management, including physical and transitional risks related to climate change, and the introduction of new requirements for the integration of climate risk into the risk measurement and management systems of banking groups, including through the publication of proposals for banks to manage and disclose climate risk.

These measures may have a significant adverse financial impact. For example, the introduction of a required contribution to the Single Resolution Fund resulted in a substantial additional expense for the BNP Paribas Group since its inception (the Group made a EUR 1,256 million contribution to the Single Resolution Fund in 2022).

Measures relating to the banking sector could be further amended, expanded or strengthened. Moreover, additional measures could be adopted in other areas. It is impossible to predict what additional measures will be adopted or what their exact content will be, and, given the complexity of the issues and the uncertainty surrounding them, to determine their impact on the BNP Paribas Group. The effect of these measures, whether already adopted or that may be adopted in the future, has been and could continue to be a decrease in the BNP Paribas Group's ability to allocate its capital and capital resources to financing, limit its ability to diversify risks, reduce the availability of certain financing and liquidity resources, increase the cost of financing, increase the cost of compliance, increase the cost or reduce the demand for the products and services offered by the BNP Paribas Group, require the BNP Paribas Group to proceed with internal reorganisations, structural changes or reallocations, affect the ability of the BNP Paribas Group to carry on certain activities or to attract and/or retain talent and, more generally, affect its competitiveness and profitability, which could have an impact on its activities, financial condition and operating results. As a recent example on 27 October 2021, the European Commission presented a legislative package to finalise the implementation within the European Union of the Basel III agreement adopted by the Group of Central Governors and Heads of Supervision (GHOS) on 7 December 2017. On 8 November 2022, the Council adopted its position on the Commission's proposals and is currently negotiating with the European Parliament to agree on a final version of the texts. In the impact assessment accompanying the legislative package, the European Commission estimated, on the basis of an EBA impact study dated December 2020 and of additional European Commission estimates for some EU specific adjustments, that the implementation of the final Basel III standards may result in an average increase in total minimum capital requirements ranging between 6.4% and 8.4% after full implementation of the reform. On the basis of the EBA's updated impact analysis taking into account the combined effect of the reform and the potential consequences of the health crisis, the European Commission opted to apply the new capital requirements to EU banks as from 1 January 2025, with a phase-in period during which the requirements will be gradually increased through 2030 (and 2032 for certain requirements). On this basis, the Group has indicated a potential increase of 8% in its risk-weighted assets at the date of the first application announced for 1 January 2025, which implies a potential 8% increase in total minimum capital requirements resulting from the finalisation of Basel 3 (fully loaded). This estimate is subject to change depending on potential changes in the draft text, in the Group and the macroeconomic context.

The BNP Paribas Group is subject to extensive and evolving regulatory regimes in the jurisdictions in which it operates. The BNP Paribas Group faces the risk of changes in legislation or regulation in all of the countries in which it operates, including, but not limited to, the following: monetary, liquidity, interest rate and other policies of central banks and regulatory authorities; changes in government or regulatory policy that may significantly influence investor decisions, in particular in the markets in which the BNP Paribas Group operates; changes in regulatory requirements applicable to the financial industry, such as rules relating to applicable governance, remunerations, capital adequacy and liquidity frameworks, restrictions on activities considered as speculative and recovery and resolution frameworks; changes in securities regulations as well as in financial reporting, disclosure and market abuse regulations; changes in the regulation of certain types of transactions and investments, such as derivatives and securities financing transactions and money market funds; changes in the regulation of market infrastructures, such as trading venues, central counterparties, central securities depositories, and payment and settlement systems; changes in the regulation of payment services, crowdfunding and fintech; changes in the regulation of protection of personal data and cybersecurity; changes in tax legislation or the application thereof; changes in accounting norms; changes in rules and procedures relating to internal controls, risk management and compliance; and expropriation, nationalisation, price controls, exchange controls, confiscation of assets and changes in legislation relating to foreign ownership.

These changes, the scope and implications of which are highly unpredictable, could substantially affect the BNP Paribas Group and have an adverse effect on its business, financial condition and results of operations. Certain reforms not directed specifically at financial institutions, such as measures relating to the funds industry or promoting technological innovation (such as open data projects), could facilitate the entry of new players in the financial services sector or otherwise affect the BNP Paribas Group's business model, competitiveness and profitability, which could in turn affect its financial condition and results of operations.

6.2 The BNP Paribas Group may incur substantial fines and other administrative and criminal penalties for non-compliance with applicable laws and regulations, and may also incur losses in related (or unrelated) litigation with private parties.

The BNP Paribas Group is exposed to regulatory compliance risk, *i.e.* the failure to comply fully with the laws, regulations, codes of conduct, professional norms or recommendations applicable to the financial services industry. This risk is exacerbated by the adoption by different countries of multiple and occasionally diverging and even conflicting legal or regulatory requirements. Besides damage to the BNP Paribas Group's reputation and private rights of action (including class actions), non-compliance could lead to material legal proceedings, fines and expenses (including fines and expenses in excess of recorded provisions), public reprimand, enforced suspension of operations or, in extreme cases, withdrawal by the authorities of operating licences. This risk is further exacerbated by continuously increasing regulatory scrutiny of financial institutions as well as substantial increases in the quantum of applicable fines and penalties. Moreover, litigation by private parties against financial institutions has substantially increased in recent years. Accordingly, the BNP Paribas Group faces significant legal risk in its operations, and the volume and amount of damages claimed in litigation, regulatory proceedings and other adversarial proceedings against financial services firms have substantially increased in recent years and may increase further. The BNP Paribas Group may record provisions in this respect as indicated in note 4.p to the consolidated financial statements for the year ending 31 December 2022 (*Provisions for contingencies and charges*).

In this respect, on 30 June 2014 the BNP Paribas Group entered into a series of agreements with, and was the subject of several orders issued by, US federal and New York state government agencies and regulatory authorities in settlement of investigations into violations of US laws and regulations regarding economic sanctions. The fines and penalties imposed on the BNP Paribas Group as part of this settlement included, among other things, the payment of monetary penalties amounting in the aggregate to USD 8.97 billion (EUR 6.6 billion) and guilty pleas by BNP Paribas SA, the parent company of the BNP Paribas Group, to charges of having violated US federal criminal law and New York State criminal law. Following this settlement, the BNP Paribas Group remains subject to increased scrutiny by regulatory authorities (including *via* the presence of an independent consultant within the BNP Paribas Group) who are monitoring its compliance with a remediation plan agreed with them.

The BNP Paribas Group is currently involved in various litigations and investigations as summarised in note 7.b *Legal proceedings and arbitration* to the financial statements for the year ended 31 December 2022. It may become involved in further such matters at any point. No assurance can be given that an adverse outcome in one or more of such matters would not have a material adverse effect on the BNP Paribas Group's operating results for any particular period.

6.3 The BNP Paribas Group could experience an unfavourable change in circumstances, causing it to become subject to a resolution proceeding: BNP Paribas Group security holders could suffer losses as a result.

The BRRD, SRM Regulation, the ordinance of 20 August 2015 and the ordinance of 21 December 2020, as amended from time to time, confer upon the ACPR or the SRB the power to commence resolution proceedings for a banking institution, such as the BNP Paribas Group, with a view to ensure the continuity of critical functions, to avoid the risks of contagion and to recapitalise or restore the viability of the institution. These powers are to be implemented so that, subject to certain exceptions, losses are borne first by shareholders, then by holders of additional capital instruments qualifying as Tier 1 and Tier 2 (such as subordinated bonds), then by the holders of non-preferred senior debt and finally by the holders of senior preferred debt, all in accordance with the order of their claims in normal insolvency proceedings. For reference, the BNP Paribas Group's medium- to long-term wholesale financing at 31 December 2022 consisted of the following: EUR 12.5 billion in hybrid Tier 1 debt, EUR 22.4 billion in Tier 2 subordinated debt, EUR 72.2 billion in senior unsecured non-preferred debt, EUR 60.7 billion in senior unsecured preferred debt and EUR 12.7 billion in senior secured debt.

Resolution authorities have broad powers to implement resolution measures with respect to institutions and groups subject to resolution proceedings, which may include (without limitation): the total or partial sale of the institution's business to a third party or a bridge institution, the separation of assets, the replacement or substitution of the institution as obligor in respect of debt instruments, the full or partial write-down of capital instruments, the dilution of capital instruments through the issuance of new equity, the full or partial write-down or conversion into equity of debt instruments, modifications to the terms of debt instruments (including altering the maturity and/or the amount of interest payable and/or imposing a temporary suspension on payments), discontinuing the listing and admission to trading of financial instruments, the dismissal of managers or the appointment of a special manager (*administrateur spécial*).

Certain powers, including the full or partial write-down of capital instruments, the dilution of capital instruments through the issuance of new equity, the full or partial write-down or conversion into equity of additional capital instruments qualifying as Tier 1 and Tier 2 (such as subordinated bonds), can also be exercised as a precautionary measure, outside of resolution proceedings and/or pursuant to the European Commission's State Aid framework if the institution requires exceptional public financial support.

The implementation of these tools and powers with respect to the BNP Paribas Group may result in significant structural changes to the BNP Paribas Group (including as a result of asset or business sales or the creation of bridge institutions) and in a partial or total write-down, modification or variation of claims of shareholders and creditors. Such powers may also result, after any transfer of all or part of the BNP Paribas Group's business or separation of any of its assets, in the holders of securities (even in the absence of any such write-down or conversion) being left as the creditors of the BNP Paribas Group whose remaining business or assets are insufficient to support the claims of all or any of the creditors of the Group.

7. RISKS RELATED TO THE BNP PARIBAS GROUP'S GROWTH IN ITS CURRENT ENVIRONMENT

7.1 Should the BNP Paribas Group fail to implement its strategic objectives or to achieve its published financial objectives, or should its results not follow stated expected trends, the trading price of its securities could be adversely affected.

In connection with the publication of its results for the year ended 31 December 2021, the BNP Paribas Group announced its 2025 strategic plan. The plan includes financial and operational objectives. When it published its results for the year ended 31 December 2022, the Group raised its objectives for 2025. The BNP Paribas Group's actual results could vary significantly from these trends for a number of reasons, including the occurrence of one or more of the risk factors described elsewhere in this section, in particular as a result of macroeconomic developments such as inflation, the invasion of Ukraine and the residual consequences of the health crisis which have had and could continue to have major repercussions on the economic outlook and cause financial market disruptions. If the BNP Paribas Group's results do not follow these trends, its financial condition and the value of its securities, as well as its financing costs, could be affected.

Additionally, the Group is pursuing an ambitious corporate social responsibility (CSR) policy and is committed to making a positive impact on society with concrete achievements. In 2022, BNP Paribas strengthened its commitment to a sustainable economy and accelerated decarbonation strategies, with the signing of the Net-Zero Banking Alliance, the Net-Zero Asset Owner Alliance, and the Net-Zero Asset Manager initiative. The Group is thus taking strong positions, as a founding member of the United Nations Principles for Responsible Banking, which commits it to align its strategy with the Paris Agreement and the Sustainable Development Goals (SDGs). As part of the Group's 2022-2025 strategic plan, it aims to mobilise EUR 350 billion in ESG- related loans and bond issuances (loans to companies, institutions and individuals covering environmental and social issues and annual sustainable bonds issuances) and to have EUR 300 billion in sustainable responsible investments under management by 2025 (BNP Paribas Asset Management European open funds classified articles 8 and 9 as defined by SFDR). In addition, in 2019, as part of the fight against climate change, the BNP Paribas Group made new commitments to reduce its exposure to thermal coal to zero by 2030 in the OECD and by 2040 for the rest of the world. At the end of 2022, the BNP Paribas Group published its first climate alignment report and its targets for reducing carbon emission intensity by 2025 and is taking the necessary measures to align its credit portfolios with its carbon neutrality commitments. Finally, in January 2023, the Group strengthened its social commitment policy and is working alongside its clients as part of a global approach to the transition to a sustainable, low-carbon economy. Building on the expertise developed through the Low-Carbon Transition Group, the Group announced new objectives that will result in an acceleration in the financing of low-carbon energy production and a reduction in the financing of fossil fuel production by 2030. If the Group fails to meet these targets, which depend in part on factors beyond its control, its reputation could be affected.

7.2 The BNP Paribas Group may experience difficulties integrating businesses following acquisition transactions and may be unable to realise the benefits expected from such transactions.

The BNP Paribas Group engages in acquisition and combination transactions on a regular basis. The BNP Paribas Group's most recent major such transactions were the integration of Deutsche Bank's *Prime Brokerage & Electronic Execution* platform in 2019, the acquisition of 100% of Exane, previously 50% owned by BNP Paribas, finalised on 13 July 2021, and the acquisition of 100% of Floa, a subsidiary of Casino and Crédit Mutuel Alliance Fédérale (*via* the Banque Fédérative du Crédit Mutuel – BFCM) and one of the French leaders in innovative payments, finalised on 1 February 2022. These operational integration activities resulted, in 2022, in restructuring costs of EUR 188 million. Successful integration and the realisation of synergies require, among other things, proper coordination of business development and marketing efforts, retention of key members of management, policies for effective recruitment and training as well as the ability to adapt information and computer systems. Any difficulties encountered in combining operations could result in higher integration costs and lower savings or revenues than expected. There will accordingly be uncertainty as to the extent to which anticipated synergies will be achieved and the timing of their realisation. Moreover, the integration of the BNP Paribas Group's existing operations with those of the acquired operations could interfere with its respective businesses and divert management's attention from other aspects of the BNP Paribas Group's business, which could have a negative impact on the BNP Paribas Group's business and results. In some cases, moreover, disputes relating to acquisitions may have an adverse impact on the integration process or have other adverse consequences, including financial ones.

Although the BNP Paribas Group undertakes an in-depth analysis of the companies it plans to acquire, such analyses often cannot be complete or exhaustive. In the event that the BNP Paribas Group is unable to conduct comprehensive due diligence prior to an acquisition, it may acquire doubtful or troubled assets or businesses that may be unprofitable or have certain potential risks that only materialise after the acquisition, The acquisition of an unprofitable business or a business with materialised risks may have a significant adverse effect on the BNP Paribas Group's overall profitability and may increase its liabilities.

7.3 The BNP Paribas Group's current environment may be affected by the intense competition amongst banking and non-banking operators, which could adversely affect the BNP Paribas Group's revenues and profitability.

Competition is intense in all of the BNP Paribas Group's primary business areas in France and the other countries in which it conducts a substantial portion of its business, including other European countries and the United States. Competition in the banking industry could intensify as a result of consolidation in the financial services area, as a result of the presence of new players in the payment and the financing services area or the development of crowdfunding platforms, as well as the continuing evolution of consumer habits in the banking sector. While the BNP Paribas Group has launched initiatives in these areas, such as the debut of Hello bank! and its acquisition of Nickel or Floa, competitors subject to less extensive regulatory requirements or to less strict capital requirements (*e.g.* debt funds, shadow banks), or benefiting from economies of scale, data synergies, technological innovation (*e.g.* internet and mobile operators, digital platforms, fintechs), or free access to customer financial data could be more competitive by offering lower prices and more innovative services to address the new needs of consumers. New technologies that facilitate or transform transaction processes and payment systems, such as blockchain technologies and related services, or that could significantly impact the fundamental mechanisms of the banking system, such as central bank digital currencies, have been developed in recent years or could be developed in the near future. While it is difficult to predict the effects of these developments and the regulations that apply to them, the use of such technology could nevertheless reduce the market share of banks, including the BNP Paribas Group, secure investments that otherwise would have used technology used by more established financial institutions, such as the BNP Paribas Group or, more broadly, lead to the emergence of a different monetary system in which the attractiveness of using established financial institutions such as the BNP Paribas Group would be affected. If such developments continue to gain momentum, particularly with the support of governments and central banks, if the BNP Paribas Group is unable to respond to the competitive environment in France or in its other major markets by offering more attractive, innovative and profitable product and service solutions than those offered by current competitors or new entrants or if some of these activities were to be carried out by institutions other than banks, it may lose market share in key areas of its business or incur losses on some or all of its activities. In addition, downturns in the economies of its principal markets could add to the competitive pressure, through, for example, increased price pressure and lower business volumes for the BNP Paribas Group and its competitors. It is also possible that the imposition of more stringent requirements (particularly capital requirements and business restrictions) on large or systemically significant financial institutions that new players may not be subject to could lead to distortions in competition in a manner adverse to large private-sector institutions such as the BNP Paribas Group.

7.4 The BNP Paribas Group could experience business disruption and losses due to risks related to environmental, social and governance ("ESG") issues, particularly relating to climate change, such as transition risks, physical risks or liability risks.

The BNP Paribas Group is exposed to risks related to climate change, either directly through its own operations or indirectly through its financing and investment activities. There are two main types of risks related to climate change: (i) transition risks, which result from changes in the behaviour of economic and financial actors in response to the implementation of energy policies or technological changes for a transition to a low-carbon economy; and (ii) physical risks, which result from the direct impact of climate change on people and property through extreme weather events or long-term risks such as rising water levels or increasing temperatures. Physical risk can spread throughout the value chain of the BNP Paribas Group's clients, which can lead to a payment default and thus generate financial losses, while the process of reducing emissions is likely to have a significant impact on all sectors of the economy by affecting the value of financial assets and corporate profits.

In addition, liability risks may flow from both categories of risk. They correspond to the financial compensation that can be claimed by individuals, companies, governments or non-governmental organisations ("**NGOs**") that may affected by climate change events, activities or effects and who would seek to hold actors in the financial sector accountable for financing, facilitating or otherwise contributing to such events, activities, or effects. In recent years, activism by shareholders, activist funds, NGOs and others, particularly on ESG issues, has been directed against many public companies. These initiatives include requiring companies to disclose material information about their ESG-related actions and commitments and, in some cases, seeking to force them to make strategic and business changes. In some jurisdictions, financial sector actors may also face legal action from individuals, companies, governments or NGOs, groups or private persons.

Policy and regulatory initiatives and frameworks, including at the French, European Union and international levels, concerning climate change and sustainability, as well as voluntary and joint commitments through industry alliances, create increasing legal, regulatory and reputational risks. The ESG regulatory framework is constantly changing, evolving and continuing to evolve rapidly. It includes, among other things, requirements in terms of disclosure and the integration of climate risks into risk measurement and management systems, as well as a general duty of care (see section 6.1 *Laws and regulations adopted in recent years, as well as current and future legislative and regulatory developments, may significantly impact the BNP Paribas Group and the financial and economic environment in which it operates*). These initiatives and frameworks overlap in some respects and are not always consistent in their objectives, resulting in regulatory complexity and, in some cases, a lack of clarity and difficulty in interpretation. Non-compliance by the Group in its business and disclosure with these and other regulatory requirements, as well as any other regulations concerning the transition to a lower carbon economy, climate change, sustainability or energy-related investments, could have a negative impact on its business, the value of its investments and its reputation.

BNP Paribas is progressively integrating the assessment of these risks into its risk management system. The Group monitors these risks in the conduct of its business, in the conduct of its counterparties' business, and in its investments on its own behalf and on behalf of third parties. In this respect, the specific credit policies and the General Credit Policy have been enhanced as from 2012 and 2014, respectively, with the addition of clauses relating to social and environmental responsibility. In addition, the development of regulatory requirements in this area could lead to an increase in litigation against financial institutions in relation to climate change and other related issues. The Group could thus be held liable for transaction execution failings such as inadequate assessment of the environmental, social and governance criteria of certain financial products.

In addition, sectors specific policies and policies excluding certain environmental, social and governance (ESG) sectors from financing have also been put in place and the BNP Paribas Group will have to adapt its activities and the selection of its counterparties appropriately in order to achieve its strategic objectives (see section 7.1 *Should the BNP Paribas Group fail to implement its strategic objectives or to achieve its published financial objectives, or should its results not follow stated expected trends, the trading price of its securities could be adversely affected*).

Despite the actions taken by the BNP Paribas Group to monitor risks and combat climate change, the physical, transitional or liability risks related to climate change, or any delay or failure to implement them, could have a material adverse effect on the Group's business, financial condition, or reputation.

7.5 Changes in certain holdings in credit or financial institutions could have an impact on the BNP Paribas Group's financial position.

Certain classes of assets may carry a high risk-weight of 250%. They include: credit or financial institutions consolidated under the equity method within the prudential scope (excluding insurance); significant financial interest in credit or financial institutions in which the BNP Paribas Group holds a stake of more than 10%; and deferred tax assets that rely on future profitability and arise from temporary differences.

The risk-weighted assets carrying a risk-weight of 250% amounted to EUR 20 billion at 31 December 2022, or 3% of the total risk-weighted assets of the BNP Paribas Group. If the BNP Paribas Group increases the amount of heavy risk-weighted assets (either by increasing the proportion of such heavy risk-weighted assets in its overall asset portfolio or due to an increase of the regulatory risk-weighting applicable to these assets), its capital adequacy ratios could decrease.

FORWARD-LOOKING STATEMENTS

This Universal Registration Document contains forward-looking statements. Statements that are not historical facts, including statements about BNP Paribas or the BNP Paribas Group's beliefs and expectations, are forward-looking statements. These statements are based on current plans, estimates and projections, and therefore undue reliance should not be placed on them. Forward-looking statements speak only as of the date they are made. Saved as required by the UK Prospectus Regulation Rules, the Listing Rules and the Disclosure and Transparency Rules as set out in the Financial Conduct Authority's Handbook, BNP Paribas and the BNP Paribas Group undertake no obligation to update publicly any of them in light of new information or future events.

5.2 Capital management and capital adequacy

SCOPE OF APPLICATION

The prudential scope of application defined in Regulation (EU) No. 575/2013 on capital requirements is not the same as the accounting scope of consolidation whose composition concerns the application of IFRS as adopted by the European Union. The notes to the consolidated financial statements cover the accounting consolidation scope.

The consolidation principles and the scope of consolidation in accordance with the accounting consolidation method used are described respectively in notes 1.b and 7.l to the consolidated financial statements.

PRUDENTIAL SCOPE

In accordance with banking regulation, BNP Paribas Group has defined a prudential scope to monitor capital ratios calculated on a consolidated basis. Its specificities are as follows:

- insurance companies (primarily BNP Paribas Cardif and its subsidiaries) that are fully consolidated within the accounting scope are consolidated under the equity method in the prudential scope;
- unregulated entities of the real estate services (BNP Paribas Real Estate) and long-term vehicle leasing (Arval) businesses that are fully consolidated within the accounting scope are consolidated under the equity method within the prudential scope;
- jointly controlled entities are consolidated under the equity method in the accounting scope and under the proportional consolidation method in the prudential scope;
- the BancWest entities covered by the agreement with BMO financial group are fully consolidated without the application of IFRS5 (see note 7.d *Discontinued activities* to the consolidated financial statements).

The differences between the accounting and prudential scopes of consolidation are summarised in the table below.

TABLE 7: DIFFERENCES BETWEEN THE ACCOUNTING AND PRUDENTIAL SCOPES (EU LI3)

						31 December 2022
		Method of regulatory consolidation				
Name of the entity	**Method of accounting consolidation**	**Full consolidation**	**Proportional consolidation**	**Equity method**	**Neither consolidated nor deducted**	**Description of the entity**
BNP Paribas Cardif and its subsidiaries(*)	Full consolidation			x		Insurance
BNPP SB Re	Full consolidation			x		Insurance
BNPP Vartry Reinsurance DAC	Full consolidation			x		Insurance
Decart Re Ltd	Full consolidation			x		Insurance
Darnell DAC	Full consolidation			x		Insurance
Greenval Insurance DAC	Full consolidation			x		Insurance
Le Sphinx Assurances Luxembourg SA	Full consolidation			x		Insurance
Greenstars BNPP	Full consolidation			x		Insurance
BNP Paribas Real Estate and its non-regulated subsidiaries(*)	Full consolidation			x		Real-estate services
Arval and its non-regulated subsidiaries(*)	Full consolidation			x		Long-term car leasing
Collective investment funds(**)	Full consolidation				x	Asset management
2SF – Société des Services Fiduciaires	Equity method		x			Retail Banking
Bantas Nakit AS	Equity method		x			Retail Banking
Euro Securities Partners	Equity method		x			Retail Banking
Partecis	Equity method		x			Retail Banking
Baroda BNPP AMC Private Ltd	Equity method		x			Asset management
FScholen	Equity method		x			Corporate and Institutional Banking
Lyf SA	Equity method		x			Internet financial services
Lyf SAS	Equity method		x			Internet financial services
Services Logiciels d'Intégration Boursière	Equity method		x			Securities custody
Genius Auto Finance Co Ltd	Equity method		x			Specialised loans
Securitisation funds UCI and RMBS Prado	Equity method		x			Specialised loans
Union de Creditos Inmobiliarios SA	Equity method		x			Specialised loans
United Partnership	Equity method		x			Specialised loans
Zhejiang Wisdom Puhua Financial Leasing Co Ltd	Equity method		x			Specialised loans

(*) BNP Paribas Cardif, BNP Paribas Real Estate and Arval subsidiaries are identified in note 7.I to the consolidated financial statements (footnote (2)).
(**) Collective investment funds are identified in note 7.I to the consolidated financial statement (footnote (4)).

The table below shows the restatements between the accounting and prudential scopes of consolidation for each balance sheet item.

TABLE 8: CONSOLIDATED BALANCE SHEET TO PRUDENTIAL BALANCE SHEET RECONCILIATION (EU LI1/EU CC2)

	31 December 2022						
In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	FinRep prudential scope	Adjustment related to the impact of IFRS 5(**)	Prudential scope	Reference to capital table (see Appendix 2)
ASSETS							
Cash and amounts due from central banks	318,560		9	318,569	2,751	321,320	
Financial instruments at fair value through profit or loss							
Securities	166,077	591	278	166,946	840	167,786	
of which own funds instruments in credit or financial institutions more than 10%-owned	*241*	*591*		*832*		*832*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*3,022*			*3,022*	*18*	*3,040*	*2*
Loans and repurchase agreements	191,125	1,239	(340)	192,024	6	192,030	
Derivative financial instruments	327,932	643	(217)	328,358	349	328,707	
Derivatives used for hedging purposes	25,401	(62)	342	25,681	6	25,687	
Financial assets at fair value through equity							
Debt securities	35,878	2,692		38,570	4,503	43,073	
of which own funds instruments in credit or financial institutions more than 10%-owned	*44*	*2,690*		*2,734*		*2,734*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned							*2*
Equity securities	2,188			2,188		2,188	
of which own funds instruments in credit or financial institutions more than 10%-owned	*788*			*788*		*788*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*812*			*812*		*812*	*2*
Financial assets at amortised cost							
Loans and advances to credit institutions	32,616		(142)	32,474	144	32,618	
of which own funds instruments in credit or financial institutions more than 10%-owned	*252*		*(75)*	*177*		*177*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned							*2*
Loans and advances to customers	857,020	4,752	25,895	887,667	56,084	943,751	
of which own funds instruments in credit or financial institutions more than 10%-owned	*73*	*25*	*(73)*	*25*		*25*	*1*

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	FinRep prudential scope	Adjustment related to the impact of IFRS 5(**)	Prudential scope	Reference to capital table (see Appendix 2)
							31 December 2022
of which own funds instruments in credit or financial institutions less than 10%-owned							*2*
Debt securities	114,014		(303)	113,711	16,779	130,490	
of which own funds instruments in credit or financial institutions more than 10%-owned	*100*			*100*		*100*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*74*			*74*		*74*	*2*

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	FinRep prudential scope	Adjustment related to the impact of IFRS 5(**)	Prudential scope	Reference to capital table (see Appendix 2)
							31 December 2022
Remeasurement adjustment on interest-rate risk hedged portfolios	(7,477)			(7,477)		(7,477)	
Financial investments and other assets of insurance activities	247,403	(247,403)					
Current and deferred tax assets	5,893	(166)	(114)	5,613	408	6,021	
Accrued income and other assets	209,092	(4,011)	(3,611)	201,470	1,607	203,077	
Equity-method investments	6,263	3,422	3,350	13,035		13,035	
of which investments in credit or financial institutions	*5,629*	*3,216*	*(724)*	*8,121*		*8,121*	*1*
of which goodwill	*503*	*208*	*918*	*1,629*		*1,629*	*3*
Property, plant and equipment and investment property	38,468	(478)	(27,913)	10,077	452	10,529	
Intangible assets	3,790	(293)	(138)	3,359	215	3,574	
of which intangible assets excluding mortgage servicing rights	*3,790*	*(293)*	*(138)*	*3,359*	*192*	*3,551*	*3*
Goodwill	5,294	(207)	(919)	4,168	2,695	6,863	3
Assets held for sale(**)	86,839			86,839	(86,839)		
TOTAL ASSETS	**2,666,376**	**(239,281)**	**(3,823)**	**2,423,272**	**-**	**2,423,272**	
LIABILITIES							
Deposits from central banks	3,054			3,054		3,054	
Financial instruments at fair value through profit or loss							
Securities	99,155			99,155		99,155	
Deposits and repurchase agreements	234,076			234,076		234,076	
Issued debt securities	70,460	(4,856)	(195)	65,409		65,409	
of which liabilities qualifying for Tier 1 capital							*4*
of which liabilities qualifying for Tier 2 capital	*20*			*20*		*20*	*5*
Derivative financial instruments	300,121	1,023	(208)	300,936	461	301,397	
Derivatives used for hedging purposes	40,001	(58)	59	40,002	307	40,309	
Financial liabilities at amortised cost							
Deposit from credit institutions	124,718	(7,009)	(995)	116,714	260	116,974	
Deposit from customers	1,008,054	1,115	5,398	1,014,567	74,202	1,088,769	
Debt securities	154,143	1,222	(3,175)	152,190	101	152,291	
Subordinated debt	24,156	(1,769)	1	22,388		22,388	
of which liabilities qualifying for Tier 1 capital(***)							*4*
of which liabilities qualifying for Tier 2 capital(****)	*23,865*			*23,865*		*23,865*	*5*
Remeasurement adjustment on interest-rate risk hedged portfolios	(20,201)			(20,201)		(20,201)	
Current and deferred tax liabilities	3,054	656	(550)	3,160	85	3,245	
Accrued expenses and other liabilities	185,456	(2,427)	(3,725)	179,304	1,385	180,689	
Technical reserves and other insurance liabilities	226,532	(226,532)					

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	FinRep prudential scope	Adjustment related to the impact of IFRS 5(**)	Prudential scope	Reference to capital table (see Appendix 2)
							31 December 2022
Provisions for contingencies and charges	10,040	(510)	(433)	9,097	201	9,298	
Liabilities associated with assets held for sale(**)	77,002			77,002	(77,002)		
TOTAL LIABILITIES	**2,539,821**	**(239,145)**	**(3,823)**	**2,296,853**	**-**	**2,296,853**	

							31 December 2022
In millions of euros	**Accounting scope**	**Adjustment of insurance companies**	**Other adjustments related to consolidation methods(*)**	**FinRep prudential scope**	**Adjustment related to the impact of IFRS 5(**)**	**Prudential scope**	**Reference to capital table (see Appendix 2)**
EQUITY							
Share capital, additional paid-in capital and retained earnings	*115,149*	*1*	*(1)*	*115,149*		*115,149*	*6*
Net income Group share for the period	*10,196*			*10,196*		*10,196*	*7*
Total capital, retained earnings and net income Group share for the period	**125,345**	**1**	**(1)**	**125,345**		**125,345**	
Changes in assets and liabilities recognised directly in equity	*(3,553)*	*(1)*	*1*	*(3,553)*		*(3,553)*	
Shareholders' equity	**121,792**			**121,792**		**121,792**	
Minority interests	**4,763**	**(136)**		**4,627**		**4,627**	**8**
TOTAL CONSOLIDATED EQUITY	**126,555**	**(136)**	**-**	**126,419**	**-**	**126,419**	
TOTAL LIABILITIES AND EQUITY	**2,666,376**	**(239,281)**	**(3,823)**	**2,423,272**	**-**	**2,423,272**	

(*) Adjustment of jointly controlled entities under proportional consolidation for prudential scope, which are consolidated using the equity method within the accounting scope, and of the unregulated entities of BNP Paribas Real Estate and Arval consolidated using the equity method within the prudential scope which are fully consolidated within the accounting scope.

(**) See note 7.d to the consolidated financial statement.

(***) Debt eligible as Tier 1 capital is recognised in equity.

(****) Debt eligible as Tier 2 capital is presented as its notional value (excluding accrued interest and revaluation of the hedged component).

31 December 2021

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	FinRep prudential scope	Adjustment related to the impact of IFRS 5(**)	Prudential scope	Reference to capital table (see Appendix 2)
ASSETS							
Cash and amounts due from central banks	347,883		636	348,519	14,654	363,173	
Financial instruments at fair value through profit or loss							
Securities	191,507	547	466	192,520	628	193,148	
of which own funds instruments in credit or financial institutions more than 10%-owned	*417*	*547*		*964*		*964*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*2,315*			*2,315*	*24*	*2,339*	*2*
Loans and repurchase agreements	249,808	2,970	(275)	252,503	33	252,536	
Derivative financial instruments	240,423	654	(137)	240,940	202	241,142	
Derivatives used for hedging purposes	8,680	(48)	(13)	8,619	33	8,652	
Financial assets at fair value through equity							
Debt securities	38,906	2,691		41,597	5,009	46,606	
of which own funds instruments in credit or financial institutions more than 10%-owned		*2,690*		*2,690*		*2,690*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*10*			*10*		*10*	*2*

31 December 2021

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	FinRep prudential scope	Adjustment related to the impact of IFRS 5(**)	Prudential scope	Reference to capital table (see Appendix 2)
Equity securities	2,558			2,558		2,558	
of which own funds instruments in credit or financial institutions more than 10%-owned	*842*			*842*		*842*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*1,096*			*1,096*		*1,096*	*2*
Financial assets at amortised cost							
Loans and advances to credit institutions	21,751		183	21,934	52	21,986	
of which own funds instruments in credit or financial institutions more than 10%-owned	*229*		*(53)*	*177*		*177*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned							*2*
Loans and advances to customers	814,000	3,863	28,786	846,649	50,054	896,703	
of which own funds instruments in credit or financial institutions more than 10%-owned	*104*	*25*	*(104)*	*25*		*25*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned							
Debt securities	108,510		869	109,379	15,669	125,048	
of which own funds instruments in credit or financial institutions more than 10%-owned	*100*			*100*		*100*	*1*
of which own funds instruments in credit or financial institutions less than 10%-owned	*71*			*71*		*71*	*2*
Remeasurement adjustment on interest-rate risk hedged portfolios	3,005		44	3,049		3,049	
Financial investments and other assets of insurance activities	280,766	(280,766)					
Current and deferred tax assets	5,866	(22)	(53)	5,791	234	6,025	
Accrued income and other assets	179,123	(3,997)	(3,264)	171,862	1,501	173,363	
Equity-method investments	6,528	5,577	2,719	14,824		14,824	
of which investments in credit or financial institutions	*5,970*	*5,350*	*(483)*	*10,837*		*10,837*	*1*
of which goodwill	*433*	*222*	*881*	*1,536*		*1,536*	*3*
Property, plant and equipment and investment property	35,083	(495)	(24,281)	10,307	428	10,735	
Intangible assets	3,659	(231)	(119)	3,309	237	3,546	
of which intangible assets excluding mortgage servicing rights	*3,659*	*(231)*	*(119)*	*3,309*	*211*	*3,520*	*3*
Goodwill	5,121	(222)	(881)	4,018	2,533	6,551	3
Assets held for sale(**)	91,267			91,267	(91,267)		
TOTAL ASSETS	**2,634,444**	**(269,479)**	**4,680**	**2,369,645**	**-**	**2,369,645**	

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	FinRep prudential scope	Adjustment related to the impact of IFRS 5(**)	Prudential scope	Reference to capital table (see Appendix 2)
							31 December 2021
LIABILITIES							
Deposits from central banks	1,244			1,244		1,244	
Financial instruments at fair value through profit or loss							
Securities	112,338			112,338		112,338	
Deposits and repurchase agreements	293,456			293,456		293,456	
Issued debt securities	70,383	(6,305)	(134)	63,944		63,944	
of which liabilities qualifying for Tier 1 capital	*205*			*205*		*205*	*4*
of which liabilities qualifying for Tier 2 capital	*40*			*40*		*40*	*5*
Derivative financial instruments	237,397	517	(135)	237,779	277	238,056	
Derivatives used for hedging purposes	10,076	(2)	137	10,211	58	10,269	
Financial liabilities at amortised cost							
Deposit from credit institutions	165,699	(6,394)	63	159,368	145	159,513	
Deposit from customers	957,684	1,190	8,089	966,963	72,639	1,039,602	
Debt securities	149,723	1,241	424	151,388	258	151,646	
Subordinated debt	24,720	(1,772)	1	22,949		22,949	
of which liabilities qualifying for Tier 1 capital(***)							*4*
of which liabilities qualifying for Tier 2 capital(****)	*22,379*			*22,379*		*22,379*	*5*
Remeasurement adjustment on interest-rate risk hedged portfolios	1,367			1,367		1,367	
Current and deferred tax liabilities	3,103	92	(354)	2,841	29	2,870	
Accrued expenses and other liabilities	145,399	(2,624)	(3,135)	139,640	791	140,431	
Technical reserves and other insurance liabilities	254,795	(254,795)					
Provisions for contingencies and charges	10,187	(494)	(276)	9,417	169	9,586	
Liabilities associated with assets held for sale(**)	74,366			74,366	(74,366)		
TOTAL LIABILITIES	**2,511,937**	**(269,346)**	**4,680**	**2,247,271**	**-**	**2,247,271**	

In millions of euros	Accounting scope	Adjustment of insurance companies	Other adjustments related to consolidation methods(*)	FinRep prudential scope	Adjustment related to the impact of IFRS 5(**)	Prudential scope	Reference to capital table (see Appendix 2)
							31 December 2021
EQUITY							
Share capital, additional paid-in capital and retained earnings	*108,176*	*4*	*1*	*108,181*		*108,181*	*6*
Net income Group share for the period	*9,488*			*9,488*		*9,488*	*7*
Total capital, retained earnings and net income Group share for the period	**117,664**	**4**	**1**	**117,669**		**117,669**	
Changes in assets and liabilities recognised directly in equity	*222*	*(6)*		*216*		*216*	
Shareholders' equity	**117,886**	**(2)**	**1**	**117,885**		**117,885**	
Minority interests	**4,621**	**(134)**		**4,487**		**4,487**	**8**
TOTAL CONSOLIDATED EQUITY	**122,507**	**(133)**	**-**	**122,374**	**-**	**122,374**	
TOTAL LIABILITIES AND EQUITY	**2,634,444**	**(269,479)**	**4,680**	**2,369,645**	**-**	**2,369,645**	

(*) Adjustment of jointly controlled entities under proportional consolidation for prudential scope, which are consolidated using the equity method within the accounting scope, and of the unregulated entities of BNP Paribas Real Estate and Arval consolidated using the equity method within the prudential scope which are fully consolidated within the accounting scope.
(**) See note 7.d to the consolidates financial statement.
(***) Debt eligible as Tier 1 capital is recognised in equity.
(****) Debt eligible as Tier 2 capital is presented as its notional value (excluding accrued interest and revaluation of the hedged component).

The following table shows the breakdown of the different categories of assets and liabilities recognised on the Bank's prudential balance sheet by regulatory risk type. The sum of the amounts thus broken down is not necessarily equal to the net carrying values of the prudential scope, because some items may be subject to capital requirements for several types of risk.

TABLE 9: PRUDENTIAL BALANCE SHEET BY RISK TYPE (EU LI1-B)

						31 December 2022
	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
In millions of euros		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
ASSETS						
Cash and amounts due from central banks	321,320	321,320				
Financial instruments at fair value through profit or loss						
Securities	167,786	10,493	6,274	95	156,668	531
Loans and repurchase agreements	192,030	3,918	181,713		188,005	
Derivative financial instruments	328,707		328,707		327,132	
Derivatives used for hedging purposes	25,687		25,687			
Financial assets at fair value through	45,261	41,905	75	533		2,823

31 December 2022

In millions of euros	Net carrying values: prudential scope	Items subject to:				Not subject to capital requirements or deducted from capital
		credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	
equity						
Financial assets at amortised cost						
Loans and advances to credit institutions	32,618	25,300	7,141			177
Loans and advances to customers	943,751	869,303	23,258	49,374		1,816
Debt securities	130,490	121,033	1,410	18,046		(8,589)
Remeasurement adjustment on interest-rate risk hedged portfolios	(7,477)					(7,477)
Current and deferred tax assets	6,021	5,866				156
Accrued income and other assets	203,077	33,782	154,532		15,351	3,007
Equity-method investments	13,035	11,406				1,628
Property, plant and equipment and investment property	10,529	10,070				459
Intangible assets	3,574	1,260				2,314
Goodwill	6,863					6,863
Assets held for sale						
TOTAL ASSETS	**2,423,272**	**1,455,656**	**728,797**	**68,048**	**687,156**	**3,708**
LIABILITIES						
Deposits from central banks	3,054					3,054
Financial instruments at fair value through profit or loss						
Securities	99,155				99,057	99
Deposits and repurchase agreements	234,076		225,481		225,523	8,595
Issued debt securities	65,409					65,409
Derivative financial instruments	301,397		301,397		299,061	
Derivatives used for hedging purposes	40,309		40,309			
Financial liabilities at amortised cost						
Deposit from credit institutions	116,974		1,408			115,566
Deposit from customers	1,088,769		3,840			1,084,929
Debt securities	152,291					152,291
Subordinated debt	22,388					22,388
Remeasurement adjustment on interest-rate risk hedged portfolios	(20,201)					(20,201)
Current and deferred tax liabilities	3,245					3,245

In millions of euros	Net carrying values: prudential scope	Items subject to: credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	Not subject to capital requirements or deducted from capital
						31 December 2022
Accrued expenses and other liabilities	180,689		126,480		7,610	50,850
Provisions for contingencies and charges	9,298	1,060				8,238
Liabilities associated with assets held for sale						
TOTAL LIABILITIES	**2,296,853**	**1,060**	**698,915**	**-**	**631,251**	**1,494,463**
TOTAL CONSOLIDATED EQUITY	**126,419**	**-**	**-**	**-**	**-**	**126,419**
TOTAL LIABILITIES AND EQUITY	**2,423,272**	**1,060**	**698,915**	**-**	**631,251**	**1,620,882**

In millions of euros	Net carrying values: prudential scope	Items subject to: credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	Not subject to capital requirements or deducted from capital
						31 December 2021
ASSETS						
Cash and amounts due from central banks	363,173	363,173				
Financial instruments at fair value through profit or loss						
Securities	193,148	11,512	7,383	150	180,919	567
Loans and repurchase agreements	252,536	2,322	243,848		249,911	
Derivative financial instruments	241,142		241,142		240,053	
Derivatives used for hedging purposes	8,652		8,652			
Financial assets at fair value through equity	49,164	45,636	317	750		2,778
Financial assets at amortised cost						
Loans and advances to credit institutions	21,986	18,948	2,861			177
Loans and advances to customers	896,703	819,323	33,540	40,847		2,994
Debt securities	125,048	112,165	1,371	11,075		1,808
Remeasurement adjustment on interest-rate risk hedged portfolios	3,049					3,049
Current and deferred tax assets	6,025	5,676				349
Accrued income and other assets	173,363	29,503	129,644		12,886	3,582
Equity-method investments	14,824	13,288				1,536
Property, plant and equipment and investment property	10,735	10,258				477

In millions of euros	Net carrying values: prudential scope	Items subject to: credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	Not subject to capital requirements or deducted from capital
						31 December 2021
Intangible assets	3,546	1,308				2,238
Goodwill	6,551					6,551
TOTAL ASSETS	**2,369,645**	**1,433,112**	**668,758**	**52,822**	**683,769**	**26,106**
LIABILITIES						
Deposits from central banks	1,244					1,244
Financial instruments at fair value through profit or loss						
Securities	112,338				112,338	
Deposits and repurchase agreements	293,456		289,807		289,804	3,649
Issued debt securities	63,944					63,944
Derivative financial instruments	238,056		238,056		236,267	
Derivatives used for hedging purposes	10,269		10,269			

In millions of euros	Net carrying values: prudential scope	Items subject to: credit risk framework	counterparty credit risk framework	securitisation framework	market risk framework	Not subject to capital requirements or deducted from capital
						31 December 2021
Financial liabilities at amortised cost						
Deposit from credit institutions	159,513		2,900			156,613
Deposit from customers	1,039,602		637			1,038,965
Debt securities	151,646					151,646
Subordinated debt	22,949					22,949
Remeasurement adjustment on interest-rate risk hedged portfolios	1,367					1,367
Current and deferred tax liabilities	2,870					2,870
Accrued expenses and other liabilities	140,431		99,390		1,042	41,255
Provisions for contingencies and charges	9,586	1,002				8,584
TOTAL LIABILITIES	**2,247,271**	**1,002**	**641,059**	**-**	**639,451**	**1,493,086**
TOTAL CONSOLIDATED EQUITY	**122,374**	**-**	**-**	**-**	**-**	**122,374**
TOTAL LIABILITIES AND EQUITY	**2,369,645**	**1,002**	**641,059**	**-**	**639,451**	**1,615,460**

The following table shows the main differences between the amounts of accounting exposure on the prudential balance sheet (see previous table) and the amounts of exposure used for regulatory purposes, based on the different types of risk, except market risk. Indeed, for the latter, the main regulatory measure used by the Group is Value at Risk (VaR), which reflects the sensitivity of the Bank's trading book to the different market parameters (see section 5.7, *Market risk exposure*). Therefore, the VaR amount does not relate directly to the net carrying value of the assets and liabilities subject to market risk.

TABLE 10: RECONCILIATION BETWEEN NET CARRYING VALUES UNDER THE PRUDENTIAL SCOPE AND THE EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES (EU LI2)

In millions of euros	Credit risk framework	Counterparty credit risk framework	Securitisation framework	Market risk framework
				31 December 2022
ASSETS NET CARRYING VALUE	**1,455,656**	**728,797**	**68,048**	**687,156**
Liabilities net carrying value		(698,915)		
Off-balance sheet exposures amounts net of depreciation	481,773		23,946	
Credit risk depreciation amounts	19,780		44	
Amounts below the thresholds for deduction (subject to 250% risk-weight)(*)	(7,958)			
Differences in valuations due to the use of internal models(**)		191,988		
Other adjustments	7,138			
EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES	**1,956,389**	**221,870**	**92,038**	

(*) Includes deferred tax assets depending on future profits and significant participations in financial sector entities, subject to 250% risk-weight.

(**) The main regulatory measure used by the Group for counterparty risk is the EEPE (Effective Expected Positive Exposure). The features of the valuation model are described in section 5.6 in the paragraph Counterparty risk measurement.

	31 December 2021			
In millions of euros	**Credit risk framework**	**Counterparty credit risk framework**	**Securitisation framework**	**Market risk framework**
ASSETS NET CARRYING VALUE	**1,433,112**	**668,758**	**52,822**	**683,769**
Liabilities net carrying value		(641,059)		
Off-balance sheet exposures amounts net of depreciation	454,152		18,746	
Credit risk depreciation amounts	21,631		64	
Amounts below the thresholds for deduction (subject to 250% risk-weight)(*)	(7,066)			
Differences in valuations due to the use of internal models(**)		200,135		
Other adjustments	9,234			
EXPOSURE AMOUNTS CONSIDERED FOR REGULATORY PURPOSES	**1,911,063**	**227,833**	**71,632**	

(*) Includes deferred tax assets depending on future profits and significant participations in financial sector entities, subject to 250% risk-weight.
(**) The main regulatory measure used by the Group for counterparty risk is the EEPE (Effective Expected Positive Exposure). The features of the valuation model are described in section 5.6 in the paragraph Counterparty risk measurement.

The exposure amounts used for regulatory purposes are presented:

- in section 5.4 for credit risk;
- in section 5.5 for securitisation positions in the banking book;
- in section 5.6 for counterparty credit risk;
- in section 5.7 for market risk.

SIGNIFICANT SUBSIDIARIES

Aggregate information on the risk-weighted assets of BNP Paribas' significant subgroups and subsidiaries are given as Group contribution in Appendix 4 to this chapter.

The following subgroups are considered significant, based on the criterion that their risk-weighted assets amount to more than 3% of the Group's total risk-weighted assets (excluding entities consolidated under the equity method) at 31 December 2022:

- BNP Paribas Fortis;
- Banca Nazionale del Lavoro (BNL);
- BNP Paribas USA Inc.[1];
- BancWest Holding Inc.[2];
- BNP Paribas Personal Finance;
- BGL BNP Paribas.

The risk-weighted assets reported correspond to the sub-consolidation scope of the six sub-groups. Thus, BGL BNP Paribas and BancWest Holding Inc subgroups are also included in BNP Paribas Fortis and BNP Paribas USA Inc. subgroups respectively.

The significant restrictions relating to the Group's ability to transfer cash within the entities are described in note 7.g *Significant restrictions in subsidiaries, joint ventures and associates* of the consolidated financial statements.

[1] *Since 1 July 2016, BNP Paribas USA, Inc. is the Group's intermediate holding company for its US subsidiaries.*

[2] *On 18 December 2020, BNP Paribas concluded an agreement with BMO financial group for the sale of 100% of its retail and commercial banking activities in the United States operated by the BancWest Holding Inc group. Following the receipt of regulatory approvals, the transaction was finalised on 1 February 2023.*

Subsidiaries whose prudential requirements are supervised as part of the consolidated supervision of BNP Paribas SA, in accordance with article 7.1 of Regulation (EU) No. 575/2013, are identified in the scope of consolidation in note 7.l to the consolidated financial statements, under reference (1).

Compliance with capital requirements at the individual level of each entity that does not have an exemption is verified at the level of their respective division or business line. As of 31 December 2022, two entities had a capital level below the regulatory level for a non-material amount. This situation will be amended by 31 March 2023.

REGULATORY CAPITAL

The BNP Paribas Group is required to comply with the French regulation that transposes European Directives on "Access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" and "Financial Conglomerates" into French law.

In the various countries in which the Group operates, BNP Paribas also complies with specific regulatory ratios in line with procedures controlled by the relevant supervisory authorities. These ratios mainly address the issues of capital adequacy, risk concentration, liquidity and asset/liability mismatches.

As of 1 January 2014, Regulation (EU) No. 575/2013, establishing the methods for calculating the solvency ratio, defines it as the ratio between the regulatory capital and the sum of:

- the amount of risk-weighted assets for credit and counterparty risks, calculated using the standardised approach or the Internal Ratings-Based Approach (IRBA) depending on the particular entity or the activity of the Group concerned;
- capital requirements for market risk, for credit valuation adjustment risk and for operational risk, multiplied by a factor of 12.5.

BREAKDOWN OF REGULATORY CAPITAL

Regulatory capital is divided into three categories (Common Equity Tier 1 capital, Additional Tier 1 capital and Tier 2 capital), which consist of equity and debt instruments, to which regulatory adjustments have been made.

Common Equity Tier 1 capital

Common Equity Tier 1 capital instruments mainly comprise:

- the consolidated equity attributable to shareholders restated for the anticipated distribution of result and Undated Super Subordinated Notes, which are ineligible for this category;
- minority interest reserves of regulated entities, adjusted for their capitalisation surplus.

The main regulatory adjustments are as follows:

- gains and losses generated by cash flow hedges;
- adjustments to the value of instruments measured at fair value required by prudent valuation;
- goodwill and other intangible assets, net of deferred tax liabilities. Since 31 December 2020, in accordance with Regulation (EU) No. 2020/2176, certain software products have benefited from a specific prudential amortisation allowing the application of a preferential weighting instead of a deduction from CET1 capital;
- net deferred tax assets that rely on future profitability and arising from tax loss carry-forwards;
- expected losses on equity exposures;
- share of expected losses on outstanding loans measured using the Internal Ratings-Based Approach (IRBA) which is not covered by provisions and other value adjustments;
- negative difference between the amount of the provision recognised for each non-performing exposure and the minimum provisioning level as defined in article 47c of Regulation (EU) No. 2019/630;
- securitisation tranches for which the Group has opted for the own funds deduction instead of a 1,250% weighting.

Treasury shares held or granted a buy-back authorisation are deducted from this category.

TABLE 11: TRANSITION FROM CONSOLIDATED EQUITY TO COMMON EQUITY TIER 1 (CET1) CAPITAL

In millions of euros	31 December 2022	31 December 2021
Consolidated equity	**126,419**	**122,374**
Undated Super Subordinated Notes ineligible in CET1	(11,800)	(9,207)
Proposed distribution(*)	(5,773)	(4,527)
Ineligible minority interests	(2,891)	(2,872)
Changes in the fair value of hedging instruments recognised directly in equity	(12)	(978)
Additional value adjustments linked to prudent valuation requirements	(1,514)	(1,608)
Goodwill and other intangible assets	(10,559)	(10,091)
Net deferred tax assets arising from tax loss carry-forwards	(160)	(299)

Negative amounts resulting from the calculation of expected losses	(420)	(351)
Other prudential adjustments	(1,462)	(464)
COMMON EQUITY TIER 1 (CET1) CAPITAL	**91,828**	**91,976**

(*) The "ordinary" proposed distribution as at 31 December 2022 includes -EUR 962 million under a share buy-back programme (subject to usual conditions).

The table below shows the calculation of value adjustments applied to instruments measured at fair value, related to the prudent valuation requirements subject to a deduction from Common Equity Tier 1 capital.

TABLE 12: VALUE ADJUSTMENTS RELATED TO PRUDENT VALUATION (PVA) (EU PV1)

		a	b	c	d	e	EU e1	EU e2	f	g	h
											31 December 2022
						Risk category	**Category level AVA – Valuation uncertainty**			**Total category level post-diversification**	
In millions of euros		**Equity**	**Interest Rates**	**Foreign exchange**	**Credit**	**Commodities**	**Unearned credit spreads AVA**	**Investment and funding costs AVA**		**of which: total core approach in the trading book**	**of which: total core approach in the banking book**
1	Market price uncertainty	474	195	17	179	47	64	23	431	194	238
3	Close-out cost	341	263	27	220	31			297	264	33
4	Concentrated positions	161	127	14	47	8			358	288	69
5	Early termination	169	1		1				171	170	1
6	Model risk	114	78	4	41		174		121	121	
7	Operational risk										
10	Future administrative costs	80	26	6	24				136	136	
12	**TOTAL ADDITIONAL VALUATION ADJUSTMENTS (AVAS)**								**1,514**	**1,173**	**341**

		a	b	c	d	e	EU e1	EU e2	f	g	h
											31 December 2021
						Risk category	**Category level AVA – Valuation uncertainty**			**Total category level post-diversification**	
In millions of euros		**Equity**	**Interest Rates**	**Foreign exchange**	**Credit**	**Commodities**	**Unearned credit spreads AVA**	**Investment and funding costs AVA**		**of which: total core approach in the trading book**	**of which: total core approach in the banking book**
1	Market price uncertainty	634	214	39	58	33	177	115	548	299	249
3	Close-out cost	384	193	123	97	27	12		280	244	36
4	Concentrated positions	162	106	31	20	2			320	253	67
5	Early termination	178	1		1				181	181	
6	Model risk	112	99	21	35	2	151		116	116	

10	Future administrative costs	69	50	17	27	163	163	
12	**TOTAL ADDITIONAL VALUATION ADJUSTMENTS (AVAS)**					**1,608**	**1,256**	**352**

Additional Tier 1 capital

Additional Tier 1 capital is mainly composed of subordinated debt instruments with the following characteristics:

- they are perpetual and include no redemption incentive;
- they are not held by the bank, its subsidiaries or any company in which the Group holds 20% or more of the capital;
- they have a capacity to absorb losses;
- they may include a buy back option, five years after the issue date at the earliest, exercisable at the issuer's discretion (subject to authorisation by the supervisor);
- remuneration arises from distributable elements that may be cancelled, with no requirements for the bank.

This category is also composed of non-eligible minority reserves in common equity within their limit of eligibility.

Authorisations to redeem Additional Tier 1 own capital instruments are deducted from this category.

Tier 2 capital

Tier 2 capital is comprised of subordinated debt with no buy back incentive, as well as non-eligible minority reserves in Tier 1 capital within their limit of eligibility. A prudential discount is applied to the subordinated debt with less than five years of residual maturity.

Prudential deductions from Tier 2 capital primarily concern:

- Tier 2 capital components in significant financial entities;
- Tier 2 own capital instrument buy back authorisations.

Composition and evolution of regulatory capital

The detail of regulatory capital regulatory adjustments is presented in Appendix 2 *Regulatory capital – Detail*.

The table presenting the details of the debt instruments recognised as capital, as well as their characteristics, in accordance with the template (EU CCA) required by implementing Regulation No. 1423/2013, is available in the *BNP Paribas Debt* section of the Investor Relations website: https://invest.bnpparibas/en/search/debt/documents.

TABLE 13: REGULATORY CAPITAL

Common Equity Tier 1 (CET1) capital: instruments and reserves		
Capital instruments and the related share premium accounts	26,236	26,236
of which ordinary shares	*26,236*	*26,236*
Retained earnings	82,094	82,684
Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	(2,963)	(3,319)
Minority interests (amount allowed in consolidated CET1)	1,780	1,736
Independently reviewed interim profits net of any foreseeable charge or distribution(*)	2,674	-
COMMON EQUITY TIER 1 (CET1) CAPITAL BEFORE REGULATORY ADJUSTMENTS	**109,821**	**107,337**
Common Equity Tier 1 (CET1) capital: regulatory adjustments(**)	**(15,723)**	**(15,508)**
COMMON EQUITY TIER 1 (CET1) CAPITAL	**94,098**	**91,828**
Additional Tier 1 (AT1) capital: instruments(***)	**13,769**	**12,103**
Additional Tier 1 (AT1) capital: regulatory adjustments	**(488)**	**(487)**

ADDITIONAL TIER 1 (AT1) CAPITAL (***)	**13,282**	**11,616**
TIER 1 CAPITAL (T1 = CET1 + AT1) (***)	**107,380**	**103,445**
Tier 2 (T2) capital: instruments and provisions(***)	**20,062**	**20,692**
Tier 2 (T2) capital: regulatory adjustments	**(3,262)**	**(3,575)**
Tier 2 (T2) CAPITAL (***)	**16,799**	**17,117**
TOTAL CAPITAL (TC = T1 + T2) (***)	**124,179**	**120,562**

(*) Taking into account a 50% proposed distribution of result subject to usual conditions.
(**) Including -EUR 2.5 billion corresponding to the approval to launch the 1st tranche of the share buy-back programme announced on the 31 March 2023; this purchase includes the -EUR 962 million under the "ordinary" distribution policy of the 2022 result.

(***) In accordance with the eligibility rules for grandfathered debt in additional Tier1 capital and Tier2 capital applicable.

TABLE 14: CHANGE IN REGULATORY CAPITAL

In millions of euros	**31 December 2022**
COMMON EQUITY TIER 1 (CET1) CAPITAL	
31 December 2021	**91,976**
Common Equity Tier 1 capital: instruments and reserves	**1,574**
Capital instruments and the related share premium accounts	-
of which ordinary shares	
Retained earnings	295
Accumulated other comprehensive income	(3,773)
Minority interests (amounts allowed in consolidated CET1)	119
Independently reviewed interim profits net of any foreseeable charge or dividend(*)	4,933
Common Equity Tier 1 (CET1) capital: regulatory adjustments(**)	**(1,721)**
of which additional value adjustments	*94*
of which intangible assets	*(467)*
of which net deferred tax assets depending on future profits excluding these arising from temporary differences	*139*
of which fair value reserves related to gains or losses on cash flow hedges	*966*
of which negative amounts resulting from the calculation of expected loss amounts	*35*
of which gains or losses on liabilities valued at fair value resulting from changes in own credit standing	*(386)*
of which securitisation positions deducted from own funds	*(3)*
of which other adjustments(**)	*(2,099)*
31 December 2022	**91,828**
ADDITIONAL TIER 1 CAPITAL(***)	
31 December 2021	**8,280**
Additional Tier 1 (AT1) capital: instruments(***)	**3,337**
Additional Tier 1 (AT1) capital: regulatory adjustments	**(1)**
Loans to credit or financial institutions more than 10%-owned	
Others	(1)

31 December 2022	**11,616**
TIER 2 CAPITAL(***)	
31 December 2021	**17,001**
Tier 2 (T2) capital: instruments and provisions(***)	**10**
Tier 2 (T2) capital: regulatory adjustments	**107**
Loans to credit or financial institutions more than 10%-owned	(43)
Others	150
31 December 2022	**17,117**

(*) Taking into account a 50% proposed distribution of result subject to usual conditions.
(**) Including -EUR 962 million at 31 December 2022 for a share buy-back programme under the "ordinary" distribution policy (subject to usual conditions).
(***) In accordance with the applicable eligibility rules for grandfathered debt in additional Tier 1 capital and Tier 2 capital.

TABLE 15: CHANGE IN ELIGIBLE DEBT FOR THE CONSTITUTION OF EQUITY

In millions of euros	Tier 1	Tier 2
31 December 2021	**8,443**	**20,398**
New issues	5,022	2,278
Redemptions	(1,460)	(782)
Prudential discount		(1,796)
Others	(205)	372
31 December 2022	**11,800**	**20,470**

Transitional arrangements relating to regulatory capital

Under Regulation (EU) No. 575/2013 (CRR), the calculation methods introduced by Basel 3 were implemented gradually until 1 January 2022. Since 2019, the items still subject to these transitional arrangements were subordinated debt issued prior to 31 December 2011, eligible under prior regulations but not eligible under Basel 3, to which a declining eligibility threshold applied. The impact of these arrangements is set out in lines 80 to 85 of Appendix 2 *Regulatory capital – Detail*. These transitional arrangements expired on 1 January 2022, and the instruments concerned were all called before 31 December 2021, with the exception of a Tier 1 instrument which lost its prudential value of EUR 205 million on 1 January 2022.

Regulation (EU) No. 2019/876 (CRR 2), which came into force on 27 June 2019, introduces additional eligibility criteria for Tier 1 and 2 regulatory capital which supplement those provided for by Regulation (EU) No. 575/2013. Instruments that were previously eligible under CRR, although not fulfilling these additional requirements may, eventually, be recognised in a less subordinated category, for a transitional period that may extend up to 2025. A Tier 2 capital instrument of EUR 31 million lost its eligibility on 1 January 2022, as issued by an *ad hoc* entity (article 63(a) CRR). In addition, as of 31 December 2022, there are no longer any Tier 1 capital instruments eligible for the transitional arrangements in force until June 2025, because they were issued under the law of countries outside the European Union without a bail-in clause (articles 52(1)(p) and 63(n) CRR); the stock of Tier 2 capital instruments eligible for the same provisions amounted to EUR 3.6 billion.

The details of the instruments concerned by these transitional provisions, describing their eligibility period and the main characteristics in relation to the CRR/CRR 2 Regulations and the EBA's opinion published on 21 October 2020, on the appropriate treatment of instruments ineligible at the end of 2021 in relation to the CRR criteria, are available on the Group's investor relations website: https://invest.bnpparibas/en/search/debt/documents.

Regulation (EU) No. 2017/2395 and Regulation (EU) No. 2020/873 define the transitional measures relating to the introduction of IFRS 9. These measures mitigate the impact of the increase in expected credit losses related to the application of new standard on CET1 capital until 2024. The Group has been applying these transitional measures since 31 March 2020 in accordance with the ECB recommendation. The Bank has opted for the arrangements relating to the calculation of the exposure value calculated under the standardised approach, defined in paragraph 4 and paragraph 7 point b) in article 473a.

TABLE 16: EFFECT OF THE APPLICATION OF TRANSITIONAL ARRANGEMENTS FOR IFRS 9 ACCOUNTING STANDARD (EU IFRS9-FL)

	In millions of euros	31 March 2023	31 December 2022
Available capital			
1	Common Equity Tier 1 (CET1) capital	94,098	91,828
2	Common Equity Tier 1 (CET1) capital as if IFRS 9 transitional arrangements had not been applied	94,098	91,444
3	Tier 1 capital	107,380	103,445
4	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	107,380	103,060
5	Total capital	124,179	120,562
6	Total capital as if IFRS 9 transitional arrangements had not been applied	124,179	120,484
Risk-weighted assets			
7	Risk-weighted assets	694,407	744,851
8	Risk-weighted assets as if IFRS 9 transitional arrangements had not been applied	694,407	745,046
Capital ratios			
9	Common Equity Tier 1 (CET1) capital	13.55%	12.33%
10	Common Equity Tier 1 (CET1) capital as if IFRS 9 transitional arrangements had not been applied	13.55%	12.27%
11	Tier 1 capital	15.46%	13.89%
12	Tier 1 capital as if IFRS 9 transitional arrangements had not been applied	15.46%	13.83%
13	Total capital	17.88%	16.19%
14	Total capital as if IFRS 9 transitional arrangements had not been applied	17.88%	16.17%
Leverage ratios			
15	Leverage ratio total exposure measure	2,464,153	2,373,844
16	Leverage ratio	4.36%	4.36%
17	Leverage ratio as if IFRS 9 transitional arrangements had not been applied	4.36%	4.34%

The Group did not apply the provisions pursuant to Article 468 of the Regulation (EU) No. 2020/873 relating to the temporary treatment of unrealized gains or losses on financial instruments at fair value through equity issued by central, regional or local governments. These provisions ceased to apply on 1 January 2023.

CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

The table below shows risk-weighted assets and capital requirement by risk type. Capital requirements make up 8% of risk-weighted assets.

TABLE 17: OVERVIEW OF RISK-WEIGHTED EXPOSURE AMOUNTS (EU OV1)

		a	b	c
			RWAs	**Capital requirements**
	In millions of euros	**31 March 2023**	**31 December 2022**	**31 March 2023**
1	**Credit risk**	**533,734**	**579,635**	**42,699**
2	Of which the standardised approach	183,868	231,375	**14,709**
3	Of which the foundation IRB (FIRB) approach	-	-	**-**
4	Of which: slotting approach	-	-	**-**
EU 4a	Of which equities under the simple weighting approach	44,448	41,192	**3,556**
5	Of which the advanced IRB (A-IRB) approach	305,418	307,068	**24,433**
6	**Counterparty credit risk**	**42,081**	**42,320**	**3,366**
7	Of which SACCR (Derivative)	3,000	1,208	**240**
8	Of which internal model method (IMM)	30,174	31,072	**2,414**
EU 8a	Of which exposures to CCP related to clearing activities	3,060	2,541	**245**
EU 8b	Of which CVA	4,790	6,464	**383**
9	Of which other	1,056	1,035	**84**
15	**Settlement risk**	**10**	**9**	**1**
16	**Securitisation exposures in the banking book**	**14,750**	**15,794**	**1,180**
17	Of which internal ratings-based approach (SEC-IRBA)	8,120	8,770	**650**
18	Of which external ratings-based approach (SEC-ERBA)	1,083	1,132	**87**
19	Of which standardised approach (SEC-SA)	5,547	5,892	**444**
EU 19a	Of which exposures weighted at 1,250% (or deducted from own funds)(1)	-	-	-
20	**Market risk**	**26,597**	**25,543**	**2,128**
21	Of which the standardised approach	7,487	6,622	**599**
22	Of which internal model approach (IMA)	19,110	18,921	**1,529**
23	**Operational risk**	**57,971**	**61,656**	**4,638**
EU 23a	Of which basic indicator approach	4,067	4,280	**325**
EU 23b	Of which standardised approach	8,615	12,073	**689**
EU 23c	Of which advanced measurement approach	45,289	45,302	**3,623**
24	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**19,264**	**19,895**	**1,541**
29	**TOTAL**	**694,407**	**744,851**	**55,553**

(1) The Group opted for the deductive approach rather than a weighting of 1,250%. The amount of securitisation exposures in the banking book deducted from own funds stands at EUR 253 million at 31 March 2023 (214 million at 31 December 2022).

TABLE 18: RISK-WEIGHTED ASSET MOVEMENTS BY KEY DRIVER

RWAs *In millions of euros*	**31 December 2021**	Key driver								**31 December 2022**
		Asset size	**Asset quality**	**Model updates**	**Methodology and policy**	**Acquisitions and disposals**	**Currency**	**Other**	**Total Variation**	
Credit risk	**553,861**	28,450	(13,363)	2,437	5,575	1,607	3,793	(2,725)	25,774	**579,635**
Counterparty credit risk	**40,437**	(161)	(2,394)	971	27		(32)	3,471	1,883	**42,320**
Settlement risk	**33**							(24)	(24)	**9**
Banking book securitisation positions	**13,627**	1,326	756				246	(160)	2,167	**15,794**
Market risk	**24,839**	(5,921)	(1,693)	3,503	4,575			240	703	**25,543**
Operational risk	**63,209**	869	(2,787)			361		4	(1,553)	**61,656**
Amounts below the thresholds for deduction (subject to 250% risk weight)	**17,666**	1,370	(19)		320	706		(148)	2,229	**19,895**
TOTAL	**713,671**	**25,933**	**(19,499)**	**6,911**	**10,497**	**2,674**	**4,006**	**658**	**31,180**	**744,851**

The main reasons explaining the EUR 31 billion increase in risk-weighted assets in 2022 are:

- a EUR 26 billion increase in line with business activity net of the impact of the efficient securitisation transactions initiated by the Group. (+EUR 18 billion overall);
- a EUR 19 billion decrease induced by improvement of risk parameters;
- a EUR 7 billion increase billion linked to the update of the models and a EUR 10 billion increase related to regulatory changes, including, in particular, IRB Repair and application of the EBA recommendation regarding the foreign exchange risk on the structural position as well as the lifting of the penalty relating to mortgages in Belgium;
- a EUR 3 billion increase related to perimeter effects;
- a EUR 4 billion increase due to currency effects, linked to the appreciation of the US dollar.

Comments on the main changes in 2022 for each type of risk are detailed in the various appropriate sections.

BREAKDOWN OF RISK-WEIGHTED ASSETS BY BUSINESS LINE

TABLE 19: RISK-WEIGHTED ASSETS BY RISK TYPE AND BUSINESS

	31 December 2022							
	Corporate & Institutional Banking			**Commercial, Personal Banking & Services**				
RWAs *In millions of euros*	**Global Banking**	**Global Markets**	**Securities Services**	**Commercial & Personal Banking**	**Specialised businesses**	**Investment & Protection Services**	**Corporate center**	**Total**
Credit risk	**125,017**	**11,740**	**3,869**	**277,059**	**98,401**	**35,556**	**27,993**	**579,635**
of which standardised approach	9,065	2,513	487	128,492	72,452	12,864	5,502	231,375
of which advanced IRB approach	114,933	8,056	3,260	143,699	14,954	4,817	17,348	307,068

RWAs *In millions of euros*	Corporate & Institutional Banking			Commercial, Personal Banking & Services				
	Global Banking	**Global Markets**	**Securities Services**	**Commercial & Personal Banking**	**Specialised businesses**	**Investment & Protection Services**	**Corporate center**	**Total**
of which equity positions under the simple weighting method	1,018	1,171	122	4,869	10,995	17,874	5,143	41,192
Counterparty credit risk	**418**	**37,297**	**1,909**	**1,907**	**1**	**326**	**463**	**42,320**
of which SACCR (derivatives)		416		497		286	8	1,208
of which internal model method (IMM)	236	28,195	1,027	1,225			388	31,072
of which exposures to CCP related to clearing activities	80	1,551	872				39	2,541
of which CVA	102	6,099	10	185	1	39	28	6,464
of which other		1,035						1,035
Settlement risk		**9**						**9**
Securitisation exposures in the banking book	**7,190**	**5,259**		**2,579**	**367**	**106**	**294**	**15,794**
of which internal ratings based approach (SEC-IRBA)	4,328	1,839		2,449	154			8,770
of which standardised approach (SEC-SA)	2,621	3,129		129			13	5,892
of which external ratings based approach (SEC-ERBA)	241	291		1	213	106	281	1,132

31 December 2022

31 December 2022

RWAs *In millions of euros*	Corporate & Institutional Banking			Commercial, Personal Banking & Services				
	Global Banking	Global Markets	Securities Services	Commercial & Personal Banking	Specialised businesses	Investment & Protection Services	Corporate center	Total
Market risk	**4,062**	**18,913**	**238**	**1,670**	**338**	**61**	**261**	**25,543**
of which standardised approach	3,315	1,524	14	1,114	338	55	261	6,622
of which internal model approach (IMA)	747	17,388	224	556		5		18,921
Operational risk	**9,613**	**14,397**	**3,588**	**20,363**	**10,177**	**3,706**	**(187)**	**61,656**
of which basic indicator approach	364	794	160	1,701	1,103	297	(139)	4,280
of which standardised approach	1,136	1,206	334	6,219	2,520	550	109	12,073
of which advanced measurement approach (AMA)	8,112	12,397	3,094	12,443	6,554	2,860	(157)	45,302
Amounts below the thresholds for deduction (subject to 250% risk weight)	**10**	**133**	**339**	**7,932**	**2,273**	**917**	**8,290**	**19,895**
TOTAL	**146,310**	**87,746**	**9,943**	**311,510**	**111,557**	**40,671**	**37,114**	**744,851**

31 December 2021

RWAs *In millions of euros*	Corporate & Institutional Banking			Commercial, Personal Banking & Services				
	Global Banking	Global Markets	Securities Services	Commercial & Personal Banking	Specialised businesses	Investment & Protection Services	Corporate center	Total
Credit risk	**117,163**	**12,416**	**5,359**	**261,730**	**89,644**	**41,195**	**26,355**	**553,861**
of which standardised approach	8,019	2,410	971	112,239	62,558	9,088	10,461	205,747
of which advanced IRB approach	108,032	8,845	4,310	144,583	18,865	4,006	9,450	298,089
of which equity positions under the simple weighting method	1,112	1,162	78	4,908	8,221	28,101	6,444	50,025
Counterparty credit risk	**231**	**35,067**	**1,975**	**2,740**		**233**	**191**	**40,437**
of which SACCR (derivatives)		537		837		199	7	1,579
of which internal model method (IMM)	296	28,920	1,176	1,557		2		31,950
of which exposures to CCP related to clearing activities	34	1,800	789				32	2,654
of which CVA	29	3,465	10	347		32	24	3,908
of which other	(128)	345					128	345

31 December 2021

RWAs *In millions of euros*	**Corporate & Institutional Banking**			**Commercial, Personal Banking & Services**				
	Global Banking	**Global Markets**	**Securities Services**	**Commercial & Personal Banking**	**Specialised businesses**	**Investment & Protection Services**	**Corporate center**	**Total**
Settlement risk		**33**						**33**
Securitisation exposures in the banking book	**6,114**	**3,349**	**36**	**3,184**	**347**	**112**	**484**	**13,627**
of which internal ratings based approach (SEC-IRBA)	3,709	1,196	36	3,055	153			8,150
of which standardised approach (SEC-SA)	2,042	2,006		127			15	4,190
of which external ratings based approach (SEC-ERBA)	363	147		2	194	112	470	1,288
Market risk	**435**	**23,585**	**329**	**438**	**8**	**23**	**21**	**24,839**
of which standardised approach	412	1,800	43	63	8	21	21	2,367
of which internal model approach (IMA)	23	21,785	286	375		2		22,472
Operational risk	**9,896**	**14,501**	**3,751**	**21,479**	**9,883**	**3,535**	**164**	**63,209**
of which basic indicator approach	330	763	460	1,799	510	276	3	4,141
of which standardised approach	1,207	647	132	6,191	2,496	528	120	11,321
of which advanced measurement approach (AMA)	8,359	13,092	3,158	13,489	6,878	2,731	41	47,747
Amounts below the thresholds for deduction (subject to 250% risk weight)	**11**	**129**	**391**	**7,109**	**2,418**	**853**	**6,755**	**17,666**
TOTAL	**133,849**	**89,081**	**11,840**	**296,680**	**102,300**	**45,950**	**33,970**	**713,671**

The breakdown of risk-weighted assets by domain reflects the Group's diversified business mix, with 56% devoted to Commercial, Personal Banking & Services (Including 42% for Commercial & Personal Banking and 15% for Specialised businesses), 33% to Corporate & Institutional Banking, 6% to Investment & Protection Services and 5% to Corporate Center.

The increase in the Group's risk-weighted assets was EUR 31.2 billion over 2022, with:

- a EUR 9.2 billion increase in Corporate & Institutional Banking, including EUR 12.5 billion in Global Banking;
- a EUR 14.8 billion increase in Commercial & Personal Banking risk-weighted assets, mainly linked to BancWest, Commercial & Personal Banking in France and Europe-Mediterranean;
- a EUR 9.3 billion increase in Specialised businesses, drived by Personal Finance;
- a EUR 5.3 billion on Investment and Protection Services.

Transitional arrangements relating to risk-weighted assets

Since 31 March 2020, the Group applies the provisions of Regulation (EU) No. 2017/2395 on transitional measures relating to the introduction of IFRS 9 for the calculation of risk-weighted assets for credit risk. Since 30 June 2020, the Group has also applied the provisions of Regulation (EU) No. 2020/875 supplementing these transitional measures (see Table 16: *Effect of the application of the transitional arrangements for IFRS 9 accounting standard*).

CAPITAL ADEQUACY AND CAPITAL PLANNING

CAPITAL ADEQUACY

The BNP Paribas Group is required to comply with a range of regulations:

- European banking regulations under the CRR and CRD, which also cover banking supervision;
- regulation relating to financial conglomerates in respect of additional supervision of its banking and insurance activities. BNP Paribas' insurance business is governed by Solvency II insurance regulations.

Within the context of the Single Supervisory Mechanism, the ECB thus became the direct supervisor of BNP Paribas as of 4 November 2014. The ECB draws on the competent national supervisory authorities in fulfilling this role.

Requirements under banking regulations and supervision

With respect to Pillar 1, the Group is required to meet:

- a minimum Common Equity Tier 1 (CET1) capital ratio of 4.5%;
- a minimum Tier 1 capital ratio of 6%;
- a minimum Total capital ratio of 8%.

Additional requirements known as buffers

In addition to the minimum capital requirements regarding Pillar 1, BNP Paribas has to maintain additional CET1 capital buffers:

- the capital conservation buffer is equal to 2.5% of the risk-weighted assets. The aim of this buffer is to absorb losses in a situation of intense economic stress;
- the following two buffers were defined to limit systemic institutions failure risk. Only the highest of these two buffers is applicable:
  - the buffer for Global Systemically Important Banks (G-SIBs) consists of a surcharge of CET1 capital defined by the Financial Stability Board based on the methodology developed by the Basel Committee, which corresponds to the global systemic importance of banks. Global systemic importance is measured in terms of the impact a bank's failure can have on the global financial system and the wider economy.

    The measurement approach of the global systemic importance is indicator-based. The selected indicators reflect the size of banks, their interconnectedness, the use of banking information systems for the services they provide, their global cross-jurisdictional activity and their complexity. The methodology is described in the document published in July 2013 by the Basel Committee, entitled *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement* (BCBS 255).

    The values of G-SIB indicators at 31 December 2022 are presented in GSIB1 format in Appendix 3 *Countercyclical capital buffers and G-SIB buffer*.

    The Group received the notification from the *Autorité de contrôle prudentiel et de résolution* (ACPR), dated 18 November 2022, that it was on the 2022 list of global systemically important financial institutions in sub-category 2, corresponding to its score in the database at end 2021.

    As a result, the G-SIB buffer requirement for the Group applying from 1 January 2023 remain unchanged compared to the previous requirement at 1.5% of the total amount of risk exposures.

  - the buffer for Domestic Systemically Important Banks (D-SIBs) aims to strengthen the capital requirements for institutions whose failure would have an impact on their national economy. The D-SIBs buffer for BNP Paribas is set at 1.5%;
- the systemic risk buffer aims to limit systemic or macro prudential non-cyclical risks in the long term. Since 30 June 2022, this buffer amounts to 0.08% for the Group;
- the countercyclical capital buffer is defined as a surcharge of CET1 capital whose purpose is to adjust over time to increase the capital requirements in periods when credit growth is accelerating and reduce them in slower periods. A rate may be activated in each country by a discretionary decision from the appointed national authority. In view of the notified rates by country, the BNP Paribas countercyclical capital buffer is 0.09% at 31 December 2022 and 0.10% from 1 January 2023 compared with 0.03% at 31 December 2021 (see Appendix 3 *Countercyclical Capital Buffer and G-SIB Buffer*).

Pillar 2 requirement

With respect to supervision, the second Pillar of the Basel Agreement provides that the supervisor shall determine whether the policies, strategies, procedures and arrangements implemented by the Group on the one hand, and the capital held on the other hand, are adequate for risk management and risk coverage purposes. This evaluation exercise by the supervisors to determine the adequacy of mechanisms and capital with respect to bank risk levels is designated in the regulations under the term SREP (Supervisory Review and Evaluation Process).

ICAAP (Internal Capital Adequacy Assessment Process) is the process by which institutions assess the adequacy of their own funds with their internal measurements of the capital needed to cover the risks generated by their usual activities. ICAAP is used for the annual SREP.

Within the BNP Paribas Group, the ICAAP is based on two key principles, as articulated in the European Central Bank's Guide on ICAAP: the assessment of the Group's adequate level of available capital to cover the capital needed in the internal perspective, and the forward-looking capital planning.

In the ICAAP, the adequacy of available capital to the risks borne by the Group is assessed in the internal perspective, using a comprehensive quantification of the capital needs generated by the Pillar 1 risks specified by Basel regulations, as well as by the Pillar 2 risks identified as material within the framework of the Group's risk identification system. In this perspective, capital needs to cover Pillar 1 and Pillar 2 risks are assessed using internal quantitative approaches, supplemented, as necessary, by qualitative approaches and dedicated monitoring frameworks.

Capital planning is based on the most recent actual and estimated financial data available at the time. This data is used to project future capital resources and requirements, in particular by taking into account regulatory requirements, factoring in the Group's goal of maintaining a first-class credit rating to protect its origination capability, its business development targets and anticipated regulatory changes.

Capital planning consists in comparing regulatory requirements and the capital ratio targets defined by the Group with future projected capital requirements, then testing their robustness in different scenarios, including in stressed macroeconomic environments.

Notification of SREP results

The results of the SREP process are notified annually to BNP Paribas Executive Management by the ECB. The requirements applying from 1 January 2023 were notified on 22 December 2022.

The SREP decision comprises two items: a requirement known as the "Pillar 2 requirement" ("P2R"), and a non-public guidance called "Pillar 2 guidance" ("P2G").

Following the SREP assessment conducted by the ECB in 2022, the requirements that the Group must meet under Pillar 2 since 1 January 2023 are the following:

- 0.88% for CET1 capital;
- 1.18% for Tier 1 capital;
- 1.57% for total capital.

Capital requirements

The Group's CET1 ratio, Tier 1 ratio and total capital ratio must at all times satisfy the following requirements corresponding to the limits of applicable distribution restrictions (Maximum Distributable Amount – MDA):

- the minimum CET1 ratio, Tier 1 ratio and total capital ratio, respectively, in accordance with article 92 (1) points a), b) and c) of the CRR;
- the Pillar 2 requirement;
- the combined buffer requirement defined in article 128 (6) of CRD 5, as transposed into the respective national law.

TABLE 20: OVERALL CAPITAL REQUIREMENTS

	31 December 2022	31 December 2023
CET1: Minimum requirement (Pillar 1)	4.50%	4.50%
CET1: Pillar 2 requirement(*)	0.78%	0.88%
Combined Buffer Requirement	4.17%	4.45%
of which capital conservation buffer	*2.50%*	*2.50%*
of which G-SIBs buffer	*1.50%*	*1.50%*
of which countercyclical capital buffer(**)	*0.09%*	*0.37%*
of which systemic capital buffer(***)	*0.08%*	*0.08%*
OVERALL CET1 CAPITAL REQUIREMENT	**9.45%**	**9.83%**
Tier 1: Minimum requirement (Pillar 1)	6.00%	6.00%
Tier 1: Pillar 2 requirement(*)	1.04%	1.18%
Combined Buffer Requirement	4.17%	4.45%
OVERALL TIER 1 CAPITAL REQUIREMENT	**11.21%**	**11.62%**
Total capital: Minimum requirement (Pillar 1)	8.00%	8.00%
Total capital: Pillar 2 requirement(*)	1.39%	1.57%
Combined Buffer Requirement	4.17%	4.45%
OVERALL TOTAL CAPITAL REQUIREMENT	**13.56%**	**14.02%**

(*) Only the Pillar 2 requirement is made public. Since 2020, the P2R has taken into account the application of article 104bis of Directive (EU) No 2019/878.
(**) Countercyclical capital buffers as at 31 December 2022 and anticipated as at 31 December 2023 take into account the applicable rate increases applicable in 2023 (see appendix 3: Countercyclical capital buffer and G-SIB buffer).
(***) Since 30 June 2022, a sectoral systemic risk buffer of 9% on mortgage portfolios is settled in Belgium. It replaces the RWA penalty on these exposures. The impact of these two measures is overall neutral at Group level.

The CET1 capital requirement is 9.45% at 31 December 2022 (excluding Pillar 2 guidance), in view of the capital conservation buffer at 2.5%, a G-SIB buffer at 1.5%, the countercyclical buffer at 0.09%, a systemic risk buffer at 0.08% and a Pillar 2 requirement at 0.78%.

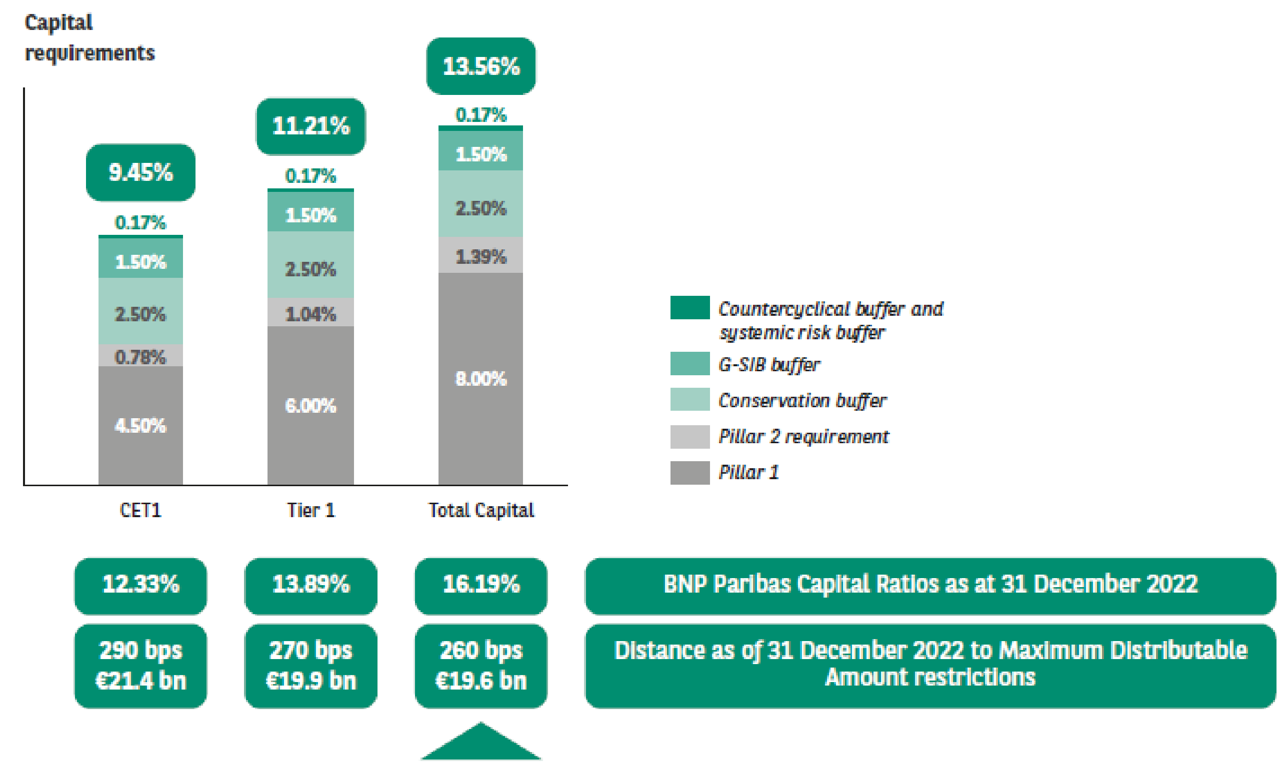
At 31 December 2022, BNP Paribas' CET1 ratio stands at 12.33%[1], well above the minimum requirement level applicable in 2022 notified by the European Central Bank. Compared to 31 December 2021, the CET1 ratio decreased by around 60 basis points as at 31 December 2022, is mainly explained by:

- the placing into reserves of 2022 net income after taking into account a 60% dividend pay-out ratio net of risk-weighted assets intrinsic growth (+30 bps);
- the economy support and growth acceleration (-20 bps);
- the market prices impact on changes in assets and liabilities recognised directly in equity (-40 bps);
- the impact related to updates of models and regulations[2] (-30 bps).

1 CRD 5, including IFRS 9 transitional arrangements.

2 In particular IRB Repair and application of the EBA recommendation regarding the foreign exchange risk on the structural position and including effects induced by the hyperinflation situation in Türkiye.

FIGURE 1: MDA RESTRICTION THRESHOLD



Since 1 January 2022, the Group is subject to a restriction threshold applicable to distributions on the basis of the MREL requirement (M-MDA, see paragraph *MREL*).

The capital surplus over the thresholds for distribution restriction is the lesser of the three amounts calculated respectively in relation to CET1, Tier 1 and total capital requirements based on exposure. As of 31 December 2022, the excess of Total capital over the restriction thresholds applicable to distributions was EUR 19.6 billion.

Since 1 January 2023, the Group is subject to a restriction threshold applicable to distributions on the basis of the leverage ratio requirement (L-MDA, see paragraph *Leverage ratio*). BNP Paribas disclosed its leverage ratio and its capital surplus over the L-MDA threshold in the annual disclosures of results on the 7 February 2023. Thus, at 1 January 2023, the excess of Total capital over the restriction thresholds applicable to distributions was EUR 14.4 billion.

BNP Paribas ratios are monitored and managed centrally, on a consolidated basis. Where a French or international entity is required to comply with banking regulations at its own level, its ratios are also monitored and managed directly by the entity (see paragraph *Capital management at local level*).

Requirements applicable to the Insurance business

BNP Paribas' insurance business is governed by Solvency II, the standard for calculating the solvency coverage ratio (Directive 2009/138/EC as transposed into French law).

The objective of Solvency II is to:

- integrate the concepts of risks and risk appetite to which insurance companies are exposed;
- harmonise the insurance regulatory regimes across Europe;
- give more power to supervisory authorities.

Solvency II is divided into three pillars aiming to:

- Pillar 1: assess solvency using what is known as an economic capital-based approach;
- Pillar 2: implement qualitative requirements, *i.e.* governance and risk management rules that include a forward-looking approach to risk assessment. This assessment is called ORSA (Own Risk & Solvency Assessment);
- Pillar 3: improve the transparency of the insurance business by making solvency the cornerstone of disclosures to the public and the supervisory authority.

The BNP Paribas Cardif group complies with this regulation both in terms of risk management and governance, as well as calculation and reporting. Solvency II-related data are available in the Solvency and Financial Condition Report (SFCR) for the BNP Paribas Cardif group, published on the institutional website https://www.bnpparibascardif.com/en.

Insurance risks are introduced in section 5.10 *Insurance risks*.

Solvency II sets out two capital requirements:

- the Solvency Capital Requirement (SCR);
- the Minimum Capital Required (MCR) or, for groups, the SCR Group Minimum.

The SCR (Solvency Capital Requirement) is the level of own funds required to absorb a full series impacts after accounting for the correlation between risks. It is calibrated to cover such an event with a return period of 200 years within a one-year timescale (Value at Risk at 99.5%). The BNP Paribas Cardif SCR is evaluated by means of the standard formula laid down by the regulation.

The capital management policy of BNP Paribas Cardif aims notably to ensure that the prudential solvency requirements are met, to cover at least 100% of the SCR defined within the scope of the ORSA assessment and to structure own funds so that the best balance can be found between the share capital, subordinated debt and other own funds elements, complying with the limits and levels laid down by regulations.

At 31 December 2021, own funds eligible for the Solvency Capital Requirement stood at EUR 19,967 million. The amount of SCR was EUR 10,822 million and the SCR coverage ratio was 185%. Eligible own funds for the SCR Group Minimum amounted to EUR 16,835 million. The amount of SCR Group Minimum was EUR 4,902 million, and the SCR Group Minimum coverage ratio was 343%.

The Solvency Report at 31 December 2022 will be published on 19 May 2023.

Compliance with the regulation on the additional supervision of financial conglomerates

As a bancassurer, the BNP Paribas Group is also subject to additional supervision as a financial conglomerate, pursuant to European Directive 2002/87/EU, supplemented by Delegated Regulation 342/2014 of the European Commission and implemented into French law by the Order of 3 November 2014.

The financial conglomerates directive has established additional prudential supervision, added to the rules existing in the banking and insurance sectors, because it has introduced additional constraints on capital adequacy, the monitoring of large exposures, and intragroup transactions.

A financial conglomerate is required to meet additional capital adequacy requirements on a consolidated basis. The purpose is to require sufficient capital to cover both banking sector and insurance sector risks, while eliminating multiple gearing.

The capital surplus or shortfall results from the difference between the financial conglomerate's equity capital and the solvency requirements applicable to the banking and insurance industries:

- the financial conglomerate's capital is determined based on the sector's solvency rules (CRR for the banking sector and Solvency II for the insurance sector);
- the requirements for the financial conglomerate are determined on the basis of banking sector requirements, calculated according to the CRR 2 and CRD 5 rules, including all capital buffers as well as the requirement resulting from the SREP 2021 applicable in 2022, and on the basis of the solvency capital requirement (SCR) for the insurance sector, calculated in accordance with the Solvency II regulation.

In calculating the financial conglomerate's capital adequacy, the requirements and deductions of insurance entities are treated in compliance with Solvency II rules in replacement of the rules defined in the CRR. The latter consist primarily of a 370% weighting of investments in equities treated according to the simple weighting method (see section 5.4 *Credit risk: Equities under the simple weighting method*).

Governance for the prudential supervision of financial conglomerates falls to the Capital Committee, which meets quarterly under the chairmanship of the Chief Financial Officer.

As at 31 December 2022, BNP Paribas Group, as a financial conglomerate, had capital of EUR 136.0 billion compared to a total requirement of EUR 109.8 billion, which represents a capital surplus of EUR 26.3 billion.

TABLE 21: FINANCIAL CONGLOMERATES – OWN FUNDS AND CAPITAL ADEQUACY RATIO (EU INS2)

		a	a
In millions of euros		**31 December 2022**	**31 December 2021**
1	Supplementary own fund requirements of the financial conglomerate *(amount)*	26,250	29,189
2	Capital adequacy ratio of the financial conglomerate *(%)*	123.91%	128.35%

RECOVERY AND RESOLUTION

Following the 2008/2009 financial crisis, international banking regulatory bodies adopted a series of regulations and directives based on the recommendations of the Financial Stability Board to facilitate the authorities' management of crises involving financial institutions and limit the impact of a potential collapse on the economy and public finances. They provide for:

- powers and instruments for the supervisory authorities to allow for better anticipation and oversight of the recovery of banks in difficulty, particularly by means of recovery plans;
- powers and instruments for the resolution authorities in order to implement orderly resolution of a bank that would not have been able to recover by itself and would be placed in resolution. This is based among other things on the resolution documents and detailed reports required from banks to enable authorities to prepare resolution plan;
- the addition of further regulatory requirements for institutions. These requirements – which overlap quite widely – aim to ensure a sufficient quantity of liabilities able to absorb losses or be converted into equity. In particular, they consist of:
  - a TLAC (Total Loss Absorbing Capacity) ratio for Global Systemically Important Banks (G-SIBs),
  - a MREL (Minimum Requirement for own funds and Eligible Liabilities) ratio applicable to all European institutions;
- bail-in rules for banks, with a review of the ranking of creditors including a category of TLAC eligible debt (non-preferred senior) created in 2016, plus the creation in 2014 of a resolution fund financed by the banks, with the aim of avoiding any recourse to public assistance.

The recommendations of the Financial Stability Board were transposed into French banking law in July 2013, introducing in particular the obligation to create recovery and resolution plans, and giving resolution powers for the ACPR (*Autorité de contrôle prudentiel et de résolution*).

On a European level, Directive 2014/59/EU (BRRD – Bank Recovery and Resolution Directive) was passed in 2014 and has been transposed into the law of all European Union Member States. This directive, as well as Regulation (EU) No. 806/2014 (SRM Regulation – Single Resolution Mechanism Regulation) of 2014 and various additional delegated regulations, form all of the current regulations governing the recovery and resolution of European financial institutions. The amendments contained in BRRD 2, CRD 5 and CRR 2 proposed by the European Commission in November 2016 were approved and published in the Official Journal on 7 June 2019. In France, the transpositions of BRRD 2 and CRD 5 were finalised on 21 December 2020.

Recovery Plan

The recovery plan, prepared at Group level, describes the possible recovery options if the Group were to find itself in a distressed situation. It contains information needed by the authorities to understand the Group's operations, resilience and capacity to absorb losses.

BNP Paribas submitted its updated Recovery Plan to its supervisor, the ECB, in September 2022. The Single Resolution Board (SRB) and other authorities can obtain the Recovery Plan from the ECB.

Prepared in accordance with the Financial Stability Board's recommendations, and the provisions of the French Monetary and Financial Code, this Recovery Plan was submitted to the Board of director's Internal Control, Risk Management and Compliance Committee (CCIRC) for review and then to the Board of directors for approval (see chapter 2 *Corporate Governance and internal control*).

The new version of the Plan includes updated figures and takes account of changes in the Group's organisation and activities. It is accompanied by a detailed description of the recovery scenarios used and the impacts of the recovery options identified. It also takes account of the comments of the ECB and the Recovery College's participating authorities, which met in February 2022, as well as developments in European regulations. It also incorporates lessons learned from dry runs conducted regularly by BNP Paribas on certain aspects of the plan with the participation of the Executive Management and the ECB.

This Recovery College, organised under the auspices of its supervisor, the ECB, brings together the authorities of the member countries of the European Union in which BNP Paribas has a presence, as well as the European Banking Authority.

Resolution documentation

In 2022, BNP Paribas submitted a set of documents to the *Autorité de contrôle prudentiel et de résolution* (ACPR) to be forwarded to the Single Resolution Board (SRB). These documents contain information needed by the authorities to prepare a plan for the potential resolution of BNP Paribas.

Since 2016, the Bank provides annually a series of documents. These include an analytical declaration of the Bank and its subsidiaries' liabilities (Liability Data Report), required by the SRB to carry out its analyses of future requirements for liabilities eligible for bail-in, as well as various financial analyses, a presentation on the Bank's organisational structure and analyses of its critical functions and operational continuity in resolution. These statements are in line with the requirements formalised by the EBA (on behalf of the Commission).

In 2022, BNP Paribas took also part in a series of working meetings of the Internal Resolution Team (IRT), including the SRB, the ACPR and other EU bank resolution authorities, under the auspices of the SRB.

The purpose of these meetings, in which a series of questionnaires completed by BNP Paribas are discussed, is to deepen the SRB's analyses of the Group's capacity to deal with a potential resolution.

The Crisis Management Group (CMG) and the Resolution College met in February 2023 in view to approve the resolution plan drafted by the SRB.

The resolution strategy privileged by the SRB for major institutions such as BNP Paribas includes “bail-in” which, in contrast to “bail-out”, involves the absorption of losses through the bank’s internal resources. This implies the cancellation or reduction in the nominal value of a debt and/or its complete or partial conversion into equity. For major centralised banking groups such as BNP Paribas, this resolution strategy is applied at a Single Point of Entry (SPE), *i.e.* BNP Paribas SA, regardless of where the losses occur within the Group.

With regard to the US authorities, BNP Paribas presented a resolution plan for its activities in the United States, pursuant to Rule 165(d) of the Dodd-Frank Act in December 2021. The next version of the resolution plan will be submitted in 2024.

TLAC

In accordance with Regulation (EU) No. 2019/876, Global Systemically Important Banks (G-SIB) have been subject to a two-fold TLAC requirement since 27 June 2019. This requirement includes, on the one hand, a minimum ratio expressed as a percentage of the risk-weighted assets, and, on the other hand, a minimum ratio expressed as a percentage of the leverage ratio exposure.

At 31 December 2022, the minimum TLAC requirement for the Group stood at 22.17% of the risk-weighted assets:

- a 18% TLAC minimum requirement;
- a 4.17% combined buffer requirement, in view of the capital conservation buffer at 2.5%, the G-SIB buffer at 1.5%, the systemic risk buffer at 0.08% and the countercyclical capital buffer at 0.09%.

From 1 January 2022, the Group’s minimum TLAC requirement amounts to 6.75% of leverage exposure.

TABLE 22: COMPOSITION OF TLAC RATIO (EU TLAC1)

	In millions of euros	**31 December 2022**	**31 December 2021**
Regulatory capital			
1	Common Equity Tier 1 capital (CET1)	91,828	91,976
2	Additional Tier 1 capital (AT1)	11,616	8,280
6	Tier 2 capital (Tier 2)	17,117	17,001
11	**Total TLAC eligible capital**	**120,562**	**117,256**
Other TLAC eligible liabilities			
12	Non-preferred senior debt issued directly by the resolution entity (not grandfathered)(*)	75,204	67,003
EU-12a	Non-preferred senior debt issued by other entities within the resolution group (not grandfathered)		
EU-12b	Non-preferred senior debt issued prior to 27 June 2019 *(*grandfathered)		
EU-12c	Amortised portion of Tier 2 instruments with remaining maturity over one year	3,410	1,610
13	Preferred senior debt (not grandfathered before application of 3.5% RWA limit)	Option not applied	Option not applied
EU-13a	Preferred senior debt issued prior to 27 June 2019 (debt grandfathered before application of the 3.5% RWA limit)	Option not applied	Option not applied
14	Preferred senior debt (after application of the 3.5% RWA limit)	Option not applied	Option not applied
17	TLAC eligible liabilities items before adjustments	78,614	68,613
EU-17a	*of which subordinated*	*78,614*	*68,613*
Own funds and TLAC eligible liabilities: Adjustments to non-regulatory capital elements			
18	Total capital and other TLAC eligible liabilities before regulatory adjustments	199,176	185,870
19	Deduction of exposures between MPE resolution groups		
20	Deduction of investments in other TLAC eligible liabilities instruments		
22	**Total capital and other TLAC eligible liabilities after regulatory adjustments**	**199,176**	**185,870**
Risk-weighted assets and leverage ratio total exposure measure			

In millions of euros		31 December 2022	31 December 2021
23	**Risk-weighted assets (RWAs)**	**744,851**	**713,671**
24	**Leverage ratio total exposure measure**	**2,373,844**	**2,442,524**
25	**TLAC RATIO** *(as a percentage of risk-weighted assets)*	**26.74%**	**26.04%**

26	**TLAC RATIO** *(as a percentage of leverage ratio total exposure measure)*	**8.39%**	**7.61%**
27	CET1 (as a percentage of RWAs) available after meeting the resolution group's requirements	6.80%	7.11%
28	Combined buffer requirement	4.17%	4.03%
29	*of which capital conservation buffer*	*2.50%*	*2.50%*
30	*of which countercyclical buffer*	*0.09%*	*0.03%*
31	*of which systemic risk buffer*	*0.08%*	*0.00%*
EU-31a	*of which G-SIBs or D-SIBs buffers*	*1.50%*	*1.50%*
EU-32	**Total amount of excluded liabilities referred to in article 72a (2) of the Regulation (EU) No. 575/2013**	**1,772,802**	**1,838,294**

(*) Outstanding principal amount.

At 31 December 2022, the Group's TLAC ratio broadly exceeds the applicable minimum level of requirement. This ratio stood at 26.74% of risk-weighted assets, without using senior preferred debt, which are eligible up to a limit of 3.5% of risk-weighted assets. It stands at 8.39% of leverage exposures.

The debts issuance targets aiming to satisfying these requirements and their nature are described in the section Wholesale funding trends based on regulatory changes in section 5.8 *Liquidity risk*.

TABLE 23: CREDITOR RANKING OF THE RESOLUTION ENTITY BNP PARIBAS SA(*) (EU TLAC3)

		31 December 2022				
		Insolvency ranking				
	In millions of euros	**1**	**2**	**2**	**4**	**TOTAL**
1	Description of insolvency ranking	CET1 capital(**)	AT1 capital(**)	T2 capital(**)	Non preferred senior debt(***)	
2	Regulatory capital instruments and debt instruments	121,296	11,800	23,699	81,044	**237,839**
3	*of which excluded instruments*					**-**
4	Regulatory capital instruments and eligible debt instruments	121,296	11,800	23,699	81,044	**237,839**
5	*of which instruments eligible for the TLAC ratio*	*121,296*	*11,800*	*23,691*	*75,204*	***231,991***
6	*of which residual maturity ≥ 1 year and < 2 years*			*937*	*5,751*	***6,688***
7	*of which residual maturity ≥ 2 years and < 5 years*			*8,239*	*28,687*	***36,926***
8	*of which residual maturity ≥ 5 years and < 10 years*			*7,772*	*31,851*	***39,623***
9	*of which residual maturity ≥ 10 years (excluding perpetual)*			*6,012*	*8,915*	***14,927***
10	*of which perpetual instruments*	*121,296*	*11,800*	*731*		***133,827***

(*) The data presented correspond to the scope of the resolution entity, BNP Paribas SA.
(**) Amounts before regulatory adjustments.
(***) Outstanding principal amount.

						31 December 2021
						Insolvency ranking
	In millions of euros	**1**	**2**	**2**	**4**	**TOTAL**
1	Description of insolvency ranking	CET1 capital (**)	AT1 capital(**)	T2 capital(**)	Non preferred senior debt(***)	
2	Regulatory capital instruments and debt instruments	115,558	9,207	22,118	69,914	**216,797**
3	*of which excluded instruments*					**-**
4	Regulatory capital instruments and eligible debt instruments	115,558	9,207	22,118	69,914	**216,797**
5	*of which instruments eligible for the TLAC ratio*	*115,558*	*8,237*	*21,762*	*67,003*	***212,560***
6	*of which residual maturity ≥ 1 year and < 2 years*			*12*	*5,768*	***5,780***
7	*of which residual maturity ≥ 2 years and < 5 years*			*6,264*	*22,380*	***28,644***
8	*of which residual maturity ≥ 5 years and < 10 years*			*8,128*	*29,487*	***37,615***
9	*of which residual maturity ≥ 10 years (excluding perpetual)*			*6,642*	*9,368*	***16,010***
10	*of which perpetual instruments*	*115,558*	*8,237*	*716*		***124,511***

(*) The data presented correspond to the scope of the resolution entity, BNP Paribas SA.
(**) Amounts before regulatory adjustments.
(***) Outstanding principal amount.

MREL

The total Minimum Requirement for own funds and Eligible Liabilities (MREL) will apply to all European Union credit institutions and investment firms from 1 January 2024.

The resolution authorities have notified the Group of an intermediate MREL which applies from 1 January 2022. Since the end of 2021 the Group has exceeded the expected intermediate MREL requirement and the distance above the minimum requirement ("M-MDA") is greater than the distance applicable to the distribution restriction thresholds ("MDA") calculated in relation to the capital requirements (see paragraph Overall capital requirements).

The requirements of the MREL ratio publication will apply from 1 January 2024.

Changes in regulations

BNP Paribas closely tracks the regulatory developments relating to bank recovery and resolution.

It noted in particular the Eurogroup statement of June 2022[1] that required a targeted review of the Crisis Management and Deposit Insurance (CMDI) framework (BRRD, SRMR and DGSD). The Commission is expected to issue a proposal to that effect in the first semester of 2023, which will be carefully analysed. Further developments should follow in the course of 2023 at the level of the EU co-legislators.

LEVERAGE RATIO

The leverage ratio's main objective is to serve as a complementary measure to the risk-based capital requirements (back-stop principle). It is calculated as the ratio between Tier 1 capital and an exposure measure calculated using on- and off-balance sheet commitments valued using a prudential approach. In particular, derivatives and repurchase agreements are also adjusted.

At a European level, the leverage ratio requirement is applied gradually in accordance with the provisions contained in the CRR and CRR 2:

- up to 29 June 2021, the leverage ratio has been the subject of a statement submitted to the ECB and a disclosure requirement under Pillar 3;
- from 28 June 2021 to 31 December 2022, institutions are subject to a minimum leverage ratio requirement of 3%;

[1] Eurogroup statement on the future of the Banking Union of 16 June 2022 – Consilium (europa.eu).

- from 1 January 2023, Global Systemically Important Banks (G-SIBs) is subject to an additional leverage requirement of 50% of the institution's G-SIBs buffer (see *Capital adequacy* section) and a new distribution threshold applying to the leverage ratio. The distance applicable to the distribution restriction thresholds ("L-MDA") is calculated in relation to the capital requirements (see paragraph *Overall capital requirements*).

Processes used to manage the risk of excessive leverage

Monitoring of the leverage ratio is one of the responsibilities of the Capital Committee (as described in the section *Capital management* hereafter).

Factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers

The leverage ratio stood at 4.36% at 31 December 2022 compared to 4.10% at 31 December 2021. It is well above the 3% leverage requirement in force at 31 December 2022. At 1 January 2023, the leverage ratio requirement includes an additional leverage requirement equal to 50% of the G-SIBs buffer in accordance with the provisions of the CRR and CRR2 and is 3.75% for the BNP Paribas Group.

TABLE 24: LEVERAGE RATIO – ITEMISED

Summary reconciliation of accounting assets and leverage ratio exposures (EU LR1)

		a	a
In millions of euros		**31 December 2022**	**31 December 2021**
1	Total assets as per published financial statements	2,666,376	2,634,444
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	(243,105)	(264,799)
3	(Adjustment for securitised exposures that meet the operational requirements for the recognition of risk transference)	(3,594)	(4,240)
4	(Adjustment for temporary exemption of exposures to central bank (if applicable))		
5	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with point (i) of article 429a(1) CRR)		
6	Adjustment for regular-way purchases and sales of financial assets subject to trade date accounting		
7	Adjustment for eligible cash pooling transactions		
8	Adjustments for derivative financial instruments	(136,719)	(32,959)
9	Adjustment for securities financing transactions (SFTs)(*)	26,619	30,023
10	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	207,155	193,916
11	(Adjustment for prudent valuation adjustments and specific and general provisions which have reduced Tier 1 capital)	(2,495)	(2,563)
11a	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with point (c) of article 429a(1) CRR)		
11b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with point (j) of article 429a(1) CRR)	(14,531)	(12,954)
12	Other adjustments	(125,864)	(98,343)
13	**LEVERAGE RATIO TOTAL EXPOSURE MEASURE**	**2,373,844**	**2,442,524**

(*) Securities Financing Transactions: repurchase agreements and securities borrowing/lending.

Leverage ratio common disclosure (EU LR2)

		a	a
	In millions of euros	**31 December 2022**	**31 December 2021**
	On-balance sheet exposures (excluding derivatives and SFTs(*))		
1	On-balance sheet items (excluding derivatives, SFTs(*), but including collateral)	1,821,751	1,823,650
2	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework		
3	(Deductions of receivables assets in respect of margin calls paid in cash in connection with derivatives transactions)	(48,796)	(40,430)
4	(Adjustment for securities received under securities financing transactions that are recognised as an asset)		
5	(General credit risk adjustments to on-balance sheet items)		
6	(Asset amounts deducted in determining Tier 1 capital)	(15,032)	(13,950)
7	**Total on-balance sheet exposures (excluding derivatives and SFTs(*))**	**1,757,923**	**1,769,269**
	Derivative exposures		
8	Replacement cost associated with derivatives transactions (net of eligible cash variation margin)	76,968	70,791
8a	Derogation for derivatives: replacement costs contribution under the simplified standardised approach		
9	Add-on amounts for potential future exposure associated with SA-CCR derivatives transactions	127,968	132,005
9a	Derogation for derivatives: Potential future exposure contribution under the simplified standardised approach		
9b	Exposure determined under Original Exposure Method		
10	(Exempted CCP leg of client-cleared trade exposures) (SA-CCR)	(4,897)	(1,404)
10a	(Exempted CCP leg of client-cleared trade exposures) (simplified standardised approach)		
10b	(Exempted CCP leg of client-cleared trade exposures) (original exposure method)		
11	Adjusted effective notional amount of written credit derivatives	474,397	449,691
12	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(456,761)	(434,245)
13	**Total derivatives exposures**	**217,675**	**216,837**
	Securities financing transaction (SFT) exposures(*)		
14	Gross SFT assets (with no recognition of netting), after adjustment for sales accounting transactions	331,761	395,040
15	(Netted amounts of cash payables and cash receivables of gross SFT(*) assets)	(143,306)	(148,651)
16	Counterparty credit risk exposure for SFT(*) assets	26,362	30,023
16a	Derogation for SFTs(*): Counterparty credit risk exposure in accordance with articles 429b (4) and 222 of the Regulation (EU) No. 575/2013		
17	Agent transaction exposures	258	
17a	(Exempted CCP leg of client-cleared SFT(*) exposure)		
18	**Total securities financing transaction exposures**	**215,074**	**276,412**
	Other off-balance sheet exposures		
19	Off-balance sheet exposures at gross notional amount	506,724	476,655
20	(Adjustments for conversion to credit equivalent amounts)	(300,550)	(283,694)
21	(General provisions associated with off-balance sheet exposures deducted in determining Tier 1 capital)		
22	**Off-balance sheet exposures**	**206,174**	**192,960**

	In millions of euros	a 31 December 2022	a 31 December 2021
	Exposures exempted in accordance with article 429, paragraphs 7 and 14, under Regulation (EU) No. 575/2013 (on and off-balance sheet)		
22a	(Exposures excluded from the leverage ratio total exposure measure in accordance with point (c) of article 429a(1) CRR)		
22b	(Exposures exempted in accordance with point (j) of article 429a(1) CRR (on and off-balance sheet))	(14,531)	(12,954)
22c	(Excluded exposures of public development banks (or units) – Public sector investments)		
22d	(Excluded exposures of public development banks (or units) – Promotional Loans)		
22e	(Excluded passing-through promotional loan exposures by non-public development banks (or units))		
22f	(Excluded guaranteed parts of exposures arising from export credits)	(8,471)	
22g	(Excluded excess collateral deposited at triparty agents)		
22h	(Excluded CSD related services of CSD/institutions in accordance with point (o) of article 429a(1) CRR)		
22i	(Excluded CSD related services of designated institutions in accordance with point (p) of article 429a(1) CRR)		
22j	(Reduction of the exposure value of pre-financing or intermediate loans)		
22k	**(Total exempted exposures)**	**(23,003)**	**(12,954)**
	Capital and total exposure measure		
23	**Tier 1 capital**	**103,445**	**100,255**
24	**Leverage ratio total exposure measure**	**2,373,844**	**2,442,524**
25	**LEVERAGE RATIO (**)**	**4.36%**	**4.10%**
EU-25	Leverage ratio (without the adjustment due to excluded exposures of public development banks – Public sector investments) *(%)*	4.36%	4.10%
25a	Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) (%)	4.36%	4.10%
	Leverage requirement		
26	Regulatory minimum leverage ratio requirement *(%)*	3.00%	3.00%
26a	Additional leverage ratio requirements (%)		
26b	*of which: to be made up of CET1 capital*		
27	Leverage ratio buffer requirement *(%)*		
27a	Overall leverage ratio requirement *(%)*	3.00%	3.00%
	Choice on transitional arrangements and relevant exposures		
EU-27b	Amount of fiduciary assets derecognised in accordance with article 429 (11) of Regulation (EU) No. 575/2013.		
	Disclosure of mean values		
28	Mean of daily values of gross SFT(*) assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivable	250,964	316,646
29	Quarter-end value of gross SFT(*) assets, after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables	188,455	246,389
30	Total exposure measure (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT(*) assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)	2,436,353	2,512,781
30a	Total exposure measure (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT(*) assets	2,436,353	2,512,781

In millions of euros		a 31 December 2022	a 31 December 2021
	(after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)		
31	**Leverage ratio (including the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT(*) assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)**	**4.25%**	**3.99%**
31a	**Leverage ratio (excluding the impact of any applicable temporary exemption of central bank reserves) incorporating mean values from row 28 of gross SFT(*) assets (after adjustment for sale accounting transactions and netted of amounts of associated cash payables and cash receivables)**	**4.25%**	**3.99%**

(*) Securities Financing Transactions: repurchase agreements and securities lending/borrowing operations.

Split of on-balance sheet exposures (excluding derivatives, SFTs(*) and exempted exposures) (EU LR3)

In millions of euros		a 31 December 2022	a 31 December 2021
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs(*), and exempted exposures), of which:**	**1,749,953**	**1,770,265**
EU-2	Trading book exposures	164,340	190,179
EU-3	Banking book exposures, of which:	1,585,613	1,580,087
EU-4	Covered bonds		
EU-5	Exposures treated as sovereigns	483,668	503,388
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	38,724	40,828
EU-7	Institutions	29,795	33,574
EU-8	Secured by mortgages of immovable properties	205,730	185,825
EU-9	Retail exposures	246,598	242,525
EU-10	Corporate	383,742	356,553
EU-11	Exposures in default	12,844	13,711
EU-12	Other exposures (*e.g.* equity, securitisations, and other non-credit obligation assets)	184,511	203,683

(*) Securities Financing Transactions: repurchase agreements and securities borrowing/lending.

Pursuant to article R.511-16-1 of French Monetary and Financial Code, BNP Paribas' asset yield (*i.e.* net accounting income divided by the total balance sheet on a consolidated basis) was 0.38% in 2022 compared to 0.36% in 2021.

CAPITAL MANAGEMENT [Audited]

To ensure the Group's sustainability, the Bank must maintain an adequate level of capital with respect to the risks to which it is exposed and its strategy. Capital is a rare and strategic resource, which requires stringent, clearly defined, rigorous management according to an approach, which takes account of the needs and demands of stakeholders, including shareholders, supervisors, creditors and depositors.

OBJECTIVES

BNP Paribas' capital management:

- is governed by policies and procedures which make it possible to understand, document and supervise capital management practices throughout the Bank;
- takes risk measurement into account to determine the use of the capital;
- considers capital requirements and resources under normal operating conditions, as well as under situations of severe, but plausible stress;
- presents a forward-looking vision of the Bank's capital adequacy to the Executive Management;
- allocates the capital constraint to the business lines in keeping with their strategic objectives;
- complies with the Internal Capital Adequacy Assessment Process (ICAAP) and is consistent with the Risk Appetite Framework;
- is monitored by an appropriate governance.

CAPITAL MANAGEMENT AT CENTRAL LEVEL

BNP Paribas' capital management aims to ensure and verify that the Group has adequate capital to comply with the regulatory capital ratios, as well as specific requirements, for instance to operate as a Global Systemically Important Bank. To ensure its capital adequacy, the Group abides by the following principles:

- maintaining the capital at an appropriate level in view of BNP Paribas' activities, risk appetite, growth and strategic initiatives;
- maintaining BNP Paribas' capital at a level which complies with regulatory requirements;
- keeping a balance between capital adequacy and return on capital;
- meeting its obligations *vis-à-vis* creditors and counterparties, at each due date;
- continuing to operate as a financial intermediary.

Governance

The governance of the development, approval and update of the capital planning process is handled by two committees:

- the Risk-Weighted Assets Committee: it is jointly chaired by the Chief Financial Officer and the Chief Risk Officer, and comprises the operational divisions' Chief Financial Officers and Chief Risk Officers. The Committee meets quarterly to examine forecasts of the Group's risk-weighted assets in the context of the budget cycle and updating of its estimates.

  The Risk-Weighted Assets Committee is tasked with:

  - monitoring and discussing the forecasts of the Group's risk-weighted assets for each business line,
  - identifying the main assumptions underlying these forecasts and checking their accuracy,
  - identifying any evolution factors and quantifying their impacts,
  - proposing adjustments if required;
- the Capital Committee: it meets at least quarterly and is chaired by the Chief Financial Officer. The Committee's mission is to validate the Group's targets in terms of solvency ratios and loss absorbing capacity requirements in case of resolution (TLAC and MREL) as well as the trajectory to achieve these targets; monitor compliance with this trajectory; and, where necessary, propose corrective measures, consistent with the Group's Risk Appetite Statement (RAS). The Committee ensures, in this respect, internal capital adequacy is taken into account in the ICAAP as well as in the results of the global stress tests processes.

  The Capital Committee is tasked with:

  - monitoring, validating and anticipating changes in the business lines' risk-weighted assets as well as changes in the Group's prudential ratios, in central scenario and adverse scenario, and monitoring these indicators relative to the Group's Risk Appetite, which is stated in the Risk Appetite Statement. This includes solvency ratios, leverage ratio, TLAC/MREL ratios, capital adequacy of the financial conglomerate, *etc.*,
  - identifying any evolution factors and quantifying their impacts,
  - defining trends in short/medium term capital consumption (at least 3 years) and proposing or reporting the ensuing arbitrages to the Group's Executive Committee,
  - monitoring internal capital adequacy as part of the ICAAP,
  - monitoring potential regulatory changes,
  - monitoring the sensitivity of the CET1 ratio to changes in exchange rates,
  - validating management buffers applicable to the aforementioned ratios,
  - monitoring the impacts of global stress test results,
  - monitoring the implementation of the supervisor's decisions that have an impact on the Group's solvency ratio or the amount of its risk-weighted assets.

The Capital Committee is also the Group's competent Executive Management authority for all issues related to the internal credit and operational risk model and the methodologies used in the ICAAP.

Monitoring indicators

Capital management at the consolidated level rests on the following indicators:

- the solvency ratios:

  BNP Paribas uses the CET1 ratio as its main internal capital management indicator;
- risk-weighted assets:

  The risk-weighted assets are calculated per business line and per type of risk. The change in risk-weighted assets is analysed per type of effect (in particular: volume effect, parameters effect, perimeter effect, currency effect and method effect);
- the leverage ratio:

  It reports the amount of Tier 1 capital to a measure of both on- and off-balance sheet exposures using a prudential approach. In particular, derivatives and repurchase agreements are adjusted;
- notional equity:

  The capital allocation transfers the capital constraints to all Group divisions and thus represents a major constraint concerning the Group's development and management. The evaluation of the business lines' performance includes the analysis of their pre-tax Return On Notional Equity – (RONE) indicators. The equity component of this ratio is the notional equity, which corresponds to the business lines' consumption of capital.

This management rests on two major processes which are closely linked:

- a detailed quarterly analysis of actual capital consumption by divisions/business lines and of the Group's solvency ratios, as well as quarterly forecasts of these indicators throughout the year;
- the yearly budget process, which plays a central role in the Bank's strategic planning process.

CAPITAL MANAGEMENT AT LOCAL LEVEL

The Group has to allocate available capital among its different entities. To ensure a free and efficient flow of capital throughout the Group, the capital allocation process within the Group is centralised at head office level. It is mainly based on two principles: compliance with local regulatory requirements and analysis of the local business needs of the entity and growth prospects. In line with these two principles, the aim is to minimise capital dispersion.

With respect to the first principle, the local Chief Financial Officers are responsible for the daily management and reporting of their subsidiaries' capital requirements. When a capital need arises, it is analysed on a -case-by-case basis by the Group, taking into consideration the subsidiary's present position and future strategy. Furthermore, each year, the Group manages the subsidiaries' earnings repatriation process. The Group general policy stipulates that the entire distributable profit of every entity, including retained earnings, must be paid out. This policy ensures that the capital remains centralised at the BNP Paribas SA level and also contributes to reducing the foreign exchange risk. Exceptions are considered on a case-by-case basis.

Local Chief Executive Officers are responsible for ensuring the subsidiary's ongoing financial viability and competitiveness in terms of capital, where relevant. However, any capital action requested by a subsidiary is assessed by and subject to authorisation from head office.

With respect to the second principle, the needs of each entity are analysed by dedicated teams, in light of the Group's strategy in the relevant country, the entity's growth prospects and the macroeconomic environment.

In addition, every year the Group examines the branches' capital allocations in order to maintain an adequate level of capital in light of the different regulations.

5.3 Risk management [Audited]

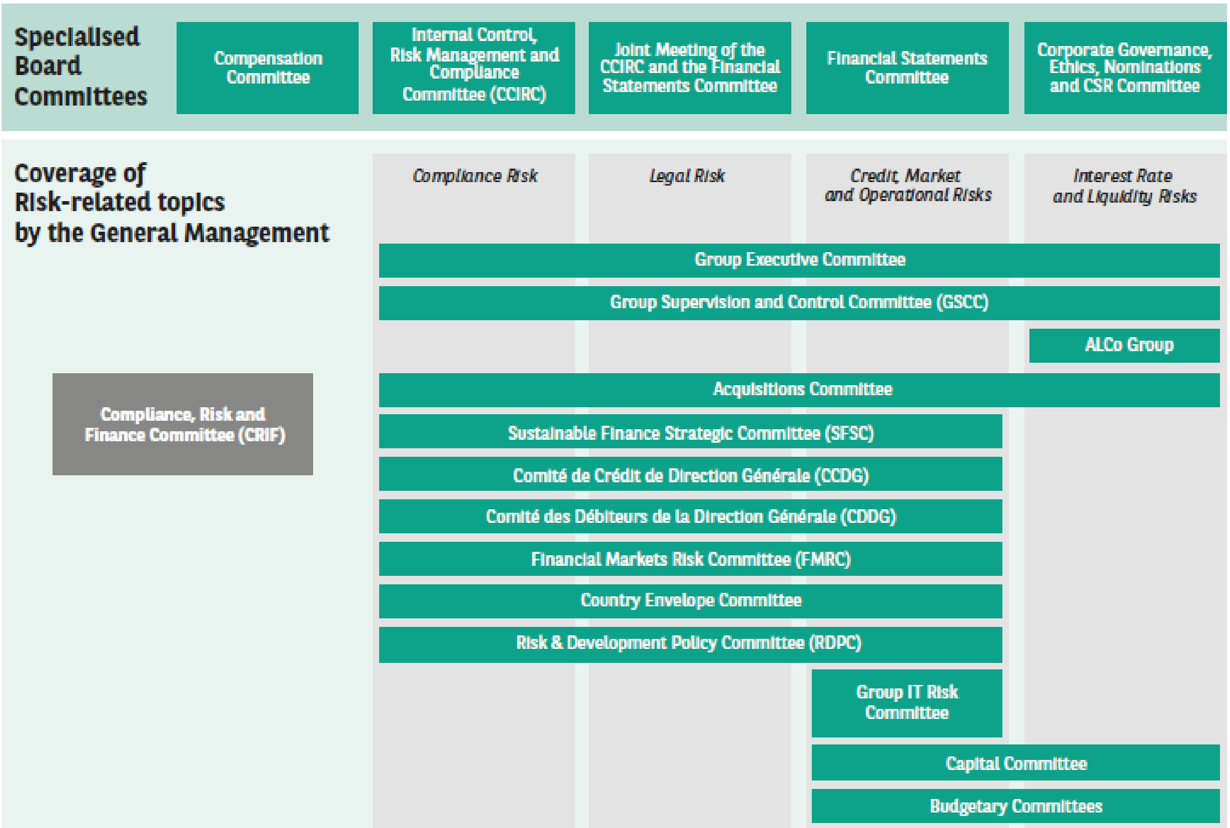
GOVERNANCE

The specialised committees of the Board of directors (see part 2.1.2, *Corporate Governance of BNP Paribas* of chapter 2 *Corporate Governance and internal control*), which examine the risks taken and the risk policies on a Group scale, are:

- the Internal Control, Risk Management and Compliance Committee (CCIRC);
- the Joint Committee that combines the CCIRC and the Financial Statements Committee;
- the Corporate Governance, Ethics, Nominations and CSR Committee (CGEN).

In line with the Group's *Risk Appetite Statement*, Executive Management provides broad guidelines for risk management through Group-level governance bodies. The main guidelines are shown in the diagram below:

FIGURE 2: OVERVIEW OF GROUP LEVEL GOVERNING BODIES COVERING RISK-RELATED TOPICS



Main Group-level governance bodies have the following roles:

- Capital Committee: described under *Capital management* in section 5.2, validates the Group's objectives in terms of solvency ratios and Total Loss Absorbing Capacity (TLAC and MREL) requirements in case of resolution as well as the trajectory to achieve these targets, monitors the compliance with this trajectory and, when relevant, proposes corrective actions to achieve target solvency ratios. As the Group's competent Executive Management authority for all issues related to the internal credit and operational risks model, the Capital Committee is informed of decisions made in the MARCo Committees (Model Approval and Review Committee);
- Group ALM Treasury Committee (Group ALCo) is responsible for the management of the liquidity risk, interest rate risk in the banking book and structural foreign exchange risk over the whole Group;
- Group Supervision and Control Committee (GSCC) brings together the Group's control functions at Executive Management level and takes a Group-wide approach to tackling all aspects of risk exposure;
- Acquisitions Committee decides on acquisitions, disposals and external partnerships for operations under its jurisdiction as part of the Group's general investment approval procedure. The Acquisitions Committee reviews the strategic relevance of the proposed projects from the Group's point of view, as well as the various components of the business plans, including synergies and execution risks. In particular, it ensures the intrinsic profitability of projects (measured by Return on

Investment), as well as the impact on the Group's solvency, liquidity and profitability, and their adequacy with the Group's Risk Appetite Statement;

- the Sustainable Finance Strategic Committee (SFSC) aims to validate the Group's Sustainable Finance strategy and commitments in this area. It approves the overall strategy in terms of sustainable finance, decides the main focuses of sustainable finance commercial policies and monitors their operational implementation. Where necessary, it also validates cross-functional infrastructure choices ensuring expertise and consistency in the implementation of regulatory requirements and the Group's commitments in methods, analyses, risk management, data, tools, standards and reporting related to sustainable finance;
- the General Management Credit Committee (CCDG) is the Group's highest authority concerning credit and counterparty risks. This committee decides primarily on credit requests exceeding the amount of individual delegations attributed to divisions and business lines or relating to transactions of a specific nature or which would deviate from the principles of the General Credit Policy. A Compliance representative may attend CCDG meetings when an opinion on financial security is needed;
- the General Management Doubtful Committee (CDDG) is the Group's highest level decision-making committee in terms of specific provisioning and recognitions of losses relative to the Group's customer exposures;
- the Financial Markets Risk Committee (FMRC) is the body which governs the Group's risk profile of the capital markets activities; its tasks include, among others, analysing market and counterparty risks and setting limits for capital markets activities;
- the Country Envelope Committees determine the Group's risk appetite by setting limits for medium-to-high-risk countries in view of risk in relation to country, market conditions, business strategies and aspects of risk and compliance;
- the Risk & Development Policy Committees (RDPC) have the dual objective of defining an appropriate risk policy for any given subject which may be a business activity, a product, a geographic area (region or country), a customer segment or economic sector, and of investigating development opportunities in relation to the subject in question;
- the Group IT Risk Committee (GITRC) defines and oversees the BNP Paribas Group's IT risk profile. This is the highest authority in terms of technological and cybersecurity risk management.

SPECIFIC ADAPTATION MEASURES LINKED TO CRISIS SITUATION

The invasion of Ukraine led to the establishment of crisis committees at all levels of the Group for close monitoring of the main impacts as well as the application of the sanctions that were introduced following this invasion in the activities concerned, allowing rapid decision-making adapted to the evolving context.

On credit risk, close portfolio monitoring was implemented within the divisions and business lines level in order to analyse and manage in particular direct risks. This monitoring also includes the indirect impacts which, in addition to the context of exit the health crisis, have particularly affected certain sectors through rising energy and commodity prices or supply chains disruptions.

RISK MANAGEMENT ORGANISATION

POSITION OF THE CONTROL FUNCTIONS

Risk management is central to the banking business and is one of the cornerstones of operations for the BNP Paribas Group. BNP Paribas has an internal control system covering all types of risks to which the Group may be exposed, organised around three lines of defence (see section 2.4 *Internal Control* in chapter 2 *Corporate Governance and internal control*):

- as the first line of defence, internal control is the business of every employee, and the heads of the operational activities are responsible for establishing and running a system for identifying, assessing and managing risks according to the standards defined by the functions exercising an independent control in respect of the second line of defence;
- the main control functions within BNP Paribas ensuring the second line of defence are the Compliance, RISK and LEGAL Functions. Their Heads report directly to Chief Executive Officer and account for the performance of their missions to the Board of directors *via* its specialised committees;
- General Inspection provides a third line of defence. It is responsible for the periodic control.

GENERAL RESPONSIBILITIES OF THE RISK AND COMPLIANCE FUNCTIONS

Responsibility for managing risks primarily lies with the divisions and business lines that are at the origin of the underlying transactions. RISK continuously performs a second-line control over credit and counterparty risks, market risk, interest rate and foreign exchange rate risks on the banking book, liquidity risks, insurance risks, and operational risk, including technological and cybersecurity risks, over data protection risks, modelling risks and environmental and social risk factors, as well as the associated governance risks. As part of this role, it must ascertain the soundness and sustainability of the business commercial developments and their overall alignment with the risk appetite target set by the Group. RISK's remit includes formulating recommendations on risk policies, analysing the risk portfolio on a forward-looking basis, approving customers loans and trading limits, guaranteeing the quality and effectiveness of monitoring procedures, controlling the maturity of the processes and underlying operational risks and defining or validating risk measurement methods. RISK is also responsible for ensuring that all the risk implications of new businesses or products have been adequately assessed.

Compliance has identical responsibilities as regards compliance and reputation risks and it plays an important oversight and reporting role in the process of validating new products, new business activities and exceptional transactions. By issuing opinions and decisions, and performing oversight and second-level controls, Compliance provides reasonable assurance as to the effectiveness and coherence of the compliance control framework applicable to the Group's operations and to the protection of its reputation.

ORGANISATION OF THE RISK AND COMPLIANCE FUNCTIONS

Approach

The RISK organisation fully complies with the principles of independence, vertical integration, and decentralisation issued by the Group's Management for the Group's main control functions (Compliance, RISK, LEGAL, and a third line of defence, General Inspection). Hence within RISK:

- all the teams in charge of risks, including those in operational entities have been integrated in the function with reporting lines to the Chief Risk Officers of these entities;
- the Chief Risk Officers of the entities report to RISK.

This organisation enables the governance of risk management activities to be strengthened, especially regarding model risk management, through RISK Independent Review and Control (RISK IRC) team, reporting directly to the Chief Risk Officer (CRO) which groups together the teams in charge of the independent review of the risk methodologies and models. This team is also in charge of the independent review of operational risk of RISK Function, with the organisation described in section 5.9 *Operational risk*.

In accordance with international standards and French regulations, Compliance manages the system for monitoring compliance and reputation risks for all of the Group's businesses in France and abroad. The system for monitoring compliance and reputation risks is described in section 5.9.

Independent and hierarchically integrated on a global basis, Compliance brings together all employees reporting to the function. Its organisation is based on its guiding principles (independence, integration, decentralisation and subsidiarity of the function, dialogue with the business lines) through local teams (operating divisions, CPBS, IFS and CIB), areas of expertise, and departments in charge of transverse missions.

Role of the Chief Risk Officer

The Group Chief Risk Officer reports directly to the Chief Executive Officer and sits on the Executive Committee of BNP Paribas. He has line authority over all RISK employees. He can veto the decisions which are not in line with the Risk Appetite Statement, concerning the risks under RISK competency.

The Group Chief Risk Officer has no connection, in terms of authority, with the Heads of Core Businesses, business lines and territories. He also has direct and independent access to the Board of directors of BNP Paribas, *via* the Internal Control, Risks and Compliance Committee (CCIRC).

This positioning serves the following purposes:

- ensuring the objectivity of risk control, by removing any involvement in commercial relationships;
- making sure senior management is warned of any deterioration in risk and is rapidly provided with objective and comprehensive information on the status of risks;
- enabling the dissemination, throughout the Bank, of high and uniform risk management standards and practices;
- ensuring the quality of risk assessment methods and procedures by calling on professional risk managers in charge of evaluating and enhancing these methods and procedures in light of the best practices implemented by international competitors.

Role of the Chief Compliance Officer

The Chief Compliance Officer reports to the Chief Executive Officer and is a member of the BNP Paribas Executive Committee. She has direct and independent access to the Board of directors and in particular to its specialised committee, the Internal Control, Risk Management and Compliance Committee (CCIRC), and can thus inform it of any event likely to have a significant impact on the Group. Lastly, the CCIRC periodically interviews her, without the effective managers being present.

The Chief Compliance Officer has no operational activity outside of the non-compliance and reputation risk management framework and no commercial activity, which guarantees her independence of action. She exercises hierarchical supervision over all the Compliance teams within the various business units, geographical areas and functions.

RISK CULTURE

ONE OF THE GROUP'S CORE FOUNDING PRINCIPLES

The BNP Paribas Group has a strong risk and compliance culture.

Executive Management has chosen to include the risk culture in three of its key corporate culture documents:

- Code of conduct:

  The Group adopted a new Code of conduct in 2016. It applies to all employees and defines the rules for our conduct in line with the core values of our corporate culture. For example, employees are reminded in the Code of conduct that the Group's interests are protected by responsible risk-taking in a strict control environment. The Code of conduct, updated in 2021, also includes rules for protecting customers' interests, financial security, market integrity, professional ethics and anti-bribery and corruption, which all play an important role in mitigating non-compliance and reputation risks;
- Responsibility Charter:

  Executive Management drew up a formal Responsibility Charter, inspired by the Group's core values (the "BNP Paribas Way"), management principles and Code of conduct. One of the four commitments is "Being prepared to take risks, while ensuring close risk control".

  The Group sees rigorous risk control as part of its responsibility, both to clients and to the financial system as a whole. The Bank's decisions on the commitments it makes are reached after a rigorous and concerted process, based on a strong, shared risk culture which pervades all levels of the Group. This is true both for risks linked to lending activities, where loans are granted only after in-depth analysis of the borrower's situation and the project to be financed, and for market risks arising from transactions with clients – these are assessed on a daily basis, tested against stress scenarios, and subject to limits.

  As a strongly diversified Group, both in terms of geography and businesses, BNP Paribas is able to balance risks and their consequences as they materialise. The Group is organised and managed in such a way that any difficulties arising in one business area will not jeopardise another in the Bank;
- the Group's mission and commitments:

  The mission of BNP Paribas is to finance the economy and advise its clients, by supporting them with their projects, their investments, and the management of their savings, guided by strong ethical principles. Through these activities, BNP Paribas wants to have a positive impact on stakeholders and on society, and be one of the most trustworthy players in the sector. BNP Paribas' 12 commitments as a Responsible Bank include in particular the commitment to apply the highest ethical standards and rigorously manage environmental, social, and governance risks (see section 7.2 *Economic Responsibility: financing the economy in an ethical manner*).

SPREADING THE RISK CULTURE

Robust risk management is an integral part of the Bank's principles. A culture of risk management and control has always been one of its top priorities.

BNP Paribas launched the Risk Culture, a Group-wide initiative, giving it the objective of reinforcing the communication of the best practices in risk management. Sponsored by four functions: Compliance, LEGAL, Human Resources (HR), and RISK, Risk Culture is designed for the benefit of all staff and intervenes on all types of risks to which the Group may be exposed, including credit, market, liquidity, operational, non-compliance, regulatory, environmental and social risks.

Taking an adaptive and participative approach, this initiative supports the business lines and functions in their process of understanding risks, for example in transformation projects or when onboarding new employees. In particular, it takes special care to ensure that conduct and behaviour requirements are well integrated, beyond the mission of transmitting knowledge. It provides entities with resources that they can use for their information, acculturation and support for employee skills development in all aspects of the risk culture.

In conjunction with operational entities, Risk Culture actions mainly consist of:

- ensuring the dissemination of information and professional development in the area of risk management, by means of conferences and the publication of educational articles or videos;
- facilitating the sharing of knowledge between the various players in the Bank, in particular changes in the Bank's business lines, news on regulatory requirements and new ways of working. The experts of the Group are invited to expand documentary resources which can be accessed by employees through various communication channels available within the Group.

In all its initiatives, Risk Culture promotes the six fundamental risk management practices that are key to developing a robust risk culture. They serve as a reminder to staff about the importance of clearly understanding and anticipating risks with a long-term perspective, being disciplined with risks taken and reporting swiftly and transparently on risk management.

Lastly, the risk culture is also spread throughout the Group by linking compensation to performance and risk (see chapter 7, section 7.3 *A competitive compensation policy*), under a system that was strengthened in this area since 2015 for those employees whose decisions entail a significant risk component.

RISK APPETITE

DEFINITION AND OBJECTIVES

The Group does not have a specific risk appetite target, but some risks are inherent to its business and therefore to the achievement of its strategic objectives. It has prepared a Risk Appetite Statement and Risk Appetite Framework, which should be seen as the Group's formal statement of its tolerance to the risks to which it is exposed as it implements its strategy.

The Risk Appetite Statement is approved on a yearly basis, or more frequently if necessary, by the Board of directors on the proposal of Executive Management. Consistent with the Group's strategy and in light of the environment in which it operates, this document sets out the qualitative risk principles it intends to follow in its business activities, as well as a quantitative mechanism for supervising the Group's risk profile indicators through quantitative metrics and thresholds. This system covers both the quantifiable and non-quantifiable risks to which it is exposed.

The Group's risk appetite is determined by Executive Management, during various committees it chairs (CCDG, FMRC, Group ALCo, and Capital Committee), which are tasked with managing the Group's different types of risk exposure. The Group's strategic processes, such as budget, capital and liquidity management, are in line with the Risk Appetite Statement. Certain Risk Appetite Statement indicators are included in the budget exercise and their expected values in the budget are cross-checked against the thresholds in the Risk Appetite Statement.

The Group's Risk Appetite Statement reflects the core values of its risk culture. It states that the Group's risk culture and its commitments as a responsible bank are at the heart of its strategy. The Statement reaffirms the Group's mission: to finance the economy, advise its clients, and help to finance their projects, guided by strong ethical principles. The Group's strategy underpinning its risk appetite is founded on the core principles that have guided its development: a balance between business activities to deliver profitability and stability, a customer-focused business model and an integrated banking model to optimise services to the latter. This strategy also factors in developments in the banking industry, including the trend towards a digital model, and an uncertain macro-economic outlook, marked by the increase of inflation and interest rates in a context of high geopolitical risk.

RISK PRINCIPLES

The risk principles aim to define the types of risk the Group is prepared to accept in support of its business strategy.

They include the following in particular:

- diversification and risk-adjusted profitability:

  The Group seeks to generate sustainable, client-driven, risk adjusted profits. Sustainable profitability will be achieved based on selectivity and controlled evolution of BNP Paribas' assets, and the pursuit of a diversified business model. Whilst the Group accepts some level of earnings volatility, it remains attentive to contain, at all times, the level of maximum potential losses in an adverse scenario;
- solvency and profitability:

  BNP Paribas has sufficient capital to cope with stress scenarios and to meet regulatory capitalisation standards in force. In the course of serving its clients, BNP Paribas accepts exposure to risks when it earns a proper return over an acceptable time frame, and when its potential impacts seem acceptable;
- funding and liquidity:

  The Group ensures that the diversification of and balance between its resources and uses of funds correspond to a conservative funding strategy, allowing it to withstand adverse liquidity scenarios. The Group makes sure that it complies with the regulatory liquidity ratios in force;
- credit risk:

  The Group only accepts exposure on customers it knows well, based on comprehensive information, and pays close attention to the structure of the financing it grants. The Group builds and maintains a diversified risk portfolio, avoiding large concentrations (especially on single names, industries and countries) and ensures that it complies with the concentration policies in force;
- market risk:

  The Group manages market risks (interest rates, equities, currencies, commodities) within the following framework:
  - for activities in the capital markets that are customer-focused, BNP Paribas intends to keep its market risk profile in line with this customer-focused business mode,

  - interest rate risk associated with its banking book with the aim of stabilising its results on an ongoing basis to within acceptable limits;
- operational risk:

  The Group aims to protect its customers, employees and shareholders from operational risk. To do so it has developed a risk management infrastructure based on identifying potential risks, strategies to mitigate risk, and actions to raise awareness of these risks. Some specific risks have resulted in the definition of dedicated principles, in particular:
  - non-compliance risk:

    The Group is committed to compliance with all applicable laws and regulations. It undertakes to implement a system to manage the risk of non-compliance, including through special programmes dedicated to the most important regulations for its business,
  - information, communication and technology risk:

    The Group endeavours to reduce the risks related to the security of its information through various awareness actions, enhanced supervision of outsourced activities, heightened protection of terminals, incident monitoring, and a technology watch over IT vulnerabilities and attacks;
- insurance activities:

  BNP Paribas Cardif is exposed mainly to credit, underwriting and market risks. The entity closely monitors its exposures and profitability, taking into account its risks and the adequacy of its capital with regard to solvency rules. It endeavours to contain potential losses in adverse scenarios at acceptable levels;
- risk associated with social and environmental responsibility:

  The Group is particularly sensitive to its customers' performance in terms of social and environmental responsibility, believing that this could have a material impact on its customers' risk profile and, consequently, their solvency, in addition to being a major reputational risk. BNP Paribas takes social and environmental risks into consideration when assessing customer-related risks. The Group also tracks these risks as part of the conduct of its own business, the conduct of its counterparties' business and of its investments on its own behalf or on behalf of third parties.

SUPERVISION OF RISK PROFILE INDICATORS

The Risk Appetite Statement sets out the indicators that measure the Group's risk profile for its risk exposure categories.

Risk level thresholds are assigned to each metric. When these thresholds are reached, they trigger an established process to inform Executive Management and the Board of directors, and if need be, to implement action plans.

These indicators are monitored quarterly in the risk dashboards presented to the CCIRC.

For example, the following ratios (described in the *Key figures* of section 5.1) are included in the Risk Appetite Statement indicators:

- the solvency ratios (CET1, Tier 1, total own funds, TLAC and leverage ratio);
- the balance of the breakdown of risk-weighted assets by business line;
- the cost of risk on loans outstandings (in annualised basis points) and doubtful loans on gross outstandings ratio;
- the liquidity ratios (LCR and NSFR).

STRESS TESTING

To ensure dynamic risk supervision and management, the Group has implemented a comprehensive stress testing framework.

STRESS TESTING FRAMEWORK

The stress testing framework forms an integral part of the risk management and financial monitoring system and is used with a threefold objective of forward-looking risk management, planning of regulatory resources and liquidity requirements, and optimisation of the deployment of these resources within the Group, mainly through the Group's and its main entities' ICAAP and ILAAP processes.

Different types of stress tests

There are two types of stress tests:

- regulatory stress tests:

  These involve primarily the stress tests requested by the European Banking Authority, the European Central Banks, or any other supervisory authority.

  In 2022, the ECB conducted a climate stress test among 104 financial institutions under its supervision. The exercise included i) a questionnaire designed to assess the climate stress testing infrastructure of banks, ii) information on revenues generated in sectors deemed to be exposed to climate change and on greenhouse gas emissions of major clients in these sectors, and iii) several climate stress tests in a number of transition and physical risk scenarios. Given that climate stress tests are new and remain in learning phase, the exercise had no capital implication. The ECB did not disclose any bank-specific information. The exercise demonstrated the good level of progress achieved by BNP Paribas in climate stress testing. The Group recognises the revelance of scenario analysis to assess the possible impacts of climate risk, given its forward-looking nature. The Group however also considers that climate stress testing is a developing activity, which is less mature than traditional stress tests involving macro-economic or capital markets scenarios. Results of climate scenarios analyses should be used in a way that reflects this lesser maturity.

In 2021, the EBA and the ECB conducted EU-wide stress tests of the 50 largest European banks. As in previous years, macroeconomic scenarios and a certain number of methodological assumptions were applied to all banks for comparison purposes. A macroeconomic stress scenario of unprecedented severity over a period of three consecutive years (the "adverse scenario") was used to test the impact on exposure to credit, market, operational and revenue (rates and commission) risks. This was done in a context already under stress due to the health crisis. This was the second European regulatory stress test completed under the new IFRS 9 accounting standard to analyse its impact on the 2020 crisis year and on a period of renewal of a major macroeconomic crisis.

In 2019, the ECB had conducted liquidity stress tests on 103 European banks. This exercise consisted of a sensitivity analysis to assess changes in the banks' net liquidity position in different impact scenarios that may arise in the event of the bank experiencing a liquidity crisis. The shocks applied to assets and liabilities were defined using observed liquidity crises that have impacted banks in Europe and were calibrated for different levels of severity. This liquidity stress test showed the Group's comfortable liquidity position.

BNP Paribas will participate in 2023 in the next stress test organised by the EBA;

- internal stress tests:
  - stress tests dedicated to risk anticipation: they contribute to the forward-looking risk management, in particular of credit, market, counterparty, interest rates in the banking book, operational, activity and liquidity risks. The results of the transverse stress tests are used, among other purposes, to formulate the Bank's risk appetite and periodically measure its risk profile. They are periodically submitted to Group Executive Management as well as the Board of directors' Internal Control, Risk Management and Compliance Committee (CCIRC) through the quarterly Group risk dashboard. Moreover, *ad hoc* stress testing is performed, when appropriate, within Risk & Development Policy Committees, portfolio reviews or Country Strategic Committees to identify and assess areas of vulnerability within the Group's portfolios,
  - stress tests for the budget process: they contribute to three-year capital planning. Stress tests are carried out annually as part of the budget process and are included in the ICAAP and the ILAAP. They are reviewed at divisional and business line level before being consolidated at Group level to provide a comprehensive view of the impact on the Bank's capital, liquidity and earnings,

    The purpose of stress testing in the budget process is to assess the impact of an adverse macroeconomic scenario on the Group and its activities. These stress tests are part of the yearly budget process which is run on the basis of baseline and adverse scenarios.

    The impact of the adverse scenario is measured on profit and loss (revenues, cost of risk, *etc.*), balance-sheet, risk-weighted assets, and capital.

    The calculated final output is a range of projected Group's solvency ratios, as well as possible adjustment measures. The scenarios used, the outcomes of the stress tests and the proposed possible adjustment measures (such as reducing exposures to a sub-segment cost reduction initiatives, or changes in funding or liquidity policies, *etc.*) are included in the budget synthesis report presented to the Group Executive Management at the end of the budget process. In addition, in the Group's ICAAP, its solvency can be analysed in adverse scenarios other than an adverse budget scenario, defined by risk topics occasionally identified by the Group,
  - reverse stress tests: they were conducted as part of the Bank's recovery and resolution plan and ICAAP. Reverse stress tests consist of identifying scenarios likely to result in a drop in the Bank's solvency ratios to below levels set in advance in line with the methods of use in question. These exercises enable any areas where the Bank is fragile in terms of changes in certain risk factors to be detected and facilitate in-depth analyses of the remedial actions that could be implemented by business lines or Group-wide.

Governance and implementation

This framework is based on a well-defined governance, with responsibilities shared between the Group and operational entities in order to encourage operational integration and relevance. Since 2017, the Group has set up a Stress Testing and Extended Planning (STEP) programme serving both the Group and its subsidiaries and business lines. The aim of the STEP programme is continue to respond effectively to the various regulatory stress tests, such as the EBA and ECB ones, and to develop internal stress test practices required for proper risk management and Group resource planning.

Finance, RISK and ALM Treasury functions have created a shared team – Stress Testing and Financial Simulations ("STFS"), responsible for implementing the STEP programme and its deployment across the Group's entities and activities.

The STFS team is responsible in particular for:

- the definition and the implementation of the Group's target structure in terms of stress testing and ICAAP while covering the associated organisational issues, modelisation, IT systems and governance;

- the performance of all of the Group’s stress testing exercises, relying in particular on existing teams within RISK and Finance Functions;
- the support of the stress test and ICAAP initiatives of the Group’s business lines and legal entities in order to ensure overall consistency and streamline procedures;
- the coordination of the Group’s financial simulation system and its adaptation to the challenges of SREP;
- the Group’s risk identification process;
- the production of the Group’s ICAAP report and, for certain risks, the quantification of internal capital.

Stress test methodologies are tailored to the main categories of risk and subject to independent review.

Stress tests may be run at Group, business line or portfolio level, dedicated to one or more risk types and on a more or less large number of variables depending on the pursued objective. Where appropriate, the results of quantitative models may be adjusted on the basis of expert judgement.

Since its creation, the Group’s stress testing framework has evolved continuously in order to integrate the most recent developments in stress tests, whether in terms of methodologies or improved operational integration in the Group’s management processes. The stress test framework by type of risks is detailed in sections 5.4 *Credit risk*, 5.6 *Counterparty credit risk* and 5.7 *Market risk*. In this context, the Group is engaged in the development of a climate stress testing infrastructure, covering scenarios (see below), data and models and methodologies, as well as encompassing both transition and physical risks, which are the two main risk types into which climate risk materialises.

INTERNAL STRESS TEST SCENARIO DEFINITION

In stress testing exercises, it is common practice to distinguish the baseline scenario from adverse (and favourable, where applicable) scenarios. A macroeconomic scenario is typically a set of macroeconomic and financial variables (GDP and its components, inflation, employment and unemployment, interest and exchange rates, stock prices, commodity prices, *etc.*) projected over a given future period.

Macroeconomic stress tests

Baseline scenario

The baseline scenario is considered as the most likely scenario over the projection horizon. The baseline scenario is constructed by Group Economic Research in collaboration with various functions and business lines possessing a specific expertise, in particular:

- Group ALM Treasury for interest rates;
- Wealth Management for equity indices;
- BNP Paribas Real Estate regarding commercial real estate;
- local economists when regional expertise is required;
- Stress Testing & Financial Simulations (STFS) for coordination and overall consistency of the scenario.

The global scenario is made up of regional and national scenarios (eurozone, France, Italy, Belgium, Spain, Germany, United Kingdom, Poland, Türkiye, United States, Japan, China, India, Russia, *etc.*) consistent with each other.

Adverse scenario

An adverse scenario describes one or several potential shocks to the economic and financial environment – *i.e.* the materialisation of one or several risks to the baseline scenario – over the projection horizon. An adverse scenario is thus always designed in relation to a baseline scenario. The shocks associated with the adverse scenario are translated in the set of macroeconomic and financial variables listed above in the form of deviations from their value in the baseline scenario. The adverse scenario is constructed by STFS in collaboration with the same functions and business lines as for requested for the baseline scenario.

Construction of scenarios

The baseline, adverse and favourable scenarios are revised quarterly by STFS to monitor the Bank’s risk appetite metrics and credit provision calculations within the framework of IFRS 9 (see part 2.h of the consolidated and financial statements).

They are validated in meetings involving the Group Executive Management for scenarios used in the Group’s budget process (second and third quarters of the year). For the other two quarterly exercises in March and December, scenarios are validated jointly by the Group Chief Risk Officer and the Group Chief Financial Officer.

The scenarios are then used to calculate expected losses (or profit and loss impact in the case of market risks) over the year for all Group portfolios:

- for portfolios exposed to credit or counterparty risk and for the equity portfolio of the banking book: this calculation measures the impact of the scenario on the cost of risk and risk-weighted assets due to the deterioration of the portfolio quality resulting from the macroeconomic scenario, or adverse moves in equity prices. Credit risk stress tests are performed on the Bank’s entire portfolio for all regions and all prudential portfolios, namely Retail, Corporates and Institutions;

- for market portfolios: the changes in value and their profit and loss impact are calculated by simulating a one-time shock, which is consistent with the overall scenario.

The above calculations and related methodologies for stress tests on credit and market risks are coordinated centrally at Group level by STFS team. They also involve various teams of experts at Group and territory's levels in their implementation and design.

Lastly, in an adverse budget scenario, risks appertaining to the Group and its business activities and not forming part of the adverse macroeconomic scenario are added. They are identified and quantified either by the Group's businesses or centrally for those likely to impact the Group as a whole.

Climate stress tests

Beyond macroeconomic stress tests, the field of climate stress tests is developing rapidly. In this context, the Group is engaged in the analysis, adaptation and creation of transition and physical risk scenarios.

With regard to the risk of transition, the analysis and adaptation work are based at this stage on the work of the NGFS (Network for Greening the Financial System), pioneer in this field. For the Group's internal requirements in terms of climate stress tests, the NGFS scenarios can be adjusted and adapted, so that they are more in touch with most recent developments (*e.g.* at the macroeconomic level) or that they are more specifically adapted to the Group's portfolios. In addition, in collaboration with other companies and institutions, the Group is taking part in the Iris initiative to define transition scenarios with more precise sectoral aspects. That are relevant to assess transition risk.

The physical risk scenarios used by the Group at this stage focus on geographies with significant Retail Banking activities in Europe.

5.4 Credit risk

Credit risk is the consequence resulting from the likelihood that a borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The probability of default and the expected recovery on the loan or receivable in the event of default are key components of the credit quality assessment.

EXPOSURE TO CREDIT RISK

The following table shows the gross exposure of all of the BNP Paribas Group's assets exposed to credit risk. The banking book securitisation positions as well as derivatives and repurchase agreements exposed to counterparty risk are excluded from this section and presented in sections 5.5 and 5.6, respectively.

In accordance with Commission Implementing Regulation (EU) No. 2021/637, equity exposures under the standardised approach and using the simple weighting method are included in this section.

The main differences between the carrying amounts of the prudential balance sheet and the risk exposure amounts used for regulatory purposes are presented in Table 10 the *Scope of Application* in section 5.2.

These gross exposure amounts do not take into account guarantee and collateral received by the Group in its normal credit risk management operations (see *Credit risk mitigation techniques* section).

TABLE 25: CREDIT RISK EXPOSURE BY ASSET CLASS AND APPROACH

	31 December 2022				31 December 2021				Variation	
Exposure *In millions of euros*	**IRB approach**	**Standardised approach(*)**	**Simple weighting method**	**Total**	**IRB approach**	**Standardised approach(*)**	**Simple weighting method**	**Total**	**Total**	**Total – excluding foreign exchange effect**
Central governments and central banks	454,775	50,242		505,017	469,741	55,167		524,908	(19,891)	(22,999)
Corporates	674,680	158,374		833,053	636,914	141,136		778,050	55,003	41,801
Institutions(**)	45,960	26,467		72,427	52,369	25,182		77,552	(5,125)	(6,543)
Retail	288,930	198,524		487,454	290,972	177,146		468,117	19,337	19,920
Equity		4,893	12,133	17,026		4,389	14,393	18,782	(1,755)	(1,786)
Other items(***)	726	40,686		41,412	1,738	41,916		43,654	(2,242)	(1,849)
TOTAL	**1,465,071**	**479,186**	**12,133**	**1,956,389**	**1,451,734**	**444,936**	**14,393**	**1,911,063**	**45,327**	**28,544**

(*) In the following paragraphs, standardised credit risk exposures are reported according to the regulatory standardised classification.
(**) Institutions asset class comprises credit institutions and investment firms, including those recognised in other countries. It also includes some exposures to regional and local authorities, public sector agencies and multilateral development banks that are not treated as central government authorities.
(***) Other non-credit obligation assets include tangible assets, accrued income and residual values.

Exposure related to loan acquisitions on the secondary market in 2022 only accounts for a marginal amount.

TRENDS IN CREDIT RISK EXPOSURE

The EUR 29 billion increase in credit risk exposure, excluding foreign exchange effect, in 2022, is due mainly to the increase of the Bank's usual business activity. Currency effects with a significant impact on the exposure trend (+EUR 17 billion), particularly with the appreciation of the US dollar (+EUR 23 billion), partially offset by the depreciation of Turkish lira (-EUR 3 billion) and British pound sterling (-EUR 3 billion).

Excluding these currency effects, the main changes by exposure class are the following:

- the +EUR 42 billion increase in corporate activity is mostly driven by CPBS (+EUR 23 billion), primarily in France (+EUR 10 billion) followed by Belgium (+EUR 7 billion), and by CIB (+EUR 19 billion), mostly split between Europe and North America;
- the +EUR 20 billion increase in retail exposures is carried mainly by mortgage activity, notably in France (+EUR 8 billion), Belgium (+EUR 7 billion) and North America (+EUR 2 billion);
- offset by a -EUR 23 billion decrease in exposures, mainly in European and American Central Banks.

APPROACHES USED TO CALCULATE CAPITAL REQUIREMENTS

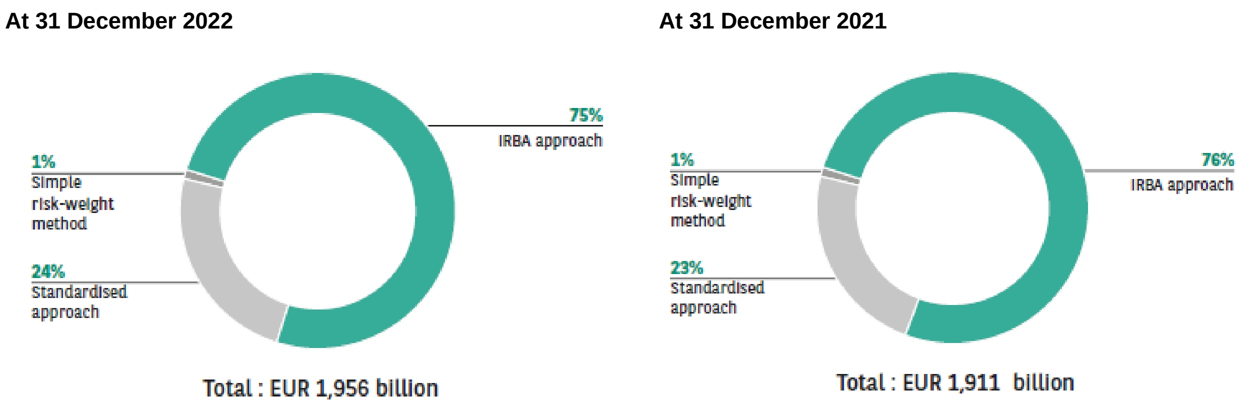
BNP Paribas has opted for the most advanced approaches allowed under Basel 3. In accordance with the European Directive and its transposition into French law, in 2007 the supervisor authorised the Group to use internal models to calculate capital requirements starting on 1 January 2008.

For credit risk, the share of gross exposures under the IRBA approach is 75% at 31 December 2022, breakdown stable compared to 31 December 2021. This significant scope includes in particular Corporate and Institutional Banking (CIB), Commercial & Personal Banking in France (CPBF), Commercial & Personal Banking in Belgium (CPBB) and BNL bc. The main models used by the Fortis Group, which prior to its acquisition had been authorised by its banking supervisor to use the advanced approach, converged with Group methodologies (with the exception of those concerning retail customers).

The IRBA scope excludes certain entities such as those of the BancWest subgroup and subsidiaries in emerging countries.

Within the scope of equity exposures, the Group has mainly opted for the simple weighting method.

FIGURE 3: GROSS CREDIT RISK EXPOSURE BY APPROACH



The amounts and percentages below are presented net of provisions for credit risk.

TABLE 26: SCOPE OF THE USE OF IRB AND SA APPROACHES (EU CR6-A)

		a	b	c	d	e
						31 December 2022
			Exposure for purposes of leverage ratio(2)			
In millions of euros		**EAD for exposures subject to IRB approach(1)**	**Total exposure value for exposures subject to the standardised approach and to the IRB approach**	**Percentage of total exposure value subject to the permanent partial use of the standardised approach** *(%)* **(3)**	**Percentage of total exposure value subject to a roll-out plan** *(%)*	**Percentage of total exposure value subject to IRB approach** *(%)*
1	Central governments or central banks	452,804	520,777	1.14%	11.54%	87.32%
1.1	*of which Regional governments or local authorities*		*6,148*	*12.27%*	*87.73%*	
1.2	*of which Public sector entities*		*19,169*	*0.39%*	*99.61%*	
2	Institutions	38,441	58,346	0.39%	21.33%	78.28%
3	Corporates	491,948	801,132	0.73%	15.91%	83.36%
3.1	*of which Specialised lending, IRB approach*		*81,891*			*100.00%*
4	Retail	285,075	424,581	2.94%	29.98%	67.08%
4.1	*of which secured by real estate SMEs*		*12,044*			*100.00%*
4.2	*of which secured by real estate non-SMEs*		*188,191*			*100.00%*
4.3	*of which qualifying revolving*		*11,657*			*100.00%*
4.4	*of which SMEs*		*32,960*			*100.00%*
4.5	*of which Other retail*		*40,105*			*100.00%*
5	Equity	12,108	21,653	0.03%	43.94%	56.03%
6	Other non-credit obligation assets	726	726			100.00%
7	**TOTAL**	**1,281,102**	**1,827,215**	**1.34%**	**18.43%**	**80.23%**

(1) EAD value used in the risk-weighted assets calculation for the purpose of solvency ratio, pursuant to article 166 of Regulation (EU) No 575/2013.

(2) Exposure value used as a measure of exposure for the purpose of leverage ratio, pursuant to article 249 of Regulation (EU) No 876/2019.

(3) The scope of exposures subject to the permanent partial use of the standardised approach is limited to BNL bc and a few entities of the BNP Paribas Fortis Group.

In millions of euros		a	b	c	d	e
			31 December 2021			
			Exposure for purposes of leverage ratio (2)			
		EAD for exposures subject to IRB approach (1)	**Total exposure value for exposures subject to the standardised approach and to the IRB approach**	**Percentage of total exposure value subject to the permanent partial use of the SA** *(%)* (3)	**Percentage of total exposure value subject to a roll-out plan** *(%)*	**Percentage of total exposure value subject to IRB approach** *(%)*
1	Central governments or central banks	467,794	522,330	0.36%	10.19%	89.46%
1.1	*of which Regional governments or local authorities*		*14,416*	*2.26%*	*0.02%*	*97.72%*
1.2	*of which Public sector entities*		*35,085*	*0.04%*	*33.89%*	*66.07%*
2	Institutions	36,419	55,756	2.68%	32.84%	64.48%
3	Corporates	318,331	408,494	0.11%	24.04%	75.85%
3.2	*of which Specialised lending, IRB approach*		*55,341*	*0.00%*	*0.00%*	*100.00%*
4	Retail	259,504	390,329	1.17%	34.01%	64.82%
4.1	*of which secured by real estate SMEs*		*12,300*	*0.00%*	*14.30%*	*85.70%*
4.2	*of which secured by real estate non-SMEs*		*203,026*	*1.80%*	*13.52%*	*84.69%*
4.3	*of which qualifying revolving*		*9,243*	*0.00%*	*58.53%*	*41.47%*
4.4	*of which SMEs*		*58,543*	*1.26%*	*50.90%*	*47.84%*
4.5	*of which Other retail*		*107,217*	*0.18%*	*63.73%*	*36.09%*
5	Equity	14,313	16,349	0.00%	12.45%	87.55%
6	Other non-credit obligation assets	1,390	42,530	5.80%	90.25%	3.95%
7	**TOTAL**	**1,097,752**	**1,435,787**	**0.76%**	**23.88%**	**75.36%**

(1) EAD value used in the risk-weighted assets calculation for the purpose of solvency ratio, pursuant to article 166 of Regulation (EU) No 575/2013.

(2) Exposure value used as a measure of exposure for the purpose of leverage ratio, pursuant to article 249 of Regulation (EU) No 876/2019.

CREDIT RISK MANAGEMENT POLICY

CREDIT POLICIES [Audited]

The Bank's lending activities are governed by the Global Credit Policy. It applies to all Group activities that generate credit or counterparty risk. The Global Credit Policy provides general principles (including the risk assessment and decision-making process, adherence to the highest standards of compliance and ethics) applicable to all credit risk, as well as specific principles applicable to country risk, economic sector risks, clients selection and the transaction structures. It is supplemented by specific policies tailored to each type of business or counterparty.

These policies are regularly updated in line with developments in the credit environment in which the Group operates.

Corporate Social and Environmental Responsibility (CSR)

Since 2012, clauses on Corporate Social and Environmental Responsibility (CSR) are included in specific new credit policies or when existing policies are updated.

Furthermore, sectoral policies and financing exclusions for certain sectors presenting significant Environmental, Social and Governance (ESG) challenges (described in the Commitment 3 section of chapter 7 *Systematic integration and management of Environmental, social and governance risks (ESG)*) have been implemented since 2011 and steadily strengthened since then. These risks are also analysed in the context of sector reviews and country envelope limits.

The Group is also taking a number of steps to improve the incorporation of ESG risks factors, especially those linked to climate change, in its credit risk system. Within this context, the Group continues to strengthen the ESG assessment of its clients to make it more systematic and to better understand the ESG risk profile associated.

Expanding the ESG analysis of corporate customers thanks to a risk assessment tool: the ESG Assessment

BNP Paribas takes ESG criteria into account in its decision-making processes. ESG criteria are integrated into the Know Your Client (KYC) as well as into the Global Credit policy and, when more precise criteria are deemed relevant, in specific credit policies.

In addition to the current ESG risk assessment framework (sectoral policies, specific credit policies), an ESG assessment tool has been deployed since June 2021: ESG Assessment, which progressively replaces all existing set-ups (CSR screening, questionnaire on Duty of care law). It makes it possible to identify, assess and monitor the ESG performance and risks of corporate customers by sector with a common approach within the Group for a given customer segment.

The assessment aims to perform a systematic ESG analysis at business group level as part of the credit process, one of the foundations of the banking activity, thus integrating ESG criteria with the other criteria included in the assessment of the counterparty's credit profile.

The ESG Assessment covers the environmental (climate and biodiversity), social (health, safety and impact on communities) and governance (business ethics) dimensions through a set of questions, supplemented by an analysis of controversies affecting the client. The questionnaires developed in this context are specific to each sector in order to better integrate the challenges and issues specific to their activities.

This tool makes it possible to assess clients' compliance with sector policies, as well as the maturity of their ESG strategy and its implementation.

The deployment of ESG Assessment, included in the credit files for all business sectors and business groups, will enable the RISK Function to exercise greater control over the ESG dimensions during Credit Committees on a documented basis. Currently designed for large companies, this framework will be gradually adapted and extended to different customer segments.

INDIVIDUAL DECISION-MAKING PROCEDURES [Audited]

A system of discretionary credit delegations has been established, under which all lending decisions must be approved by managers or representatives of the business teams, with the concurrence of a formally designated RISK representative. Approvals are systematically evidenced in writing, possibly electronically either by means of a signed approval form or in the minutes of formal Credit Committee meetings. Discretionary credit delegations correspond to aggregate commitments by business group and vary according to internal credit ratings and the specific nature of the business concerned. All transactions proposed are subject to a detailed review of the borrower's current and future position. The review, conducted when granting the transaction and updated at least on an annual basis. It is designed to ensure the Group has a comprehensive understanding of the borrower and can monitor any potential changes in its situation. Certain types of lending commitments, such as loans to financial institutions, sovereign loans and loans to customers operating in certain industries that are exposed to cyclical risks or to a rapid pace of change, are subject to specific authorisation procedures and require the sign-off of an industry expert or designated specialist. In Retail Banking, simplified procedures are applied, based on statistical decision-making aids.

Credit applications must comply with the Bank's Global Credit Policy and any relevant specific policies. Material exceptions undergo a special approval process. Before making any commitments, BNP Paribas carries out an in-depth review of any known development plans of the borrower, and ensures that it has thorough knowledge of all the structural aspects of the borrower's operations and that adequate monitoring will be possible.

The General Management Credit Committee (CCDG) is the highest-level Group committee for all decisions related to credit and counterparty risk. It has in particular ultimate decision-making authority for all credit applications notably for amounts in excess of individual discretionary credit delegations or applications that would not comply with the Global Credit Policy.

MONITORING AND PORTFOLIO MANAGEMENT PROCEDURES [Audited]

Monitoring exposures

A comprehensive risk monitoring system is organised around control units, which are responsible for ensuring that lending commitments comply with the credit decision, that credit risk reporting data are reliable and that risks are effectively monitored. Daily irregular exception reports are produced and various early warning tools are used to identify early the deterioration of credit risks. The various monitoring levels are carried out under the supervision of RISK. Non-performing loans or those placed under credit watch (see *Exposures, provisions and cost of risk*) are overseen more closely *via* dedicated quarterly committee meetings (see the *Governance* part of section 5.3 *Risk management*). To supplement this mechanism, the Doubtful Committee meets on a monthly basis to to validate the proposed changes in individual provisions for doubtful loans for which an adjustment is necessary based on expected financial flows.

The responsibilities of the control teams include the monitoring of exposures against approved authorisations, covenants, and guarantees. This allows the identification of any signs of deterioration against the risk profile approved by the Credit Committee. Control teams flag up (to the RISK teams and business units) any cases that fail to comply with Credit Committee decisions and oversee their resolution. In some cases, a specific alert is sent to the senior management of RISK and of the relevant business unit. These are mainly where exceptions remain unresolved and/or where there are serious indications of deterioration in the risk profile compared with that approved by the Credit Committee.

Furthermore, since 2018 the General Credit Policy has included specific checks to be conducted for loans granted to clients presenting high leverage ratios, in accordance with European Central Bank guidelines.

Overall portfolio management and monitoring

The selection and careful evaluation of individual risks taken are supported by a monitoring and risk control system based on more aggregated portfolio levels in terms of division/business line, regions, industry, business/product.

The overall portfolio management policy, including concentration of risk by single name, industry and country, is based on this monitoring system and Group Risk Committees review all reports and analyses produced:

- risk concentration by country is managed through country risk limits that are set at the appropriate level of delegated authority for each country. The Group, which is naturally present in most economically active areas endeavours to avoid excessive concentrations of risk in countries with a high geopolitical risk or fragile political and economic structures or which economic position has been undermined. Country envelope limits are reviewed at least once a year, and quarterly reports are drawn up on their use;
- the Group closely monitors individual concentrations, in particular on business groups, corporates, banks or sovereign debts. These concentrations are reported in the quarterly risk report to CCIRC. Related policies implemented by the Group are described under *Credit risk diversification* of this section;
- regular reviews by the Group are carried out of portfolios in certain industries, either because of the magnitude of the Group's exposure to the sector or because of sector-specific risks, such as the cyclical nature of the industry or rapid technological developments. In these reviews, special focus is placed on CSR issues in potentially sensitive sectors. The Group draws on the expertise of the relevant business lines and independent industry specialists working in RISK (Industry and Sector Studies). These reviews provide Executive Management, and if appropriate the CCIRC, with an overview of the Group's exposure to the sector under consideration, and assist it to decide on strategic guidelines. As an illustration, in 2022, an internal portfolio review was undertaken on electricity production, commercial real estate, residential real estate, shipping financing and aviation sectors;
- stress tests assess portfolio vulnerabilities by measuring the impact of various adverse scenarios. They are conducted on a quarterly basis on the entire portfolio and on an *ad hoc* basis on sub-portfolios to identify any concentrations. They help to ensure that the Bank's credit risk exposure is in line with its risk appetite.

Lastly, BNP Paribas may use credit risk transfer instruments, such as securitisation programmes, credit derivatives or credit insurance, to mitigate individual risks, reduce portfolio concentration or cap potential losses arising from crisis scenarios.

IMPAIRMENT VALUATION PROCEDURES [Audited]

The Group applies the impairment procedures described below for all loans subject to impairment (see note 1.e.5 *Impairment of financial assets at amortised cost and of debt instruments at market value through equity*):

- impairment valuation procedure for performing loans:

  A loss allowance for loans in stage 1 or stage 2 is constituted by each operating division based on an estimation of expected credit losses. This is validated on a quarterly basis during a committee meeting attended by the Chief Financial Officer and Chief Risk Officer of each operating division. Estimations of expected credit losses result from the default risk in the coming twelve months for financial instruments whose credit risk has not significantly increased since initial recognition (stage 1) or upon maturity for unimpaired loans whose credit risk has significantly increased since initial recognition (stage 2). A tool used by most of the Group's business lines enables calculations to be performed based on the parameters of the rating system described below and integrating the potential impact of macroeconomic and sectoral dynamics;

- impairment valuation procedure for defaulted exposures:

  Monthly, RISK reviews corporate, bank and sovereign loans, requiring a review of their impairment, to determine the amount of any decrease in value to be recognised, either by reducing the carrying amount or by recording a provision for impairment, in accordance with applicable accounting standards (see note 1.e.5). The Group uses various methodologies (expert opinions, statistical calculations) for defaulted exposures to retail customers. These impairments are referred to as stage 3. The amount of this impairment loss is based on the present value of probable recovered net cash flows issued from several scenarios, including from the possible realisation of the collateral held. The amount of this impairment loss is based on the present value of probable recovered net cash flows under various scenarios and including from the possible realisation of the collateral held. Estimated expected cash flows also includes a cash flow scenario from the possible sale of non-performing loans or all loans. Proceeds from the sale is net of costs associated to the sale.

RATING SYSTEM [Audited]

Each counterparty is rated internally by the Group using uniform principles, regardless of the approach used to calculate regulatory capital requirements.

The Bank has a comprehensive internal rating system compliant with regulatory requirements regarding capital adequacy. A periodic assessment and control process has been deployed within the Bank to ensure that the system is appropriate and correctly implemented. The system was formally validated by the supervisor in December 2007 and is inspected on a regular basis.

For loans to institutions, corporates, sovereigns and specialised lendings, the system is based on three parameters: the counterparty's probability of default (PD) expressed *via* a rating, the Global Recovery Rate (GRR) or its complement, Loss Given Default (LGD), which depends on the structure of the transaction, and the Credit Conversion Factor (CCF) which estimates the off-balance sheet exposure at risk.

There are twelve counterparty ratings. Ten cover performing clients with credit assessments ranging from "excellent" to "very concerning", and two relate to clients classified as in default, as per the definition by the banking supervisor.

Confirmation or amendments to the probability of default parameters and GRR applicable to each transaction are reviewed at least once a year as part of the loan approval process or annual credit review. These are based on the combined expertise of business line staff and, as a second look, the RISK representatives (who have the final say in case of disagreement). It uses appropriate tools including analysis aids and credit scoring systems. The decision to use these tools and the choice of technique depends on the nature of the risk.

For retail counterparties, the system is also based on three parameters: Probability of Default (PD), the Global Recovery Rate (GRR) and the Credit Conversion Factor (CCF). On the other hand, rating methods are applied automatically to determine the loan parameters.

Internal estimates of risk parameters are used in the Bank's day-to-day management in line with regulation recommendations. Thus, apart from calculating capital requirements, they are used for example when setting delegated limits, granting new loans or reviewing existing loans to measure profitability, determine impairments and for book analyses.

TABLE 27: INDICATIVE MAPPING OF INTERNAL COUNTERPARTY RATING WITH AGENCY RATING SCALE AND AVERAGE EXPECTED PD

	Internal rating BNP Paribas	LT Issuer/Unsecured issuer's ratings S&P/Fitch	Average expected PD
Investment Grade	1+	AAA	0.01%
	1	AA+	0.01%
	1-	AA	0.01%
	2+	AA-	0.02%
	2	A+/A	0.03%
	2-	A-	0.04%
	3+/3/3-	BBB+	0.06% to 0.10%
	4+/4/4-	BBB	0.13% to 0.21%
	5+/5/5-	BBB-	0.26% to 0.48%
Non-Investment Grade	6+	BB+	0.69%
	6/6-	BB	1.00% to 1.46%
	7+/7	BB-	2.11% to 3.07%
	7-	B+	4.01%
	8+/8/8-	B	5.23% to 8.06%
	9+/9/9-	B-	9.53% to 13.32%
	10+	CCC	15.75%
	10	CC	18.62%
	10-	C	21.81%
Defaut	11	D	100%
	12	D	100%

The Group has developed an indicative equivalence between the Bank's internal ratings and the long-term issuer ratings assigned by the major rating agencies. Nevertheless, the Bank has a much broader clientele than just those counterparties rated by an external rating agency. An indicative equivalence is not relevant in Retail Banking. It is used when the internal ratings are assigned or reviewed in order to identify any differences between the Bank's assessment of a borrower's probability of default and that of one or more of the rating agencies. However, the internal ratings do not aim to reproduce or even approximate the external ratings. There are significant variances in both directions within the portfolio. Some counterparties rated 6 or 7 by BNP Paribas could be considered Investment Grade by the rating agencies.

For further details, see the sections *Internal rating system – sovereign, financial institution, corporate and specialised financing portfolios* and *Internal rating system specific to retail customers*.

CREDIT RISK STRESS TESTING

Quantitative models have been developed and are used to connect credit risk and rating migration parameters with macroeconomic and financial variables projected in stress testing scenarios (see section 5.3 *Stress testing*), for historical data as well as the relevant forecast period.

The quality of the methods used is guaranteed by:

- strict governance in terms of the separation of duties and responsibilities;
- a review of existing systems (models, methodologies, tools) by an independent entity;
- periodic evaluation of the effectiveness and pertinence of the system as a whole.

This governance is based on internal policies and procedures, the supervision of the Credit Risk Stress Testing Committees by business line and the integration of the stress tests within the risk management system.

The central stress testing framework is consistent with the structure defined in the European Banking Authority (EBA) guidelines for European stress tests:

- it is based on the parameters used to calculate capital requirements (regulatory EAD, PD and LGD);
- the expected loss conditional to the macroeconomy is used as a measure of the cost of risk resulting from new defaults;
- the stressed cost of risk is supplemented with impacts on stage 1 and 2 provisions and provisions on the outstanding non-performing loans;
- the regulatory capital stress testing is performed on the basis of rating migrations, default events, and the stressed regulatory PD used in calculating regulatory capital requirements.

Stress testing of credit risk is used in the evaluation of the Group's risk appetite, and more specifically during portfolio reviews. They are based on models integrated into the risk management and financial planning processes, shared with the provisions calculation system and the internal economic measurement of capital requirements.

The system was strengthened and adapted to the evolution of the risk environment:

- it integrates consideration of the heterogeneity of sectoral trajectories according to scenarios, in particular in high inflation and energy transition contexts;
- the Forward Looking Adjustment of Internal Rating (FLAIR) approach makes it possible to include in the projections developments that are unparalleled in the recent historical period or likely to lead to rapid changes in the relationships observed historically between variables. This system is used to take into account the impact of the rise in recent interest rates and contributes to the des assessment of climate change risks.

The Bank has developed a partnership with the *Laboratoire de Mathématiques appliquées de l'École Polytechnique en France (CMAP)* to ensure access to the most advanced scientific knowledge in the measurement of climate change risks, cyber risks, uncertainty and extreme events more generally.

CREDIT RISK DIVERSIFICATION

The Group's gross exposure to credit risk stands at EUR 1,944 billion at 31 December 2022, an increase compared to 31 December 2021 with EUR 1,897 billion. This increase is mainly driven by the Bank's day-to-day activities. The portfolio, which is analysed below in terms of its diversification, comprises all exposures to credit risk shown in Table 25, excluding equity exposures under the simple weighting method, shown in the section *Credit risk: equities under the simple weighting method*.

These exposure amounts are based on the gross carrying value of the financial assets. They do not include collateral taken by the Group in its normal credit risk management operations (see section *Credit risk mitigation techniques*).

No single counterparty gives rise to an excessive concentration of credit risk, due to the size of the business and the high level of industrial and geographical diversification of the client base. The breakdown of credit risks by industry and by region is presented in the tables hereafter.

This risk is mainly assessed through the monitoring of the indicators shown below.

SINGLE NAME CONCENTRATION

The single name concentration risk of the portfolio is subject to regular monitoring. It is assessed on the basis of the total commitments at client or business group level and is based on two types of monitoring:

Monitoring of large exposures

Article 395 of Regulation (EU) No. 575/2013 of 26 June 2013 establishes a limit of 25% of the bank's capital for exposure by business group (after exemptions and taking credit risk mitigation techniques into account).

BNP Paribas is well below the concentration thresholds set by this regulation. The exposure (as defined above) of a client or a group of connected clients never exceeds 10% of the Bank's eligible capital.

Monitoring through individual "single name" concentration policies

The single name concentration risks are part of the Group's concentration policies. They are meant to identify and closely monitor any single business group with an excessive concentration of risk to proactively manage individual concentrations relative to the Group's Risk Appetite Statement.

BREAKDOWN BY REGULATORY ASSET CLASS

TABLE 28: CREDIT RISK EXPOSURE BY ASSET CLASS AND APPROACH TYPE

Exposure ***In millions of euros***	**31 December 2022**	**31 December 2021**
Central governments or central banks	454,775	469,741
Institutions	45,960	52,369
Corporates	674,680	636,914
Corporates – Specialised financing	82,887	83,560
Corporates – SME	51,583	52,282
Other corporates	540,210	501,072
Retail	288,930	290,972
Retail – Secured by real estate property	189,024	179,284
Retail – Secured by commercial property	12,176	11,789
Retail – Revolving exposures	12,087	16,024
Retail – SME	34,210	36,399
Retail – Other	41,432	47,475
Other items	726	1,738
TOTAL IRB APPROACH	**1,465,071**	**1,451,734**
Central governments or central banks	37,441	41,976
Regional governments or local authorities	6,153	5,425
Public sector entities	19,172	19,599
Multilateral development banks	221	185
International organisations	1,023	765
Institutions	12,679	12,247
Corporates	133,878	117,098
Retail	141,448	126,050
Exposures secured by mortgages on immovable property	70,079	62,876
Exposures in default	10,858	11,063
Items associated with particular high risk(*)	655	1,345
Exposures in the form of units or shares in collective investment undertakings		1
Equity	4,893	4,389
Other items	40,686	41,919
TOTAL STANDARDISED APPROACH	**479,186**	**444,936**
TOTAL	**1,944,257**	**1,896,670**

(*) Immovable property financing exposures whose risk profile may be affected by market conditions.

GEOGRAPHIC DIVERSIFICATION

Country risk is the sum of the risks on all exposures to obligors in the country concerned. It is not the same as sovereign risk, which is the sum of all exposures to the central government and its various branches. Country risk reflects the Bank's exposure to a given economic and political environment, which are taken into consideration when assessing counterparty quality.

The geographic breakdown shown below is based on the counterparty's country of residence.

The geographic breakdown of the portfolios is balanced. The Group paid particular attention to geopolitical risks and the economic performance of emerging countries (see section *Areas of special interest in 2022* in section 5.1).

TABLE 29: CREDIT RISK EXPOSURE BY GEOGRAPHIC REGION

31 December 2022

	Europe(*)										Asia Pacific					Rest of the world					
Exposure *In millions of euros*	**Total Europe**	**France**	**Belgium**	**Luxembourg**	**Italy**	**United Kingdom**	**Germany**	**Netherlands**	**Other European countries**	**North America**	**Total Asia Pacific**	**Japan**	**North Asia**	**South-East Asia (ASEAN)**	**Indian peninsula & Pacific**	**Total Rest of the world**	**Türkiye**	**Mediterranean**	**Gulf States & Africa**	**Latin America**	**Other countries**	**TOTAL**
Central governments or central banks	**363,169**	241,404	34,353	25,225	17,668	5,544	14,996	191	23,788	**40,859**	**42,024**	17,157	6,966	11,837	6,064	**8,722**	387	292	3,580	2,354	2,110	**454,775**
Institutions	**23,445**	5,652	8,370	695	1,926	1,154	1,420	1,618	2,611	**7,450**	**7,934**	1,815	4,160	634	1,325	**7,131**	1,017	176	3,078	2,199	660	**45,960**
Corporates	**475,679**	149,297	67,635	29,306	63,983	53,642	34,138	24,107	53,571	**103,362**	**56,137**	7,232	18,510	13,350	17,045	**39,502**	1,566	546	9,799	14,567	13,024	**674,680**
Retail	**288,332**	156,086	84,067	9,244	37,400	345	288	226	674	**264**	**105**	6	37	44	19	**228**	8	44	70	34	72	**288,930**
Other items	**726**	726																				**726**
TOTAL IRB APPROACH	**1,151,351**	**553,165**	**194,425**	**64,471**	**120,977**	**60,686**	**50,842**	**26,143**	**80,643**	**151,936**	**106,200**	**26,210**	**29,672**	**25,865**	**24,453**	**55,583**	**2,978**	**1,058**	**16,526**	**19,154**	**15,867**	**1,465,071**
Central governments or central banks	**21,893**	7,160	2,580	335	3,461	23	307	3	8,024	**7,960**	**178**	46	20	5	105	**7,410**	4,222	1,860	1,031	188	109	**37,441**
Regional governments or local authorities	**5,073**	679	1,149	102	2,420	25	12	12	674	**1,008**	**3**				3	**69**	69					**6,153**
Public sector entities	**2,885**	601	71	17	1,874	49	43	6	225	**16,138**	**20**		20			**129**		125	4			**19,172**
Multilateral development banks	**221**			166		55				**-**	**-**					**-**						**221**
International organisations	**1,023**	772	206	3	39				2	**-**	**-**					**-**						**1,023**

31 December 2022

	Europe(*)										Asia Pacific					Rest of the world					
Exposure *In millions of euros*	**Total Europe**	**France**	**Belgium**	**Luxembourg**	**Italy**	**United Kingdom**	**Germany**	**Netherlands**	**Other European countries**	**North America**	**Total Asia Pacific**	**Japan**	**North Asia**	**South-East Asia (ASEAN)**	**Indian peninsula & Pacific**	**Total Rest of the world**	**Türkiye**	**Mediterranean**	**Gulf States & Africa**	**Latin America**	**Other countries**	**TOTAL**
Institutions	**9,558**	4,746	175	149	661	520	345	238	2,724	**795**	**1,034**	41	350	117	527	**1,293**	700	86	88	258	161	**12,679**
Corporates	**81,658**	23,178	5,152	1,926	9,792	7,392	5,545	1,464	27,208	**33,484**	**5,747**	32	3,161	1,757	797	**12,989**	5,590	4,270	2,009	480	639	**133,878**
Retail	**111,260**	17,397	4,697	299	30,876	13,541	16,942	1,399	26,110	**16,452**	**2,063**	62	1,659	13	329	**11,673**	4,961	1,173	1,636	3,261	642	**141,447**
Exposures secured by mortgages on immovable property	**39,368**	7,435	6,281	68	924	1,302	1,735	5,800	15,823	**27,782**	**318**	1	119	176	21	**2,612**	1,266	1,243	59	10	34	**70,079**
Exposures in default	**8,848**	2,169	281	27	2,169	585	835	42	2,740	**464**	**5**		1	2	2	**1,561**	259	768	350	152	31	**10,878**
Items associated with particular high risk(**)	**-**									**636**	**-**					**-**						**636**
Exposures in the form of units or shares in collective investment undertakings	**-**									**-**	**-**					**-**						**-**
Equity	**4,723**	2,941	349	1,072	133	131	16	34	48	**140**	**10**	1	4		5	**20**	2			9	9	**4,893**
Other items	**36,476**	25,143	2,278	509	3,800	1,344	2,112	123	1,168	**2,009**	**1,171**	23	1,055	7	85	**1,030**	446	312	144	105	22	**40,686**
TOTAL STANDARDISED APPROACH	**322,986**	**92,220**	**23,219**	**4,673**	**56,149**	**24,967**	**27,890**	**9,120**	**84,747**	**106,867**	**10,547**	**207**	**6,388**	**2,078**	**1,874**	**38,785**	**17,516**	**9,838**	**5,322**	**4,463**	**1,647**	**479,186**
TOTAL	**1,474,337**	**645,385**	**217,644**	**69,145**	**177,126**	**85,654**	**78,732**	**35,262**	**165,390**	**258,803**	**116,748**	**26,417**	**36,060**	**27,943**	**26,327**	**94,369**	**20,494**	**10,896**	**21,848**	**23,616**	**17,515**	**1,944,257**

31 December 2022

Exposure *In millions of euros*	Europe(*)									North America	Asia Pacific						Rest of the world						TOTAL
	Total Europe	France	Belgium	Luxembourg	Italy	United Kingdom	Germany	Netherlands	Other European countries		Total Asia Pacific	Japan	North Asia	South-East Asia (ASEAN)	Indian peninsula & Pacific		Total Rest of the world	Türkiye	Mediterranean	Gulf States & Africa	Latin America	Other countries	

(*) Within the scope of the European Union, the European Free Trade Association (EFTA) and United Kingdom.
(**) Immovable property financing exposures whose risk profile may be affected by market conditions.

31 December 2021

Exposure *In millions of euros*	Total Europe	France	Belgium	Luxembourg	Italy	United Kingdom	Germany	Netherlands	Other European countries	North America	Total Asia Pacific	Japan	North Asia	South-East Asia (ASEAN)	Indian peninsula & Pacific	Total Rest of the world	Türkiye	Mediterranean	Gulf States & Africa	Latin America	Other countries	TOTAL
	Europe(*)										**Asia Pacific**					**Rest of the world**						
Central governments or central banks	**400,491**	234,436	56,416	33,024	16,300	8,352	21,869	1,534	28,561	**33,467**	**28,190**	8,965	9,714	3,926	5,585	**7,593**	150	306	3,013	2,238	1,885	**469,741**
Institutions	**26,658**	6,424	8,546	772	2,936	1,138	1,376	1,768	3,699	**9,648**	**10,557**	2,060	6,207	790	1,500	**5,506**	966	216	2,162	1,751	412	**52,369**
Corporates	**451,506**	138,925	66,466	28,255	63,991	47,661	27,802	23,959	54,447	**90,583**	**57,589**	6,739	20,000	14,019	16,832	**37,236**	1,446	353	10,789	12,462	12,186	**636,914**
Retail	**290,547**	151,625	82,180	9,194	37,641	255	198	273	9,181	**145**	**77**	4	19	39	14	**204**	5	39	66	12	82	**290,972**
Other items	**1,738**	1,190	487	47			1	12		**-**	**0**					**-**						**1,738**
TOTAL IRB APPROACH	**1,170,940**	**532,601**	**214,094**	**71,292**	**120,867**	**57,407**	**51,247**	**27,545**	**95,888**	**133,843**	**96,412**	**17,767**	**35,940**	**18,774**	**23,931**	**50,539**	**2,566**	**914**	**16,029**	**16,463**	**14,566**	**1,451,734**
Central governments or central banks	**16,098**	4,946	1,625	140	1,538	28	749	3	7,070	**19,099**	**105**	44	13	3	45	**6,674**	3,674	1,499	856	114	531	**41,976**
Regional governments or local authorities	**4,713**	335	874		2,801	6	13	12	670	**634**	**0**					**78**	78					**5,425**
Public sector entities	**2,979**	502	42		2,089	50	45	5	246	**16,447**	**18**		18			**154**	3	1	4		146	**19,599**
Multilateral development banks	**153**	1		151					1	**23**	**9**			9		**0**						**185**
International organisations	**765**	637	96		30				2	**-**	**-**											**765**

31 December 2021

Exposure *In millions of euros*	Europe(*)										Asia Pacific					Rest of the world						
	Total Europe	**France**	**Belgium**	**Luxembourg**	**Italy**	**United Kingdom**	**Germany**	**Netherlands**	**Other European countries**	**North America**	**Total Asia Pacific**	**Japan**	**North Asia**	**South-East Asia (ASEAN)**	**Indian peninsula & Pacific**	**Total Rest of the world**	**Türkiye**	**Mediterranean**	**Gulf States & Africa**	**Latin America**	**Other countries**	**TOTAL**
Institutions	**8,936**	4,096	258	148	328	346	617	86	3,057	**645**	**1,052**	79	250	21	702	**1,614**	831	243	65	342	133	**12,247**
Corporates	**70,306**	19,990	2,268	1,244	9,114	8,073	4,671	1,374	23,571	**29,176**	**6,058**	40	3,585	2,192	240	**11,558**	4,419	3,905	1,595	281	1,357	**117,098**
Retail	**97,270**	14,079	3,112	132	30,715	13,887	16,615	1,369	17,361	**15,718**	**1,888**	3	1,560	7	319	**11,175**	4,603	1,115	1,695	2,957	805	**126,050**
Exposures secured by mortgages on immovable property	**35,902**	8,288	2,651	56	1,020	1,215	1,518	5,093	16,060	**23,797**	**337**	1	127	195	14	**2,840**	1,338	1,280	80	11	131	**62,876**
Exposures in default	**8,826**	1,969	167	14	2,545	637	913	41	2,540	**395**	**6**		1	3	3	**1,869**	414	801	497	120	38	**11,096**
Items associated with particular high risk(**)	**437**	1							436	**708**	**-**					**167**		156	11			**1,312**
Exposures in the form of units or shares in collective investment undertakings	**1**	1								**-**	**-**					**-**						**1**
Equity	**4,199**	2,647	306	906	99	121	23	40	58	**133**	**32**	1	3	1	26	**25**	2			10	13	**4,389**
Other items	**38,175**	27,828	1,934	505	4,066	886	1,948	131	879	**1,777**	**1,166**	34	1,027	10	95	**798**	165	323	142	95	73	**41,916**
TOTAL STANDAR	**288,759**	**85,320**	**13,333**	**3,296**	**54,345**	**25,249**	**27,112**	**8,154**	**71,950**	**108,552**	**10,671**	**204**	**6,583**	**2,442**	**1,443**	**36,953**	**15,528**	**9,323**	**4,946**	**3,929**	**3,227**	**444,936**

31 December 2021

	Europe(*)										Asia Pacific					Rest of the world						
Exposure *In millions of euros*	Total Europe	France	Belgium	Luxembourg	Italy	United Kingdom	Germany	Netherlands	Other European countries	North America	Total Asia Pacific	Japan	North Asia	South-East Asia (ASEAN)	Indian peninsula & Pacific	Total Rest of the world	Türkiye	Mediterranean	Gulf States & Africa	Latin America	Other countries	TOTAL
DISED APPROACH																						
TOTAL	**1,459,699**	**617,920**	**227,427**	**74,588**	**175,212**	**82,656**	**78,359**	**35,699**	**167,837**	**242,395**	**107,084**	**17,971**	**42,523**	**21,216**	**25,374**	**87,492**	**18,094**	**10,237**	**20,975**	**20,392**	**17,793**	**1,896,670**

(*) Within the scope of the European Union and the European Free Trade Association (EFTA).
(**) Immovable property financing exposures whose risk profile may be affected by market conditions.

INDUSTRY DIVERSIFICATION

The sectoral breakdown of the exposure class of non-financial corporations by industry is available in Table 51 *Breakdown of loans and advances and provisions to non-financial corporations by industry (EU CQ5)*.

RISK-WEIGHTED ASSETS

TABLE 30: CREDIT RISK-WEIGHTED ASSETS

RWAs ***In millions of euros***	**31 December 2022**	**31 December 2021**	**Variation**
IRB approach	**307,068**	**298,089**	**8,978**
Central governments or central banks	4,620	4,359	261
Institutions	8,280	9,983	(1,703)
Corporates	237,260	222,130	15,130
Corporates – Specialised financing	24,001	23,429	572
Corporates – SME	20,979	21,384	(405)
Other corporates	192,280	177,317	14,963
Retail	56,767	61,201	(4,434)
Retail – Secured by real estate property	23,560	25,936	(2,376)
Retail – Secured by commercial property	3,146	2,914	232
Retail – Revolving exposures	3,304	3,635	(331)
Retail – SME	9,579	9,689	(110)
Retail – Other	17,178	19,026	(1,848)
Other risk assets	141	417	(276)
Standardised approach	**231,375**	**205,747**	**25,628**
Central governments or central banks	6,236	6,529	(293)
Regional governments or local authorities	774	624	150
Public sector entities	2,236	2,194	42
Multilateral development banks			
International organisations			
Institutions	4,479	4,422	57
Corporates	80,989	67,767	13,222
Retail	73,410	64,863	8,547
Exposures secured by mortgages on immovable property	26,941	23,067	3,874
Exposures in default	5,684	5,595	89
Exposures in the form of units or shares in collective investment undertakings	705	1,310	(605)
Items associated with particular high risk(*)		1	(1)
Equity	8,771	7,790	981
Other items	21,150	21,586	(436)
Equity positions under the simple weighting method	**41,192**	**50,025**	**(8,833)**
Private equity exposures in diversified portfolios	2,952	2,370	582
Listed equity exposures	2,976	3,066	(90)

Other equity exposures	35,263	44,589	(9,326)
CREDIT RISK	**579,635**	**553,861**	**30,800**

(*) Immovable property financing exposures whose risk profile may be affected by market conditions.

TABLE 31: CREDIT RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER (EU CR8)

1st quarter 2023

		RWAs		Capital Requirements	
	In millions of euros	**Total**	**of which IRB approach**	**Total**	**of which IRB approach**
1	**31 December 2022**	**579,635**	**307,068**	**46,371**	**24,565**
2	Asset size	5,896	600	472	48
3	Asset quality	(3,939)	(3,018)	(315)	(241)
4	Model update	963	963	77	77
5	Methodology and policy	(2,362)		(189)	
6	Acquisitons and disposals	(46,304)	659	(3,704)	53
7	Currency	(1,214)	(1,013)	(97)	(81)
8	Others	1,059	158	85	(13)
9	**31 March 2023**	**533,734**	**305,418**	**42,699**	**24,433**

CREDIT RISK: INTERNAL RATINGS-BASED APPROACH (IRBA)

The internal rating system developed by the Group covers the entire Bank. The IRBA framework, validated in December 2007, covers the portfolio described in *Approaches used to calculate capital requirements* in the section entitled *Exposure to credit risk*.

The Group has developed specific internal models adapted for the most common categories of exposure and clients in its loan portfolio. BNP Paribas bases these developments on internal data gathered over long periods. Each of these models is developed and maintained by a specialist team, in conjunction with relevant RISK and business line experts. Moreover, verification is performed to ensure compliance with the floors set by the regulation on these models. The Bank does not use models developed by external suppliers.

IRBA credit models are developed and used within a control system comprising three lines of defence:

- models producing internal estimates of the risk parameters are developed and maintained by specialised RISK teams, which also perform annual backtesting of each model in production;
- another RISK team, which reports directly to the Group Chief Risk Officer, conducts independent reviews of the models. Three types of review are carried out: systematic before a model is implemented, annual when reviewing backtesting carried out by the first line, and finally periodic, covering all the IRBA models used in the Bank according to an auditing plan that takes into account a risk-based approach;
- finally, each year, the General Inspectorate conducts an overall assessment of the models and their governance, and conducts a detailed review of an identified risk area.

In addition, the first and second line of defence RISK teams regularly report the most important information to Bank management and senior management, through:

- the Capital Committee, which is the competent Executive Management authority for issues relating to internal credit models, and which, as such, is informed of the main decisions taken concerning these models, annually reviews the results of backtesting and receives a summary of the results of the independent review of the models;
- the Internal Control, Risk Management and Compliance Committee (CCIRC), a body appointed by the Board of directors, which receives a quarterly qualitative dashboard detailing the major risk-related events over the quarter and a metric based on the recommendations of the independent review team.

Counterparty rating (or the Probability of Default) and the Loss Given Default are determined either using purely statistical models for portfolios with the highest degree of granularity (loans to individuals or to very small enterprises) or a combination of models and expert judgement based on indicative values.

Loss Given Default is defined as the loss that the Bank would suffer in the event of the counterparty's default in times of economic downturn, as required by regulations. For each transaction, it is measured using the recovery rate for a senior unsecured exposure to the counterparty, adjusted for any risk mitigation techniques (collateral or guarantees). Amounts recoverable against these mitigants are estimated each year using conservative assumptions as well as haircuts calibrated to reflect economic downturn conditions.

The Bank models its own conversion factors on financing commitments by using internal default data. Conversion factors are used to measure the off-balance sheet exposure at risk in the event of a default. This parameter is assigned automatically depending on the transaction type for all portfolios and therefore, is not determined by the Credit Committees.

Internal estimates of risk parameters are used in the Bank's day-to-day management in line with regulation recommendations. Thus, apart from calculating capital requirements, they are used, for example, when setting delegated limits, granting new loans or reviewing existing loans to measure profitability, determine provisions on performing loans and for book analyses.

TABLE 32: MAIN MODELS: PD, LGD AND CCF/EAD

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default or loss data	Main asset class
PD	Sovereigns	1	Qualitative	> 10 years	Central governments and central banks
	Banks	4	Quantitative + expert opinion	> 10 years	Institutions Central governments and central banks Corporate – other
	Insurance	1	Quantitative + expert opinion	> 10 years	Corporate – other
	Large corporates	3	Quantitative + expert opinion Qualitative	> 10 years	Corporate – other
	Real Estate non-retail in France	1	Qualitative	> 10 years	Corporate – other
	Project financing	3	Qualitative Quantitative + expert opinion	> 10 years	Corporate – specialised lending
	Energy and commodity financing	1	Qualitative	> 10 years	Corporate – other
	CPBF – SME	1	Quantitative + expert opinion	> 10 years	Corporate – SME
	CPBF – Professionnals & Entrepreneurs	1	Qualitative	> 10 years	Retail – other SME
	CPBF – Personal (Individuals & Professionnals)	1	Quantitative	> 10 years	Retail – other non-SME/qualifying Revolving/secured by real estate non-SME
	Personal Finance	2	Quantitative	> 10 years	Retail – other non-SME
	BNPP FORTIS – SME	3	Quantitative + expert opinion	> 10 years	Retail – other/secured by real estate SME
	BNPP FORTIS – Professionnals	1	Quantitative	> 10 years	Retail – other SME/secured by real estate SME
	BNPP FORTIS – Individuals	1	Quantitative	> 10 years	Retail – Secured by real estate non-SME
	BNPP FORTIS – Public entities	1	Quantitative + expert opinion	9 years	Institutions
	BNL bc – SME	1	Quantitative – logistic regression	> 10 years	Corporate – SME
	BNL bc – Retail Individuals	1	Quantitative – logistic regression	> 10 years	Retail – other non-SME
	BNL bc – Professionnals et Retail SME	1	Quantitative – logistic regression	> 10 years	Retail – other SME
	BGL – Retail	1	Quantitative	> 10 years	Retail non-SME/secured by real estate SME
LGD	Sovereigns	1	Qualitative	> 10 years	Central governments and central banks

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default or loss data	Main asset class
	Banks	4	Quantitative + expert opinion	> 10 years	Institutions Central governments and central banks Corporate – other
	Insurance	1	Qualitative	> 10 years	Corporate – other

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default or loss data	Main asset class
	Large corporates	4	Quantitative – calibrated on internal data + Quantitative + expert opinion Quantitative	> 10 years	Corporate – other
	Real Estate non-retail in France	1	Qualitative – Asset valuation haircut	> 10 years	Corporate – other
	Project financing	3	Quantitative – calibrated on internal data Qualitative	> 10 years	Corporate – specialised lending
	Energy and commodity financing	1	Qualitative	> 10 years	Corporate – other
	CPBF – SME	1	Quantitative – calibrated on internal data	> 10 years	Corporate – SME
	CPBF – Professionnals	1	Quantitative – calibrated on internal data	> 10 years	Retail – other SME
	CPBF – Personal (Individuals & Professionnals)	1	Quantitative – calibrated on internal data	> 10 years	Retail – non SME
	Personal Finance	2	Quantitative – calibrated on internal data	> 10 years	Retail – other non SME
	BNPP FORTIS – Professionnals & SME	1	Quantitative – calibrated on internal data	> 10 years	Retail – other non SME/qualifying Revolving/secured by real estate non-SME
	BNPP FORTIS – Individuals	1	Quantitative – calibrated on internal data	> 10 years	Retail – other SME/secured by real estate non-SME
	BNPP FORTIS – Public entities	1	Quantitative – calibrated on internal data	> 10 years	Institutions
	BNL bc – SME	1	Quantitative – calibrated on internal data	> 10 years	Corporate – SME
	BNL bc – Retail Individuals	1	Quantitative – calibrated on internal data	> 10 years	Retail – other non-SME
	BNL bc – Professionnals et Retail SME	1	Quantitative – calibrated on internal data	> 10 years	Retail – other non-SME
	BGL – Retail	1	Quantitative	> 10 years	Retail – other non SME
CCF/EAD	CCF for corporates, banks and sovereigns	1	Quantitative – calibrated on internal data	> 10 years	Central governments and central banks
	CPBF – Retail	1	Quantitative – calibrated on internal data	> 10 years	Retail
	Personal Finance – France	2	Quantitative – calibrated on internal data	> 10 years	Retail Retail – other non-SME
	BNPP FORTIS – Professionnals & SME	1	Quantitative – calibrated on internal data	> 10 years	Retail
	BNPP FORTIS – Individuals	1	Quantitative – calibrated on internal data	> 10 years	Retail
	BNPP FORTIS – Public entities	1	Quantitative + expert opinion	> 10 years	Institutions

Modelled parameter	Portfolio	Number of models	Model and methodology	Number of years default or loss data	Main asset class
	BNL bc – Retail	2	Fixed value		Retail
	BNL bc – SME	1	Fixed value		Corporates – SME
	BGL – Retail	1	Quantitative	> 10 years	Retail – Secured by real estate non-SME

BACKTESTING

Each of the three credit risk parameters (PD, LGD, CCF/EAD) is backtested and probability of default benchmarked annually to check the system's performance for each of the Bank's business segments. Backtesting consists in comparing estimated and actual outcomes for each parameter.

For the IRBA scope, all ratings, including default ratings 11 and 12, for all counterparties to which the Bank has a credit risk exposure, have been recorded over a long period of time. Likewise, observed losses on defaulted exposures are also archived. Backtesting is performed on the basis of this information for each of the risk inputs, both globally and across the scope of each rating model. These exercises aim to measure overall performance and the performance of each rating method, and in particular, to verify the model's discriminatory power (*i.e.* the less well rated counterparties ought to default more often than the better rated ones), the stability of the rated population as well as the predictive, conservative nature of the parameters. For this purpose, observed losses and default rates are compared with estimated Global Recovery Rates and Probability of default for each rating. The "through the cycle" or "downturn" nature of these ratings and loss rates in the event of default (LGD) is also verified.

For benchmarking work, internal ratings are compared with the external ratings of several agencies based on the mapping between internal and external rating scales. Around 10% of the Group's corporate clients have an external rating and the benchmarking studies reveal predominantly an equivalent or a conservative approach to internal ratings.

Performance measurements are also carried out on sub-scopes of homogeneous asset classes for Retail portfolios. If the predictive power or the conservative nature of a model has deteriorated, the model is recalibrated or redeveloped as appropriate. These changes are submitted to the supervisor for approval in line with the regulations. Pending implementation of the new model, the bank takes conservative measures to enhance the conservatism of the existing model where necessary.

Backtesting of Loss Given Default is based mainly on analysing recovery cash flows for exposures in default. When the recovery process is closed for a given exposure, all recovered amounts are discounted back to the default date and then compared to the exposure amount. When the recovery process is open, the future recoveries are estimated by using either the amount of provisions, or historically calibrated statistical profiles. The recovery rate determined in this way is then compared with the initially forecasted rate one year before the default occurred. As with ratings, recovery rates are analysed on an overall basis and by rating policy and geographical area. Variances are analysed taking into account the marked bimodal distribution of recovery rates.

All of this work is reviewed annually in the Capital Committee (see section 5.2 under *Capital management*). The results from the backtesting are also certified internally by an independent team and the results sent to the supervisor.

The following two tables present an overview of the performance of models for regulatory risk parameters (PD and LGD) within the context of the Group's IRBA scope, using the following indicators:

- arithmetical average of the PD: average probability of default of performing loans weighted by the number of number of obligors in the portfolio in question;
- historic average default rates: average annual default rate (number of obligors defaulting during a financial year relative to the number of performing obligors at the end of the previous year) observed over a long historical period (see Table 32 *Main models: PD*);
- arithmetical average of the estimated LGD: average rate of loss in the event of default weighted by the number of obligors;
- arithmetical average of the historic LGD observed: the rate of loss in the event of default observed over a long historical period (see Table 32 *Main models: LGD*).

TABLE 33: BACKTESTING OF PD ON CENTRAL GOVERNMENTS, CENTRAL BANKS AND INSTITUTIONS PORFOLIO (EU CR9)

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Central governments and central banks	0.00 to 0.15%	739			0.01%	0.04%	
	0.00 to 0.10%	*721*			*0.01%*	*0.03%*	
	0.10 to 0.15%	*18*			*0.13%*	*0.12%*	
	0.15 to 0.25%	67			0.19%	0.17%	1.29%
	0.25 to 0.50%	80			0.29%	0.33%	
	0.50 to 0.75%	14			0.69%	0.60%	
	0.75 to 2.50%	58			1.24%	1.19%	0.89%
	0.75 to 1.75%	51			*1.24%*	*1.07%*	*1.31%*
	1.75 to 2.50%	*7*			*1.85%*	*2.08%*	
	2.50 to 10.00%	43			7.07%	3.95%	0.82%
	2.50 to 5.00%	36			*3.10%*	*3.18%*	*0.82%*
	5.00 to 10.00%	*7*			*7.13%*	*7.92%*	*0.94%*
	10.00 to 100.00%	16	3	18.75%	19.05%	17.85%	9.02%
	10.00 to 20.00%	*8*			*13.43%*	*13.29%*	*2.23%*
	20.00 to 30.00%	*8*	*3*	*37.50%*	*21.81%*	*22.42%*	*28.31%*
	30.00 to 100.00%						
	100% (Default)	12			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Institutions	0.00 to 0.15%	744			0.04%	0.07%	0.05%
	0.00 to 0.10%	*513*			*0.04%*	*0.05%*	*0.05%*
	0.10 to 0.15%	*231*			*0.12%*	*0.11%*	*0.05%*
	0.15 to 0.25%	196			0.17%	0.18%	0.23%
	0.25 to 0.50%	225			0.37%	0.35%	0.12%
	0.50 to 0.75%	78			0.61%	0.66%	0.23%
	0.75 to 2.50%	187			1.35%	1.43%	0.20%
	0.75 to 1.75%	138			*1.03%*	*1.20%*	*0.08%*
	1.75 to 2.50%	*49*			*1.85%*	*2.07%*	*0.56%*
	2.50 to 10.00%	136	2	1.47%	5.08%	4.85%	0.70%
	2.50 to 5.00%	*82*	*1*	*1.22%*	*3.52%*	*3.48%*	*0.47%*
	5.00 to 10.00%	*54*	*1*	*1.85%*	*7.30%*	*6.94%*	*0.98%*
	10.00 to 100.00%	24			21.05%	15.18%	3.54%
	10.00 to 20.00%	*22*			*14.51%*	*14.57%*	*2.56%*
	20.00 to 30.00%	*2*			*23.21%*	*21.81%*	*6.26%*
	30.00 to 100.00%						
	100% (Default)	22			100.00%	100.00%	

TABLE 33: BACKTESTING OF PD ON CENTRAL GOVERNMENTS, CENTRAL BANKS AND INSTITUTIONS PORFOLIO (EU CR9)

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Central governments and central banks	0.00 to 0.15%	714			0.01%	0.04%	
	0.00 to 0.10%	*695*			*0.01%*	*0.03%*	
	0.10 to 0.15%	*19*			*0.13%*	*0.11%*	
	0.15 to 0.25%	65			0.19%	0.17%	1.35%
	0.25 to 0.50%	82			0.29%	0.33%	
	0.50 to 0.75%	18			0.69%	0.66%	
	0.75 to 2.50%	65			1.27%	1.14%	1.00%
	0.75 to 1.75%	*60*			*1.12%*	*1.05%*	*1.28%*
	1.75 to 2.50%	*5*			*2.11%*	*2.18%*	
	2.50 to 10.00%	37			5.04%	4.10%	0.61%
	2.50 to 5.00%	*28*			*3.95%*	*3.15%*	*0.20%*
	5.00 to 10.00%	*9*			*8.23%*	*7.04%*	*1.03%*
	10.00 to 100.00%	8	2	25.00%	14.05%	17.90%	5.73%
	10.00 to 20.00%	*4*			*11.66%*	*12.90%*	*2.69%*
	20.00 to 30.00%	*4*	*2*	*50.00%*	*21.81%*	*22.90%*	*10.51%*
	30.00 to 100.00%						
	100% (Default)	11			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Institutions	0.00 to 0.15%	729			0.05%	0.07%	0.05%
	0.00 to 0.10%	*517*			*0.04%*	*0.04%*	*0.05%*
	0.10 to 0.15%	*212*			*0.11%*	*0.11%*	*0.06%*
	0.15 to 0.25%	212			0.18%	0.19%	0.25%
	0.25 to 0.50%	229			0.34%	0.35%	0.13%
	0.50 to 0.75%	91			0.58%	0.65%	0.25%
	0.75 to 2.50%	240	1	0.42%	1.26%	1.36%	0.28%
	0.75 to 1.75%	*195*			*1.12%*	*1.19%*	*0.21%*
	1.75 to 2.50%	*45*	*1*	*2.22%*	*1.88%*	*2.07%*	*0.60%*
	2.50 to 10.00%	119			4.67%	5.01%	0.69%
	2.50 to 5.00%	*66*			*3.70%*	*3.43%*	*0.43%*
	5.00 to 10.00%	*53*			*5.83%*	*6.98%*	*0.96%*
	10.00 to 100.00%	18			15.44%	14.61%	3.73%
	10.00 to 20.00%	*18*			*13.12%*	*14.61%*	*2.63%*
	20.00 to 30.00%				*22.98%*		*6.79%*
	30.00 to 100.00%				*53.44%*		
	100% (Default)	32			100.00%	100.00%	

TABLE 34: BACKTESTING OF PD ON CORPORATES PORTFOLIO (EU CR9)

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Corporates – Specialised Lending	0.00 to 0.15%	138			0.08%	0.09%	
	0.00 to 0.10%	*65*			*0.06%*	*0.06%*	
	0.10 to 0.15%	*73*			*0.12%*	*0.12%*	
	0.15 to 0.25%	114			0.18%	0.18%	
	0.25 to 0.50%	522			0.36%	0.34%	0.12%
	0.50 to 0.75%	278			0.69%	0.68%	0.66%
	0.75 to 2.50%	945			1.39%	1.24%	0.48%
	0.75 to 1.75%	*786*			*1.20%*	*1.08%*	*0.36%*
	1.75 to 2.50%	*159*			*2.09%*	*1.98%*	*1.01%*
	2.50 to 10.00%	339	3	0.88%	4.68%	3.99%	1.44%
	2.50 to 5.00%	*261*			*3.36%*	*3.18%*	*1.31%*
	5.00 to 10.00%	*78*	*3*	*3.85%*	*6.96%*	*6.69%*	*1.91%*
	10.00 to 100.00%	53	10	18.87%	16.69%	17.17%	13.17%
	10.00 to 20.00%	*35*	*5*	*14.29%*	*15.70%*	*14.51%*	*10.63%*
	20.00 to 30.00%	*18*	*5*	*27.78%*	*22.22%*	*22.35%*	*23.89%*
	30.00 to 100.00%						
	100% (Default)	68			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Corporates – SME	0.00 to 0.15%	1,251	1	0.08%	0.07%	0.11%	0.16%
	0.00 to 0.10%	*317*	*1*	*0.32%*	*0.05%*	*0.06%*	*0.15%*
	0.10 to 0.15%	*934*			*0.11%*	*0.13%*	*0.18%*
	0.15 to 0.25%	595	1	0.17%	0.18%	0.19%	0.24%
	0.25 to 0.50%	8,997	17	0.19%	0.31%	0.36%	0.42%
	0.50 to 0.75%	1,845	6	0.33%	0.66%	0.66%	0.72%
	0.75 to 2.50%	8,955	54	0.60%	1.33%	1.26%	1.37%
	0.75 to 1.75%	*8,120*	*44*	*0.54%*	*1.02%*	*1.18%*	*1.19%*
	1.75 to 2.50%	*835*	*10*	*1.20%*	*1.99%*	*2.08%*	*2.08%*
	2.50 to 10.00%	10,746	206	1.92%	4.40%	4.32%	3.56%
	2.50 to 5.00%	*8,049*	*107*	*1.33%*	*3.29%*	*3.35%*	*2.83%*
	5.00 to 10.00%	*2,697*	*99*	*3.67%*	*7.01%*	*7.24%*	*5.72%*
	10.00 to 100.00%	1,312	174	13.26%	16.81%	17.36%	17.23%
	10.00 to 20.00%	*766*	*72*	*9.40%*	*12.70%*	*13.52%*	*14.36%*
	20.00 to 30.00%	*515*	*101*	*19.61%*	*22.96%*	*21.93%*	*20.51%*
	30.00 to 100.00%	*31*	*1*	*3.23%*	*43.14%*	*36.41%*	*30.65%*
	100% (Default)	3,379			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Corporates – Other	0.00 to 0.15%	5,983	2	0.03%	0.08%	0.08%	0.21%
	0.00 to 0.10%	*3,581*	*1*	*0.03%*	*0.05%*	*0.05%*	*0.08%*
	0.10 to 0.15%	*2,402*	*1*	*0.04%*	*0.12%*	*0.12%*	*0.10%*
	0.15 to 0.25%	3,844	3	0.08%	0.18%	0.18%	0.08%
	0.25 to 0.50%	8,133	7	0.09%	0.34%	0.36%	0.19%
	0.50 to 0.75%	3,066	3	0.10%	0.67%	0.65%	0.51%
	0.75 to 2.50%	11,639	44	0.38%	1.41%	1.37%	0.61%
	0.75 to 1.75%	*9,321*	*34*	*0.36%*	*1.12%*	*1.19%*	*0.49%*
	1.75 to 2.50%	*2,318*	*10*	*0.43%*	*2.04%*	*2.07%*	*1.09%*
	2.50 to 10.00%	10,130	100	0.99%	4.83%	4.58%	2.30%
	2.50 to 5.00%	*6,680*	*42*	*0.63%*	*3.43%*	*3.41%*	*1.68%*
	5.00 to 10.00%	*3,450*	*58*	*1.68%*	*6.87%*	*6.85%*	*3.61%*
	10.00 to 100.00%	1,242	93	7.49%	15.68%	17.59%	12.30%
	10.00 to 20.00%	*911*	*54*	*5.93%*	*13.96%*	*14.56%*	*10.43%*
	20.00 to 30.00%	*257*	*24*	*9.34%*	*22.46%*	*22.58%*	*17.05%*
	30.00 to 100.00%	*74*	*15*	*20.27%*	*42.45%*	*37.54%*	*18.73%*
	100% (Default)	3,535			100.00%	100.00%	

TABLE 34: BACKTESTING OF PD ON CORPORATES PORTFOLIO (EU CR9)

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	PD scale		of which: number of obligors which defaulted during the year	Observed average default rate	Exposures weighted average PD	Average PD weighted by the number of debtors	Average historical annual default rate
Corporates – Specialised Lending	0.00 to 0.15%	133			0.08%	0.08%	
	0.00 to 0.10%	*69*			*0.06%*	*0.06%*	
	0.10 to 0.15%	*64*			*0.12%*	*0.12%*	
	0.15 to 0.25%	132			0.18%	0.19%	
	0.25 to 0.50%	550	1	0.18%	0.35%	0.35%	0.12%
	0.50 to 0.75%	273	1	0.37%	0.69%	0.67%	0.56%
	0.75 to 2.50%	955	12	1.26%	1.34%	1.23%	0.59%
	0.75 to 1.75%	*821*	*8*	*0.97%*	*1.18%*	*1.09%*	*0.43%*
	1.75 to 2.50%	*134*	*4*	*2.99%*	*2.07%*	*2.11%*	*1.36%*
	2.50 to 10.00%	374	7	1.87%	4.78%	3.89%	1.35%
	2.50 to 5.00%	*302*	*5*	*1.66%*	*3.24%*	*3.20%*	*1.17%*
	5.00 to 10.00%	*72*	*2*	*2.78%*	*6.34%*	*6.79%*	*1.69%*
	10.00 to 100.00%	38	3	7.89%	15.73%	17.71%	13.37%
	10.00 to 20.00%	*24*	*2*	*8.33%*	*15.18%*	*14.84%*	*11.30%*
	20.00 to 30.00%	*14*	*1*	*7.14%*	*21.90%*	*22.63%*	*21.91%*
	30.00 to 100.00%						
	100% (Default)	69			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Corporates – SME	0.00 to 0.15%	2,159	13	0.60%	0.07%	0.10%	0.16%
	0.00 to 0.10%	*958*	*11*	*1.15%*	*0.05%*	*0.07%*	*0.15%*
	0.10 to 0.15%	*1,201*	*2*	*0.17%*	*0.12%*	*0.13%*	*0.19%*
	0.15 to 0.25%	1,032	4	0.39%	0.17%	0.19%	0.22%
	0.25 to 0.50%	9,848	20	0.20%	0.35%	0.36%	0.32%
	0.50 to 0.75%	2,344	9	0.38%	0.66%	0.66%	0.69%
	0.75 to 2.50%	10,641	82	0.77%	1.29%	1.28%	1.44%
	0.75 to 1.75%	*9,399*	*67*	*0.71%*	*1.14%*	*1.17%*	*1.21%*
	1.75 to 2.50%	*1,242*	*15*	*1.21%*	*2.04%*	*2.10%*	*2.50%*
	2.50 to 10.00%	10,740	235	2.19%	4.21%	4.30%	3.81%
	2.50 to 5.00%	*7,992*	*128*	*1.60%*	*3.28%*	*3.35%*	*2.82%*
	5.00 to 10.00%	*2,748*	*107*	*3.89%*	*7.02%*	*7.05%*	*6.40%*
	10.00 to 100.00%	1,283	192	14.96%	17.51%	17.98%	18.51%
	10.00 to 20.00%	*698*	*88*	*12.61%*	*13.85%*	*13.80%*	*15.33%*
	20.00 to 30.00%	*570*	*97*	*17.02%*	*22.76%*	*22.22%*	*21.08%*
	30.00 to 100.00%	*15*	*7*	*46.67%*	*45.61%*	*51.83%*	*35.92%*
	100% (Default)	4,113			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Corporates – Other	0.00 to 0.15%	5,894	8	0.14%	0.07%	0.08%	0.18%
	0.00 to 0.10%	*3,543*	*6*	*0.17%*	*0.05%*	*0.06%*	*0.09%*
	0.10 to 0.15%	*2,351*	*2*	*0.09%*	*0.11%*	*0.12%*	*0.11%*
	0.15 to 0.25%	4,069	1	0.02%	0.18%	0.18%	0.08%
	0.25 to 0.50%	9,077	14	0.15%	0.35%	0.36%	0.20%
	0.50 to 0.75%	3,354	13	0.39%	0.68%	0.65%	0.58%
	0.75 to 2.50%	12,802	100	0.78%	1.35%	1.34%	0.77%
	0.75 to 1.75%	*10,464*	*64*	*0.61%*	*1.17%*	*1.17%*	*0.63%*
	1.75 to 2.50%	*2,338*	*36*	*1.54%*	*2.08%*	*2.08%*	*1.40%*
	2.50 to 10.00%	8,978	170	1.89%	4.77%	4.53%	2.48%
	2.50 to 5.00%	*5,921*	*71*	*1.20%*	*3.37%*	*3.39%*	*1.81%*
	5.00 to 10.00%	*3,057*	*99*	*3.24%*	*6.75%*	*6.73%*	*3.90%*
	10.00 to 100.00%	1,105	133	12.04%	15.25%	18.26%	13.33%
	10.00 to 20.00%	*689*	*77*	*11.18%*	*13.96%*	*14.61%*	*10.84%*
	20.00 to 30.00%	*389*	*51*	*13.11%*	*22.46%*	*22.97%*	*17.36%*
	30.00 to 100.00%	*27*	*5*	*18.52%*	*40.97%*	*43.40%*	*22.16%*
	100% (Default)	3,140			100.00%	100.00%	

TABLE 35: BACKTESTING OF THE PD ON RETAIL SECURED BY PROPERTY PORTFOLIO (EU CR9)

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail – Secured by immovable property non-SME	0.00 to 0.15%	493,375	371	0.08%	0.10%	0.08%	0.05%
	0.00 to 0.10%	*207,309*	*51*	*0.02%*	*0.06%*	*0.05%*	*0.07%*
	0.10 to 0.15%	*286,066*	*320*	*0.11%*	*0.11%*	*0.11%*	*0.10%*
	0.15 to 0.25%	81,767	87	0.11%	0.18%	0.19%	0.13%
	0.25 to 0.50%	302,721	993	0.33%	0.37%	0.37%	0.31%
	0.50 to 0.75%	164,121	685	0.42%	0.59%	0.60%	0.32%
	0.75 to 2.50%	98,023	815	0.83%	1.47%	1.45%	0.99%
	0.75 to 1.75%	*71,575*	*557*	*0.78%*	*1.26%*	*1.27%*	*0.86%*
	1.75 to 2.50%	*26,448*	*258*	*0.98%*	*1.99%*	*1.95%*	*1.49%*
	2.50 to 10.00%	41,490	939	2.26%	4.28%	4.45%	3.80%
	2.50 to 5.00%	*29,867*	*616*	*2.06%*	*3.41%*	*3.43%*	*2.51%*
	5.00 to 10.00%	*11,623*	*323*	*2.78%*	*6.77%*	*7.08%*	*6.79%*
	10.00 to 100.00%	18,460	2,124	11.51%	22.41%	20.37%	22.28%
	10.00 to 20.00%	*12,825*	*939*	*7.32%*	*13.28%*	*14.12%*	*14.07%*
	20.00 to 30.00%	*3,432*	*548*	*15.97%*	*25.76%*	*24.24%*	*27.71%*
	30.00 to 100.00%	*2,203*	*637*	*28.92%*	*45.43%*	*50.71%*	*41.59%*
	100% (Default)	35,325			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail – Secured by immovable property SME	0.00 to 0.15%	2,409	1	0.04%	0.09%	0.08%	0.12%
	0.00 to 0.10%	*1,693*	*1*	*0.06%*	*0.06%*	*0.06%*	*0.10%*
	0.10 to 0.15%	716			*0.12%*	*0.13%*	*0.16%*
	0.15 to 0.25%	2,042	4	0.20%	0.18%	0.19%	0.22%
	0.25 to 0.50%	16,064	65	0.40%	0.39%	0.40%	0.41%
	0.50 to 0.75%	4,815	13	0.27%	0.66%	0.59%	0.32%
	0.75 to 2.50%	11,907	90	0.76%	1.41%	1.48%	0.72%
	0.75 to 1.75%	*8,732*	*67*	*0.77%*	*1.20%*	*1.26%*	*0.68%*
	1.75 to 2.50%	*3,175*	*23*	*0.72%*	*2.03%*	*2.07%*	*0.85%*
	2.50 to 10.00%	14,130	206	1.46%	4.73%	4.93%	2.02%
	2.50 to 5.00%	*7,554*	*83*	*1.10%*	*3.48%*	*3.67%*	*1.50%*
	5.00 to 10.00%	*6,576*	*123*	*1.87%*	*6.69%*	*6.38%*	*2.82%*
	10.00 to 100.00%	2,371	235	9.91%	19.06%	19.25%	14.09%
	10.00 to 20.00%	*1,486*	*94*	*6.33%*	*13.63%*	*13.97%*	*8.93%*
	20.00 to 30.00%	*591*	*87*	*14.72%*	*23.64%*	*23.59%*	*19.88%*
	30.00 to 100.00%	*294*	*54*	*18.37%*	*41.69%*	*37.24%*	*26.15%*
	100% (Default)	3,813			100.00%	100.00%	

TABLE 35: BACKTESTING OF THE PD ON RETAIL SECURED BY PROPERTY PORTFOLIO (EU CR9)

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail - Secured by immovable property non-SME	0.00 to 0.15%	547,266	372	0.07%	0.09%	0.07%	0.05%
	0.00 to 0.10%	*484,182*	*305*	*0.06%*	*0.08%*	*0.07%*	*0.04%*
	0.10 to 0.15%	*63,084*	*67*	*0.11%*	*0.12%*	*0.13%*	*0.11%*
	0.15 to 0.25%	99,827	119	0.12%	0.18%	0.2%	0.14%
	0.25 to 0.50%	351,854	1,521	0.43%	0.37%	0.38%	0.3%
	0.50 to 0.75%	145,709	653	0.45%	0.64%	0.64%	0.32%
	0.75 to 2.50%	125,408	1,625	1.3%	1.42%	1.44%	1,00%
	0.75 to 1.75%	*95,492*	*1,171*	*1.23%*	*1.24%*	*1.26%*	*0.85%*
	1.75 to 2.50%	*29,916*	*454*	*1.52%*	*2.12%*	*2.04%*	*1.47%*
	2.50 to 10.00%	49,950	2,058	4.12%	4.76%	5.04%	3.79%
	2.50 to 5.00%	*30,212*	*899*	*2.98%*	*3.65%*	*3.64%*	*2.51%*
	5.00 to 10.00%	*19,738*	*1,159*	*5.87%*	*6.89%*	*7.19%*	*6.13%*
	10.00 to 100.00%	20,108	4,155	20.66%	23.48%	23.12%	22.4%
	10.00 to 20.00%	*10,974*	*1,179*	*10.74%*	*13.69%*	*15.62%*	*13.55%*
	20.00 to 30.00%	*6,072*	*1,854*	*30.53%*	*24.56%*	*23.95%*	*29.43%*
	30.00 to 100.00%	*3,062*	*1,122*	*36.64%*	*47.48%*	*48.35%*	*41.83%*
	100% (Default)	33,629			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail - Secured by immovable property SME	0.00 to 0.15%	2,826	2	0.07%	0.09%	0.09%	0.13%
	0.00 to 0.10%	*1,721*	*1*	*0.06%*	*0.06%*	*0.06%*	*0.09%*
	0.10 to 0.15%	*1,105*	*1*	*0.09%*	*0.13%*	*0.13%*	*0.19%*
	0.15 to 0.25%	2,494	7	0.28%	0.19%	0.21%	0.21%
	0.25 to 0.50%	16,416	62	0.38%	0.38%	0.38%	0.4%
	0.50 to 0.75%	5,056	22	0.44%	0.57%	0.59%	0.34%
	0.75 to 2.50%	13,203	106	0.8%	1.4%	1.45%	0.72%
	0.75 to 1.75%	*10,088*	*72*	*0.71%*	*1.18%*	*1.26%*	*0.66%*
	1.75 to 2.50%	*3,115*	*34*	*1.09%*	*2.2%*	*2.06%*	*0.93%*
	2.50 to 10.00%	12,601	275	2.18%	5.03%	4.92%	2.24%
	2.50 to 5.00%	*6,690*	*116*	*1.73%*	*3.59%*	*3.76%*	*1.61%*
	5.00 to 10.00%	*5,911*	*156*	*2.69%*	*6.78%*	*6.23%*	*3.21%*
	10.00 to 100.00%	2,473	455	18.4%	19.49%	21.64%	16.23%
	10.00 to 20.00%	*1,169*	*142*	*12.15%*	*13.82%*	*14.42%*	*10.17%*
	20.00 to 30.00%	*1,131*	*263*	*23.25%*	*25.23%*	*24.8%*	*20.11%*
	30.00 to 100.00%	*173*	*50*	*28.9%*	*40.39%*	*49.74%*	*33,00%*
	100% (Default)	4,107			100.00%	100.00%	

TABLE 36: BACKTESTING OF PD ON OTHER RETAIL PORTFOLIO (EU CR9)

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail – Qualifying revolving	0.00 to 0.15%	1,790,722	2,891	0.16%	0.09%	0.08%	0.08%
	0.00 to 0.10%	*840,717*	*426*	*0.05%*	*0.03%*	*0.03%*	*0.06%*
	0.10 to 0.15%	*950,005*	*2,465*	*0.26%*	*0.12%*	*0.13%*	*0.16%*
	0.15 to 0.25%	67,866	159	0.23%	0.17%	0.18%	0.25%
	0.25 to 0.50%	305,277	1,920	0.63%	0.39%	0.34%	0.45%
	0.50 to 0.75%	253,240	2,063	0.81%	0.62%	0.59%	0.62%
	0.75 to 2.50%	314,801	6,692	2.13%	1.35%	1.24%	1.43%
	0.75 to 1.75%	*300,721*	*6,318*	*2.10%*	*1.29%*	*1.20%*	*1.37%*
	1.75 to 2.50%	*14,080*	*374*	*2.66%*	*1.94%*	*1.96%*	*2.02%*
	2.50 to 10.00%	190,523	14,151	7.43%	4.95%	4.89%	4.92%
	2.50 to 5.00%	*110,190*	*5,117*	*4.64%*	*3.48%*	*3.34%*	*3.26%*
	5.00 to 10.00%	*80,333*	*9,034*	*11.25%*	*7.21%*	*7.02%*	*6.53%*
	10.00 to 100.00%	63,196	9,266	14.66%	21.45%	17.48%	22.53%
	10.00 to 20.00%	*48,239*	*4,001*	*8.29%*	*12.92%*	*12.16%*	*12.64%*
	20.00 to 30.00%	*7,616*	*1,992*	*26.16%*	*24.27%*	*28.33%*	*25.42%*
	30.00 to 100.00%	*7,341*	*3,273*	*44.59%*	*47.77%*	*41.21%*	*39.82%*
	100% (Default)	166,145			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail – Other SME	0.00 to 0.15%	63,471	77	0.12%	0.09%	0.08%	0.09%
	0.00 to 0.10%	*47,114*	*54*	*0.11%*	*0.06%*	*0.07%*	*0.07%*
	0.10 to 0.15%	*16,357*	*23*	*0.14%*	*0.12%*	*0.13%*	*0.12%*
	0.15 to 0.25%	115,421	502	0.43%	0.18%	0.19%	0.18%
	0.25 to 0.50%	106,183	589	0.55%	0.37%	0.38%	0.39%
	0.50 to 0.75%	70,553	538	0.76%	0.63%	0.58%	0.59%
	0.75 to 2.50%	162,966	3,770	2.31%	1.54%	1.46%	2.43%
	0.75 to 1.75%	*120,061*	*1,829*	*1.52%*	*1.15%*	*1.25%*	*1.22%*
	1.75 to 2.50%	*42,905*	*1,941*	*4.52%*	*2.08%*	*2.06%*	*5.30%*
	2.50 to 10.00%	180,087	7,845	4.36%	5.07%	4.86%	5.33%
	2.50 to 5.00%	*115,977*	*3,935*	*3.39%*	*3.60%*	*3.55%*	*4.34%*
	5.00 to 10.00%	*64,110*	*3,910*	*6.10%*	*6.55%*	*7.24%*	*6.91%*
	10.00 to 100.00%	22,305	3,976	17.83%	18.73%	20.50%	22.00%
	10.00 to 20.00%	*13,922*	*1,955*	*14.04%*	*12.87%*	*14.92%*	*15.09%*
	20.00 to 30.00%	*4,967*	*863*	*17.37%*	*24.22%*	*24.26%*	*27.07%*
	30.00 to 100.00%	*3,416*	*1,158*	*33.90%*	*43.02%*	*37.77%*	*42.27%*
	100% (Default)	121,222			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2021
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail – Other non-SME	0.00 to 0.15%	672,077	775	0.12%	0.10%	0.06%	0.10%
	0.00 to 0.10%	*508,777*	*395*	*0.08%*	*0.05%*	*0.04%*	*0.07%*
	0.10 to 0.15%	*163,300*	*380*	*0.23%*	*0.12%*	*0.12%*	*0.27%*
	0.15 to 0.25%	188,902	973	0.52%	0.19%	0.20%	0.39%
	0.25 to 0.50%	437,832	2,667	0.61%	0.38%	0.37%	0.54%
	0.50 to 0.75%	150,840	969	0.64%	0.60%	0.64%	0.63%
	0.75 to 2.50%	461,013	5,901	1.28%	1.37%	1.30%	1.46%
	0.75 to 1.75%	*410,554*	*4,546*	*1.11%*	*1.20%*	*1.23%*	*1.32%*
	1.75 to 2.50%	*50,459*	*1,355*	*2.69%*	*2.00%*	*1.90%*	*3.40%*
	2.50 to 10.00%	121,986	6,866	5.63%	4.60%	5.16%	6.33%
	2.50 to 5.00%	*63,458*	*2,518*	*3.97%*	*3.54%*	*3.64%*	*4.00%*
	5.00 to 10.00%	*58,528*	*4,348*	*7.43%*	*7.39%*	*6.81%*	*9.52%*
	10.00 to 100.00%	44,003	6,718	15.27%	22.41%	19.62%	21.57%
	10.00 to 20.00%	*31,628*	*3,719*	*11.76%*	*13.45%*	*13.90%*	*15.59%*
	20.00 to 30.00%	*7,361*	*1,141*	*15.50%*	*24.38%*	*24.52%*	*23.41%*
	30.00 to 100.00%	*5,014*	*1,858*	*37.06%*	*46.30%*	*48.51%*	*39.76%*
	100% (Default)	231,030			100.00%	100.00%	

TABLE 36: BACKTESTING OF PD ON OTHER RETAIL PORTFOLIO (EU CR9)

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail – Qualifying revolving	0.00 to 0.15%	1,771,153	3,039	0.17%	0.07%	0.06%	0.07%
	0.00 to 0.10%	*1,719,378*	*2,918*	*0.17%*	*0.07%*	*0.06%*	*0.07%*
	0.10 to 0.15%	*51,775*	*121*	*0.23%*	*0.12%*	*0.11%*	*0.14%*
	0.15 to 0.25%	259,246	1,585	0.61%	0.17%	0.22%	0.25%
	0.25 to 0.50%	226,117	2,214	0.98%	0.37%	0.38%	0.43%
	0.50 to 0.75%	152,004	1,767	1.16%	0.63%	0.62%	0.59%
	0.75 to 2.50%	282,734	6,887	2.44%	1.34%	1.34%	1.36%
	0.75 to 1.75%	*251,491*	*6,289*	*2.50%*	*1.29%*	*1.21%*	*1.29%*
	1.75 to 2.50%	*31,243*	*598*	*1.91%*	*2.34%*	*2.42%*	*1.95%*
	2.50 to 10.00%	219,658	17,222	7.84%	4.68%	4.85%	4.64%
	2.50 to 5.00%	*98,596*	*5,825*	*5.91%*	*3.37%*	*2.95%*	*3.10%*
	5.00 to 10.00%	*121,062*	*11,397*	*9.41%*	*7.22%*	*6.40%*	*6.01%*
	10.00 to 100.00%	36,325	11,132	30.65%	19.01%	24.70%	23.40%
	10.00 to 20.00%	*16,165*	*3,014*	*18.65%*	*13.07%*	*15.39%*	*13.13%*
	20.00 to 30.00%	*10,436*	*3,271*	*31.34%*	*23.54%*	*25.91%*	*25.34%*
	30.00 to 100.00%	*9,724*	*4,847*	*49.85%*	*47.93%*	*38.87%*	*39.29%*
	100% (Default)	180,523			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail – Other SME	0.00 to 0.15%	66,399	78	0.12%	0.08%	0.10%	0.09%
	0.00 to 0.10%	*38,552*	*30*	*0.08%*	*0.07%*	*0.07%*	*0.06%*
	0.10 to 0.15%	*27,847*	*48*	*0.17%*	*0.13%*	*0.13%*	*0.12%*
	0.15 to 0.25%	99,676	329	0.33%	0.19%	0.20%	0.15%
	0.25 to 0.50%	93,214	434	0.47%	0.37%	0.36%	0.37%
	0.50 to 0.75%	63,453	453	0.71%	0.57%	0.57%	0.60%
	0.75 to 2.50%	181,590	3,739	2.06%	1.43%	1.41%	2.62%
	0.75 to 1.75%	*139,046*	*2,046*	*1.47%*	*1.21%*	*1.18%*	*1.23%*
	1.75 to 2.50%	*42,544*	*1,693*	*3.98%*	*2.17%*	*2.18%*	*5.88%*
	2.50 to 10.00%	149,027	7,956	5.34%	4.87%	5.25%	5.68%
	2.50 to 5.00%	*83,443*	*3,401*	*4.08%*	*3.62%*	*3.77%*	*4.74%*
	5.00 to 10.00%	*65,584*	*4,555*	*6.95%*	*7.48%*	*7.13%*	*7.11%*
	10.00 to 100.00%	27,811	6,390	22.98%	21.71%	21.52%	23.11%
	10.00 to 20.00%	*15,720*	*2,723*	*17.32%*	*14.59%*	*14.59%*	*15.82%*
	20.00 to 30.00%	*10,124*	*2,765*	*27.31%*	*27.56%*	*26.10%*	*28.56%*
	30.00 to 100.00%	*1,967*	*902*	*45.86%*	*51.31%*	*53.25%*	*44.11%*
	100% (Default)	123,389			100.00%	100.00%	

a	b	c	d	e	f	g	h
							2020
		Number of obligors at the end of the previous year					
Portfolio	**PD scale**		**of which: number of obligors which defaulted during the year**	**Observed average default rate**	**Exposures weighted average PD**	**Average PD weighted by the number of debtors**	**Average historical annual default rate**
Retail – Other non-SME	0.00 to 0.15%	536,857	429	0.08%	0.08%	0.06%	0.06%
	0.00 to 0.10%	*468,361*	*282*	*0.06%*	*0.08%*	*0.05%*	*0.04%*
	0.10 to 0.15%	*68,496*	*147*	*0.21%*	*0.12%*	*0.12%*	*0.15%*
	0.15 to 0.25%	163,913	639	0.39%	0.19%	0.21%	0.33%
	0.25 to 0.50%	347,092	2,764	0.80%	0.38%	0.37%	0.50%
	0.50 to 0.75%	140,681	901	0.64%	0.61%	0.63%	0.52%
	0.75 to 2.50%	484,524	10,828	2.23%	1.35%	1.27%	1.43%
	0.75 to 1.75%	*465,691*	*10,286*	*2.21%*	*1.18%*	*1.24%*	*1.34%*
	1.75 to 2.50%	*18,833*	*542*	*2.88%*	*2.06%*	*2.12%*	*3.37%*
	2.50 to 10.00%	139,371	10,659	7.65%	4.75%	4.98%	6.09%
	2.50 to 5.00%	*79,698*	*4,137*	*5.19%*	*3.56%*	*3.63%*	*3.87%*
	5.00 to 10.00%	*59,673*	*6,522*	*10.93%*	*7.49%*	*6.78%*	*9.44%*
	10.00 to 100.00%	31,184	7,387	23.69%	21.36%	21.48%	21.22%
	10.00 to 20.00%	*16,617*	*2,777*	*16.71%*	*13.36%*	*14.80%*	*15.51%*
	20.00 to 30.00%	*10,287*	*2,810*	*27.32%*	*23.53%*	*24.12%*	*24.15%*
	30.00 to 100.00%	*4,280*	*1,800*	*42.06%*	*47.33%*	*41.08%*	*39.84%*
	100% (Default)	274,145			100.00%	100.00%	

TABLE 37: BACKTESTING OF LGD

Portfolio	2021 Arithmetical average of the estimated LGD	2021 Historic arithmetic average of the observed LGD
Sovereigns and public sector entities	33%	6%
Institutions(*)	33%	32%
Large corporates(**)	40%	27%
Individuals	60%	36%
Professionals and SME retail	46%	35%
SME corporate	36%	30%

(*) Including the Banks, Insurance and Regulated funds & Agency arrangements portfolios.
(**) Including the Large corporates, Real Estate non-retail in France, Project financing and Energy and commodity financing portfolios.

Portfolio	2020 Arithmetical average of the estimated LGD	2020 Historic arithmetic average of the observed LGD
Sovereigns and public sector entities	25%	9%
Institutions(*)	31%	29%
Large corporates(**)	40%	26%
Individuals	67%	40%
Professionals and SME retail	47%	38%
SME corporate	33%	32%

(*) Including the Banks, Insurance and Regulated funds & Agency arrangements portfolios.
(**) Including the Large corporates, Real Estate non-retail in France, Project financing and Energy and commodity financing portfolios.

INTERNAL RATING SYSTEM – SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS

The IRBA for sovereigns, financial institutions, corporates and specialised financing portfolios is based on a consistent rating procedure in which RISK has the final say regarding the rating assigned to the counterparty and the Global Recovery Rate (GRR) assigned to transactions. Credit Conversion Factors (CCF) of off-balance sheet transactions are automatically assigned according to counterparty and transaction type (see paragraph *Rating system* in the section *Credit risk management policy*).

The generic process for assigning a rating to each segment is as follows:

- for large corporates and specialised financing, an analysis is carried out by the unit proposing a rating and a Global Recovery Rate to the Credit Committee, using the rating models and tools developed by RISK. The rating and Global Recovery Rate are validated or revised by the RISK representative during the Credit Committee meeting. The Committee decides whether or not to grant or renew a loan and, if applicable, reviews the counterparty rating at least once a year;
- for financial institutions, the analysis is carried out by analysts in the RISK Function. Counterparty ratings and Global Recovery Rates are determined during review committees by geographical area to ensure comparability between similar banks;

- for sovereigns, the ratings are proposed by the Economic Research Department and approved at Country Committee (Rating Committee) meetings which take place several times a year. The Committee comprises members of Executive Management, the RISK Function and the business lines;
- for small and medium-sized companies (other than retail customers), a score is assigned by the RISK analysts.

For each of these sub-portfolios, the risk parameters are measured using a model certified and validated by the RISK teams, based mainly on an analysis of the Bank's historical data. The model is supported as far as possible by tools shared Group-wide to ensure consistent use. Expert judgement remains, however, irreplaceable, and each of the counterparty ratings and GRR may, subject to justification, depart from the strict application of the models.

The method for assessing risk parameters is based on a set of common principles, and particularly the "two pairs of eyes" principle which requires at least two people, at least one of whom has no commercial involvement, to give their opinion on each counterparty rating and each transaction Global Recovery Rate.

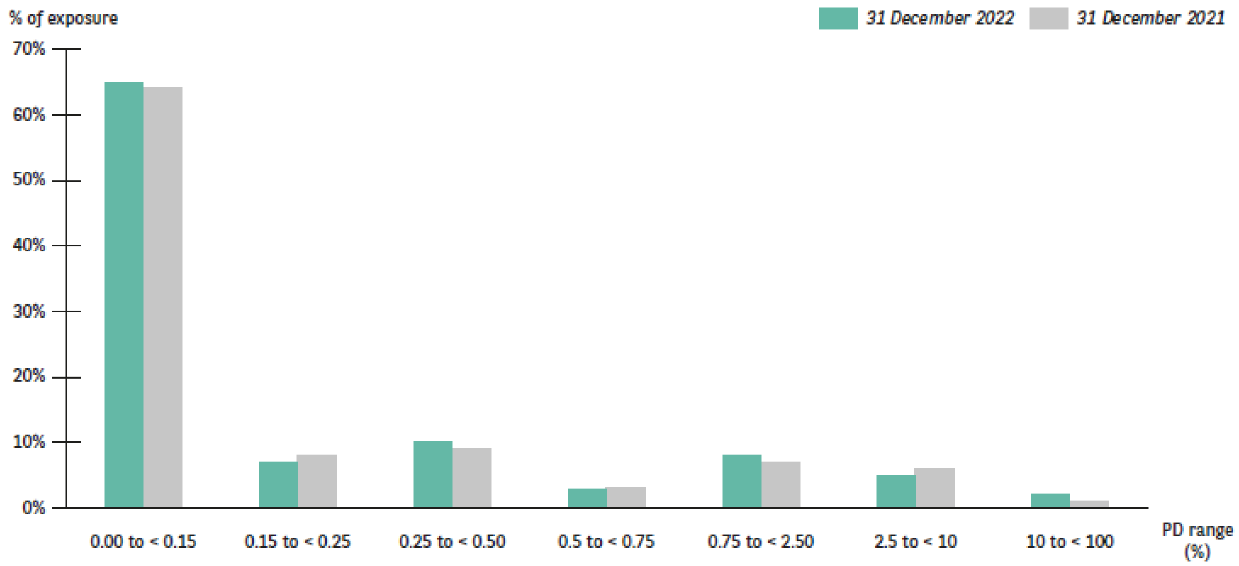
The same definition of default is used consistently throughout the Group for each asset class, in accordance with regulations.

The chart hereafter presents a breakdown by PD range of non-defaulted loans and commitments for the asset classes: central governments and central institutions, corporates for all the Group's business lines, measured using the internal ratings-based approach (see Table 27: *Indicative mapping of internal counterparty rating with agency rating scale and average expected PD*).

This exposure represented EUR 1,165 billion at 31 December 2022 compared with EUR 1,148 billion at 31 December 2021.

The majority of commitments are towards borrowers rated as good or excellent quality, reflecting the heavy weighting of large multinational groups and financial institutions in the Bank's client base. A significant proportion of commitments to non-Investment Grade borrowers are highly structured or secured by high quality guarantees implying a high recovery rate in the event of default. They include export financing covered by export credit insurance written by international agencies, project finance, structured finance and transaction financing.

FIGURE 4: IRBA EXPOSURE BY PD RANGE – SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS



SOVEREIGN, FINANCIAL INSTITUTION, CORPORATE AND SPECIALISED FINANCING PORTFOLIOS

The following table presents the breakdown by PD range of loans and commitments for the asset classes: Central governments and central banks, Institutions and Corporates for all the Group's business lines using the advanced IRB Approach. This exposure represented EUR 1,175 billion at 31 December 2022, including EUR 1,165 billion of non-defaulted loans and EUR 10 billion of defaulted loans, compared with EUR 1,159 billion at 31 December 2021, including EUR 1,048 billion of non-defaulted loans and EUR 11 billion of defaulted loans.

The table also gives the average rates of the main risk parameters in the Basel framework:

- average probability of default weighted by exposure at default: average PD[1];
- weighted average of Credit Conversion Factor (CCF) for off-balance sheet items: average CCF[2];
- average Loss Given Default weighted by exposure at default: average LGD[1];

[1] *Average PD: "Probability of Default" – average probability of default weighted by exposure at default.*

[2] *Average CCF: "Credit Conversion Factor" – ratio of exposure at default to off-balance sheet exposure.*

- average of residual maturities (in years) weighted by the exposure at default: average maturity.

The average risk weight (average RW) is defined as the ratio between risk-weighted assets and the exposure at default (EAD), resulting from the parameters defined above.

The column “Estimated loss amount” presents the expected loss at a one-year horizon.

TABLE 38: IRBA EXPOSURE BY PD SCALE AND ASSET CLASS – CENTRAL BANK, CENTRAL GOVERNMENT AND INSTITUTIONS PORTFOLIO (EU CR6)

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of expected losses(**)**	**Value adjustments and provisions(**)**
Central governments and central banks	0.00 to < 0.15%	442,627	2,846	49%	444,432	0.01%	100 to 1,000	2%	2	1,836	0%	2	
	0.00 to < 0.10%	*438,412*	*2,846*	*49%*	*440,218*	*0.01%*	*100 to 1,000*	*1%*	*2*	*871*	*0%*	*1*	
	0.10 to < 0.15%	4,214		*0%*	*4,214*	*0.13%*	*0 to 100*	*19%*	*4*	*965*	*23%*	*1*	
	0.15 to < 0.25%	1,140		22%	1,140	0.19%	0 to 100	13%	3	188	17%	-	
	0.25 to < 0.50%	3,103	414	55%	3,330	0.29%	0 to 100	26%	2	1,025	31%	2	
	0.50 to < 0.75%	961	751	55%	1,374	0.69%	0 to 100	16%	2	482	35%	2	
	0.75 to < 2.50%	596	480	55%	982	1.24%	0 to 100	13%	3	278	28%	1	
	0.75 to < 1.75%	*592*	*480*	*55%*	*978*	*1.24%*	*0 to 100*	*13%*	*3*	*275*	*28%*	*1*	
	1.75 to < 2.5%	4			*4*	*1.85%*	*0 to 100*	*30%*	*1*	*3*	*67%*	-	
	2.50 to < 10%	441	593	55%	767	7.07%	0 to 100	6%	4	237	31%	3	
	2.5 to < 5%	13		*27%*	*13*	*3.10%*	*0 to 100*	*6%*	*1*	*2*	*17%*	-	
	5 to < 10%	*428*	*593*	*55%*	*754*	*7.13%*	*0 to 100*	*6%*	*4*	*234*	*31%*	*3*	
	10 to < 100%	674	84	55%	720	19.05%	0 to 100	13%	2	537	75%	20	
	10 to < 20%	*192*	*84*	*55%*	*237*	*13.43%*	*0 to 100*	*3%*	*4*	*47*	*20%*	*1*	
	20 to < 30%	482		*55%*	*482*	*21.81%*	*0 to 100*	*18%*	*1*	*490*	*102%*	*19*	
	30 to < 100%												
	100% (default)	52	13	55%	59	100.00%	0 to 100	12%	3	38	64%	5	
SUB-TOTAL		**449,594**	**5,181**	**52%**	**452,804**	**0.08%**		**2%**	**2**	**4,620**	**1%**	**36**	**(22)**

[1] *Average LGD: “Loss Given Default” – average Loss Given Default weighted by exposure at default.*

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of expected losses(**)**	**Value adjustments and provisions(**)**
Institutions	0.00 to < 0.15%	24,436	11,627	47%	30,181	0.04%	1,000 to 10,000	28%	2	4,946	16%	4	
	0.00 to < 0.10%	*23,189*	*10,741*	*47%*	*28,515*	*0.04%*	*1,000 to 10,000*	*27%*	*2*	*4,547*	*16%*	*3*	
	0.10 to < 0.15%	*1,247*	*886*	*43%*	*1,666*	*0.12%*	*100 to 1,000*	*32%*	*2*	*399*	*24%*	*1*	
	0.15 to < 0.25%	2,146	813	41%	2,482	0.17%	100 to 1,000	46%	2	771	31%	2	
	0.25 to < 0.50%	1,896	812	46%	2,268	0.37%	100 to 1,000	23%	1	682	30%	2	
	0.50 to < 0.75%	381	254	43%	497	0.61%	100 to 1,000	18%	3	163	33%	1	
	0.75 to < 2.50%	2,044	566	38%	2,266	1.35%	100 to 1,000	26%	2	1,179	52%	8	
	0.75 to < 1.75%	*1,256*	*267*	*42%*	*1,369*	*1.03%*	*100 to 1,000*	*28%*	*1*	*672*	*49%*	*4*	
	1.75 to < 2.5%	*787*	*300*	*35%*	*896*	*1.85%*	*100 to 1,000*	*23%*	*3*	*506*	*56%*	*4*	
	2.50 to < 10%	320	327	39%	452	5.08%	100 to 1,000	25%	3	281	62%	5	
	2.5 to < 5%	*208*	*156*	*35%*	*265*	*3.52%*	*100 to 1,000*	*34%*	*2*	*190*	*72%*	*3*	
	5 to < 10%	*112*	*171*	*43%*	*187*	*7.30%*	*100 to 1,000*	*13%*	*4*	*92*	*49%*	*2*	
	10 to < 100%	85	65	37%	109	21.05%	100 to 1,000	48%	1	255	233%	11	
	10 to < 20%	*18*	*27*	*32%*	*27*	*14.51%*	*100 to 1,000*	*43%*	*2*	*63*	*233%*	*2*	
	20 to < 30%	*67*	*38*	*40%*	*82*	*23.21%*	*100 to 1,000*	*50%*	*1*	*192*	*233%*	*10*	
	30 to < 100%												
	100% (default)	187		26%	186	100.00%	0 to 100	94%	3	3	1%	177	
SUB-TOTAL		**31,495**	**14,465**	**46%**	**38,441**	**0.76%**		**28%**	**2**	**8,280**	**22%**	**209**	**(286)**
TOTAL		**481,089**	**19,646**		**491,246**					**12,900**	**3%**	**245**	**(308)**

(*) Add-on included

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of expected losses(**)**	**Value adjustments and provisions(**)**
Central governments and central banks	0.00 to < 0.15%	461,043	1,105	55%	462,019	0.01%	100 to 1,000	2%	2	2,390	1%	3	
	0.00 to < 0.10%	*456,346*	*1,104*	*55%*	*457,322*	*0.01%*	*100 to 1,000*	*2%*	*2*	*1,360*	*0%*	*1*	
	0.10 to < 0.15%	*4,697*	*-*	*47%*	*4,697*	*0.13%*	*0 to 100*	*19%*	*4*	*1,030*	*22%*	*1*	
	0.15 to < 0.25%	1,293	3	45%	1,295	0.19%	0 to 100	13%	2	166	13%	-	
	0.25 to < 0.50%	2,619	197	55%	2,727	0.29%	0 to 100	26%	2	802	29%	2	
	0.50 to < 0.75%	886	664	55%	1,252	0.69%	0 to 100	16%	2	360	29%	1	
	0.75 to < 2.50%	588	157	55%	818	1.23%	0 to 100	15%	3	222	27%	1	
	0.75 to < 1.75%	*492*	*151*	*55%*	*718*	*1.10%*	*0 to 100*	*14%*	*3*	*182*	*25%*	*1*	
	1.75 to < 2.5%	*97*	*5*	*55%*	*99*	*2.11%*	*0 to 100*	*17%*	*3*	*40*	*41%*	*-*	
	2.50 to < 10%	398	153	55%	483	5.04%	0 to 100	4%	4	79	16%	1	
	2.5 to < 5%	*341*	*35*	*55%*	*360*	*3.95%*	*0 to 100*	*4%*	*4*	*58*	*16%*	*1*	
	5 to < 10%	*58*	*119*	*55%*	*123*	*8.23%*	*0 to 100*	*2%*	*5*	*21*	*17%*	*-*	
	10 to < 100%	409	180	55%	508	13.98%	0 to 100	12%	3	336	66%	12	
	10 to < 20%	*296*	*176*	*55%*	*392*	*11.66%*	*0 to 100*	*4%*	*4*	*86*	*22%*	*2*	
	20 to < 30%	*113*	*4*	*55%*	*116*	*21.81%*	*0 to 100*	*39%*	*2*	*250*	*216%*	*10*	
	30 to < 100%												
	100% (default)	40	5	55%	43	100.00%	0 to 100	21%	2	4	8%	9	
SUB-TOTAL		**467,277**	**2,464**	**55%**	**469,143**	**0.05%**		**2%**	**2**	**4,359**	**1%**	**30**	**(29)**

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets[(*)]**	**Average weight**	**Amount of expected losses[(**)]**	**Value adjustments and provisions[(**)]**
Institutions	0.00 to < 0.15%	28,728	12,092	46%	34,524	0.05%	1,000 to 10,000	27%	2	5,384	16%	5	
	0.00 to < 0.10%	*27,210*	*11,476*	*46%*	*32,661*	*0.04%*	*1,000 to 10,000*	*27%*	*2*	*4,996*	*15%*	*4*	
	0.10 to < 0.15%	*1,519*	*615*	*49%*	*1,863*	*0.12%*	*100 to 1,000*	*24%*	*3*	*389*	*21%*	*1*	
	0.15 to < 0.25%	1,619	1,314	44%	2,202	0.18%	100 to 1,000	37%	2	755	34%	1	
	0.25 to < 0.50%	2,813	1,380	45%	3,436	0.34%	100 to 1,000	33%	2	1,820	53%	4	
	0.50 to < 0.75%	346	188	27%	397	0.58%	100 to 1,000	36%	2	231	58%	1	
	0.75 to < 2.50%	1,904	634	41%	2,170	1.27%	100 to 1,000	25%	2	946	44%	7	
	0.75 to < 1.75%	*1,467*	*525*	*41%*	*1,683*	*1.10%*	*100 to 1,000*	*25%*	*2*	*798*	*47%*	*5*	
	1.75 to < 2.5%	*436*	*109*	*43%*	*486*	*1.88%*	*100 to 1,000*	*26%*	*3*	*148*	*31%*	*3*	
	2.50 to < 10%	520	552	50%	795	4.79%	100 to 1,000	26%	2	715	90%	7	
	2.5 to < 5%	*302*	*239*	*40%*	*399*	*3.85%*	*100 to 1,000*	*33%*	*2*	*344*	*86%*	*3*	
	5 to < 10%	*219*	*313*	*57%*	*397*	*5.73%*	*100 to 1,000*	*18%*	*2*	*371*	*93%*	*5*	
	10 to < 100%	34	62	42%	60	15.38%	100 to 1,000	41%	1	130	216%	4	
	10 to < 20%	*26*	*55*	*43%*	*50*	*13.11%*	*0 to 100*	*41%*	*1*	*101*	*204%*	*3*	
	20 to < 30%	*7*	*7*	*32%*	*9*	*22.77%*	*0 to 100*	*47%*	*2*	*28*	*300%*	*1*	
	30 to < 100%	*1*	*-*	*-*	*1*	*53.44%*	*0 to 100*	*17%*	*3*	*1*	*84%*	*-*	
	100% (default)	183	-	28%	183	100.00%	0 to 100	95%	4	3	2%	175	
SUB-TOTAL		**36,148**	**16,222**	**45%**	**43,767**	**0.67%**		**28%**	**2**	**9,983**	**23%**	**205**	**(210)**
TOTAL		**503,425**	**18,686**		**512,910**					**14,342**	**3%**	**234**	**(239)**

(*) Add-on included
(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

TABLE 39: IRBA EXPOSURE BY PD SCALE AND ASSET CLASS CORPORATE PORTOFOLIOS (EU CR6)

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Corporates – Specialised financing	0.00 to < 0.15%	6,664	3,043	51%	8,238	0.08%	100 to 1,000	13%	4	1,257	15%	1	
	0.00 to < 0.10%	*3,814*	*2,274*	*50%*	*4,960*	*0.06%*	*100 to 1,000*	*15%*	*4*	*966*	*19%*	*-*	
	0.10 to < 0.15%	*2,850*	*769*	*51%*	*3,278*	*0.12%*	*100 to 1,000*	*10%*	*4*	*291*	*9%*	*-*	
	0.15 to < 0.25%	5,770	1,890	41%	6,542	0.18%	100 to 1,000	17%	3	1,479	23%	2	
	0.25 to < 0.50%	14,048	5,920	51%	17,113	0.36%	1,000 to 10,000	15%	4	4,785	28%	9	
	0.50 to < 0.75%	7,712	3,677	56%	9,811	0.69%	100 to 1,000	16%	3	4,180	43%	11	
	0.75 to < 2.50%	13,217	5,172	54%	15,998	1.39%	1,000 to 10,000	14%	3	7,040	44%	29	
	0.75 to < 1.75%	*10,439*	*4,038*	*53%*	*12,580*	*1.20%*	*1,000 to 10,000*	*14%*	*3*	*5,390*	*43%*	*19*	
	1.75 to < 2.5%	*2,778*	*1,133*	*56%*	*3,418*	*2.09%*	*100 to 1,000*	*13%*	*3*	*1,650*	*48%*	*10*	
	2.50 to < 10%	5,639	3,294	53%	7,401	4.68%	1,000 to 10,000	12%	3	3,149	43%	39	
	2.5 to < 5%	*3,655*	*2,040*	*50%*	*4,682*	*3.36%*	*100 to 1,000*	*13%*	*3*	*1,991*	*43%*	*20*	
	5 to < 10%	*1,984*	*1,255*	*59%*	*2,719*	*6.96%*	*100 to 1,000*	*11%*	*3*	*1,158*	*43%*	*19*	
	10 to < 100%	2,949	2,046	74%	4,475	16.69%	100 to 1,000	7%	4	1,729	39%	56	
	10 to < 20%	*2,382*	*1,848*	*76%*	*3,795*	*15.70%*	*100 to 1,000*	*7%*	*4*	*1,334*	*35%*	*41*	
	20 to < 30%	*567*	*198*	*57%*	*681*	*22.22%*	*0 to 100*	*9%*	*4*	*394*	*58%*	*15*	
	30 to < 100%												
	100% (default)	1,761	85	71%	1,822	100.00%	100 to 1,000	46%	3	383	21%	828	
SUB-TOTAL		**57,760**	**25,128**	**54%**	**71,400**	**4.60%**		**14%**	**4**	**24,001**	**34%**	**975**	**(996)**

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
SME corporates	0.00 to < 0.15%	1,460	3,276	51%	3,156	0.07%	1,000 to 10,000	38%	3	860	27%	1	
	0.00 to < 0.10%	*834*	*2,925*	*52%*	*2,366*	*0.05%*	*100 to 1,000*	*39%*	*3*	*575*	*24%*	*1*	
	0.10 to < 0.15%	*625*	*351*	*47%*	*791*	*0.11%*	*100 to 1,000*	*35%*	*3*	*285*	*36%*	*-*	
	0.15 to < 0.25%	1,978	933	41%	2,371	0.18%	1,000 to 10,000	21%	2	499	21%	1	
	0.25 to < 0.50%	8,645	2,081	45%	9,600	0.31%	20,000 to 30,000	27%	3	3,253	34%	8	
	0.50 to < 0.75%	2,090	418	45%	2,301	0.66%	1,000 to 10,000	18%	3	747	32%	3	
	0.75 to < 2.50%	12,008	2,660	49%	13,328	1.33%	20,000 to 30,000	28%	3	7,694	58%	50	
	0.75 to < 1.75%	*8,154*	*1,938*	*48%*	*9,099*	*1.02%*	*10,000 to 20,000*	*26%*	*3*	*4,542*	*50%*	*24*	
	1.75 to < 2.5%	*3,853*	*722*	*51%*	*4,229*	*1.99%*	*1,000 to 10,000*	*31%*	*3*	*3,152*	*75%*	*26*	
	2.50 to < 10%	4,870	7,627	36%	7,622	4.40%	10,000 to 20,000	31%	3	4,924	65%	100	
	2.5 to < 5%	*2,703*	*7,362*	*36%*	*5,337*	*3.29%*	*1,000 to 10,000*	*32%*	*3*	*2,930*	*55%*	*56*	
	5 to < 10%	*2,166*	*265*	*43%*	*2,284*	*7.01%*	*1,000 to 10,000*	*27%*	*3*	*1,994*	*87%*	*43*	
	10 to < 100%	1,545	189	49%	1,642	16.81%	1,000 to 10,000	29%	3	1,950	119%	75	
	10 to < 20%	*1,036*	*99*	*50%*	*1,087*	*12.70%*	*1,000 to 10,000*	*31%*	*3*	*1,372*	*126%*	*42*	
	20 to < 30%	*460*	*86*	*48%*	*502*	*22.96%*	*1,000 to 10,000*	*25%*	*3*	*528*	*105%*	*29*	
	30 to < 100%	*50*	*4*	*67%*	*52*	*43.14%*	*100 to 1,000*	*20%*	*3*	*50*	*96%*	*4*	
	100% (default)	1,664	139	39%	1,734	100.00%	1,000 to 10,000	58%	3	1,051	61%	1,085	
SUB-TOTAL		**34,259**	**17,324**	**42%**	**41,754**	**6.16%**		**28%**	**3**	**20,979**	**50%**	**1,323**	**(1,326)**

In millions of euros	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Other corporates	0.00 to < 0.15%	93,168	169,770	47%	173,373	0.08%	10,000 to 20,000	34%	2	41,435	24%	46	
	0.00 to < 0.10%	*44,554*	*132,678*	*48%*	*108,009*	*0.05%*	*1,000 to 10,000*	*33%*	*2*	*21,076*	*20%*	*19*	
	0.10 to < 0.15%	*48,614*	*37,092*	*45%*	*65,364*	*0.12%*	*1,000 to 10,000*	*35%*	*2*	*20,360*	*31%*	*27*	
	0.15 to < 0.25%	27,318	35,829	44%	43,323	0.18%	10,000 to 20,000	36%	2	16,918	39%	28	
	0.25 to < 0.50%	39,251	40,293	42%	56,599	0.34%	20,000 to 30,000	35%	3	30,365	54%	67	
	0.50 to < 0.75%	10,834	8,251	41%	14,406	0.67%	1,000 to 10,000	28%	2	8,605	60%	28	
	0.75 to < 2.50%	36,816	21,224	45%	46,772	1.41%	30,000 to 40,000	28%	2	33,720	72%	188	
	0.75 to < 1.75%	*23,906*	*16,885*	*46%*	*31,961*	*1.12%*	*20,000 to 30,000*	*30%*	*2*	*21,329*	*67%*	*113*	
	1.75 to < 2.5%	*12,910*	*4,339*	*40%*	*14,811*	*2.04%*	*10,000 to 20,000*	*25%*	*2*	*12,391*	*84%*	*75*	
	2.50 to < 10%	21,789	18,654	45%	30,468	4.83%	10,000 to 20,000	30%	3	46,675	153%	310	
	2.5 to < 5%	*12,959*	*10,736*	*46%*	*18,073*	*3.43%*	*10,000 to 20,000*	*30%*	*3*	*32,157*	*178%*	*187*	
	5 to < 10%	*8,830*	*7,918*	*45%*	*12,395*	*6.87%*	*1,000 to 10,000*	*30%*	*3*	*14,518*	*117%*	*124*	
	10 to < 100%	6,400	4,453	41%	8,248	15.68%	1,000 to 10,000	29%	2	11,466	139%	369	
	10 to < 20%	*5,169*	*3,883*	*40%*	*6,738*	*13.96%*	*1,000 to 10,000*	*29%*	*3*	*9,236*	*137%*	*263*	
	20 to < 30%	*1,169*	*561*	*49%*	*1,445*	*22.46%*	*1,000 to 10,000*	*31%*	*2*	*2,150*	*149%*	*100*	
	30 to < 100%	*62*	*9*	*32%*	*66*	*42.45%*	*0 to 100*	*20%*	*3*	*80*	*121%*	*6*	
	100% (default)	5,099	1,061	46%	5,606	100.00%	1,000 to 10,000	45%	2	3,097	55%	3,133	
SUB-TOTAL		**240,676**	**299,534**	**46%**	**378,795**	**2.52%**		**33%**	**2**	**192,280**	**51%**	**4,209**	**(4,518)**
TOTAL		**332,695**	**341,985**		**491,948**					**237,260**	**48%**	**6,506**	**(6,841)**

(*) Add-on included

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Corporates – Specialised financing	0.00 to < 0.15%	5,767	3,313	59%	7,725	0.08%	100 to 1,000	16%	4	1,475	19%	1	
	0.00 to < 0.10%	*3,385*	*2,431*	*63%*	*4,921*	*0.06%*	*100 to 1,000*	*17%*	*3*	*987*	*20%*	*1*	
	0.10 to < 0.15%	*2,383*	*882*	*48%*	*2,804*	*0.12%*	*100 to 1,000*	*13%*	*4*	*488*	*17%*	*-*	
	0.15 to < 0.25%	5,853	2,501	42%	6,969	0.18%	100 to 1,000	17%	3	1,493	21%	2	
	0.25 to < 0.50%	13,689	6,367	52%	16,991	0.35%	1,000 to 10,000	15%	4	4,843	29%	9	
	0.50 to < 0.75%	7,392	3,573	51%	9,235	0.69%	1,000 to 10,000	15%	3	3,860	42%	10	
	0.75 to < 2.50%	13,019	5,742	43%	15,467	1.34%	1,000 to 10,000	14%	3	6,611	43%	29	
	0.75 to < 1.75%	*10,683*	*4,691*	*40%*	*12,580*	*1.18%*	*1,000 to 10,000*	*15%*	*3*	*5,432*	*43%*	*22*	
	1.75 to < 2.5%	*2,336*	*1,052*	*52%*	*2,887*	*2.07%*	*100 to 1,000*	*13%*	*3*	*1,179*	*41%*	*7*	
	2.50 to < 10%	6,653	2,992	54%	8,278	4.78%	1,000 to 10,000	11%	3	3,375	41%	42	
	2.5 to < 5%	*3,154*	*1,952*	*52%*	*4,177*	*3.24%*	*100 to 1,000*	*12%*	*3*	*1,677*	*40%*	*16*	
	5 to < 10%	*3,499*	*1,040*	*58%*	*4,101*	*6.34%*	*100 to 1,000*	*10%*	*4*	*1,698*	*41%*	*26*	
	10 to < 100%	2,185	2,563	73%	4,057	15.73%	100 to 1,000	7%	4	1,578	39%	43	
	10 to < 20%	*1,868*	*2,542*	*73%*	*3,726*	*15.18%*	*100 to 1,000*	*6%*	*4*	*1,331*	*36%*	*33*	
	20 to < 30%	*317*	*21*	*70%*	*332*	*21.90%*	*0 to 100*	*13%*	*4*	*247*	*74%*	*10*	
	30 to < 100%												
	100% (default)	1,889	62	76%	1,936	100.00%	100 to 1,000	46%	2	195	10%	1,007	
SUB-TOTAL		**56,446**	**27,114**	**52%**	**70,658**	**4.70%**		**14%**	**3**	**23,429**	**33%**	**1,143**	**(1,135)**

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
SME corporates	0.00 to < 0.15%	1,938	1,834	54%	2,938	0.08%	1,000 to 10,000	33%	3	747	25%	1	
	0.00 to < 0.10%	*1,145*	*1,552*	*56%*	*2,022*	*0.06%*	*100 to 1,000*	*33%*	*3*	*475*	*23%*	*-*	
	0.10 to < 0.15%	*793*	*282*	*43%*	*917*	*0.13%*	*1,000 to 10,000*	*32%*	*3*	*272*	*30%*	*-*	
	0.15 to < 0.25%	1,814	1,239	50%	2,463	0.18%	1,000 to 10,000	30%	3	769	31%	1	
	0.25 to < 0.50%	7,572	1,774	54%	8,555	0.36%	10,000 to 20,000	28%	3	3,137	37%	9	
	0.50 to < 0.75%	2,494	977	34%	2,836	0.66%	1,000 to 10,000	22%	3	1,121	40%	4	
	0.75 to < 2.50%	9,358	2,077	46%	10,327	1.29%	20,000 to 30,000	26%	3	5,311	51%	33	
	0.75 to < 1.75%	*7,845*	*1,859*	*44%*	*8,684*	*1.15%*	*10,000 to 20,000*	*26%*	*3*	*4,515*	*52%*	*26*	
	1.75 to < 2.5%	*1,513*	*217*	*57%*	*1,643*	*2.05%*	*1,000 to 10,000*	*21%*	*3*	*796*	*48%*	*7*	
	2.50 to < 10%	9,542	8,116	38%	12,655	4.22%	20,000 to 30,000	32%	3	8,382	66%	162	
	2.5 to < 5%	*6,626*	*7,526*	*38%*	*9,495*	*3.28%*	*10,000 to 20,000*	*33%*	*3*	*5,744*	*61%*	*101*	
	5 to < 10%	*2,916*	*590*	*40%*	*3,161*	*7.03%*	*1,000 to 10,000*	*28%*	*3*	*2,638*	*83%*	*61*	
	10 to < 100%	1,145	99	43%	1,190	17.49%	1,000 to 10,000	26%	3	1,119	94%	53	
	10 to < 20%	*786*	*65*	*43%*	*816*	*13.89%*	*1,000 to 10,000*	*25%*	*3*	*742*	*91%*	*29*	
	20 to < 30%	*320*	*32*	*44%*	*334*	*22.81%*	*100 to 1,000*	*29%*	*3*	*354*	*106%*	*22*	
	30 to < 100%	*39*	*2*	*46%*	*40*	*46.15%*	*0 to 100*	*15%*	*3*	*24*	*60%*	*3*	
	100% (default)	2,169	134	39%	2,224	100.00%	1,000 to 10,000	53%	3	798	36%	1,204	
SUB-TOTAL		**36,033**	**16,249**	**43%**	**43,188**	**7.30%**		**29%**	**3**	**21,384**	**50%**	**1,468**	**(1,504)**

	a	b	c	d	e	f	g	h	i	j	k	l	m
													31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure before CCF**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Number of obligors**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Other corporates	0.00 to < 0.15%	72,571	143,233	48%	141,507	0.07%	10,000 to 20,000	35%	2	35,492	25%	36	
	0.00 to < 0.10%	*46,093*	*107,389*	*48%*	*98,075*	*0.05%*	*1,000 to 10,000*	*34%*	*2*	*19,724*	*20%*	*18*	
	0.10 to < 0.15%	*26,478*	*35,844*	*47%*	*43,432*	*0.12%*	*1,000 to 10,000*	*37%*	*2*	*15,767*	*36%*	*18*	
	0.15 to < 0.25%	43,337	34,431	44%	58,594	0.18%	1,000 to 10,000	35%	2	20,759	35%	36	
	0.25 to < 0.50%	31,183	38,969	42%	47,613	0.35%	10,000 to 20,000	37%	2	26,378	55%	63	
	0.50 to < 0.75%	12,000	14,904	29%	16,444	0.68%	10,000 to 20,000	30%	2	11,236	68%	33	
	0.75 to < 2.50%	30,159	18,411	44%	38,479	1.36%	20,000 to 30,000	29%	2	27,596	72%	150	
	0.75 to < 1.75%	*23,671*	*14,879*	*43%*	*30,260*	*1.17%*	*20,000 to 30,000*	*30%*	*2*	*21,133*	*70%*	*105*	
	1.75 to < 2.5%	*6,488*	*3,532*	*47%*	*8,219*	*2.08%*	*1,000 to 10,000*	*27%*	*2*	*6,463*	*79%*	*45*	
	2.50 to < 10%	25,015	21,156	45%	34,732	4.79%	20,000 to 30,000	32%	3	45,808	132%	411	
	2.5 to < 5%	*15,365*	*9,938*	*47%*	*20,164*	*3.37%*	*10,000 to 20,000*	*32%*	*3*	*19,979*	*99%*	*216*	
	5 to < 10%	*9,650*	*11,218*	*44%*	*14,569*	*6.75%*	*10,000 to 20,000*	*31%*	*3*	*25,830*	*177%*	*195*	
	10 to < 100%	4,332	4,489	47%	6,474	15.25%	1,000 to 10,000	26%	2	8,567	132%	258	
	10 to < 20%	*3,674*	*4,181*	*49%*	*5,719*	*13.96%*	*1,000 to 10,000*	*26%*	*2*	*7,601*	*133%*	*211*	
	20 to < 30%	*563*	*298*	*29%*	*652*	*22.47%*	*100 to 1,000*	*28%*	*2*	*895*	*137%*	*41*	
	30 to < 100%	*95*	*10*	*63%*	*103*	*41.00%*	*100 to 1,000*	*13%*	*2*	*71*	*69%*	*6*	
	100% (default)	5,789	1,092	49%	6,353	100.00%	1,000 to 10,000	52%	2	1,480	23%	3,838	
SUB-TOTAL		**224,387**	**276,685**	**45%**	**350,196**	**2.86%**		**34%**	**2**	**177,317**	**51%**	**4,824**	**(4,979)**
TOTAL		**316,866**	**320,048**		**464,043**					**222,130**	**48%**	**7,435**	**(7,618)**

(*) Add-on included.

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

Most of the Group's central government and central bank counterparties are of very high credit quality and based in developed countries, meaning that they have very good internal ratings and very low average Loss Given Default.

The majority of the Group's corporate commitments concerns counterparties of excellent or good quality, reflecting the large part of multinationals in BNP Paribas' customer base. Other commitments are mainly structured transactions or transactions secured by high-quality assets, reflected in their average LGD levels.

On average, the probability of default excluding counterparty default stands at 0.68%. It is 1.29% for Corporates.

TABLE 40: AVERAGE PD AND LGD OF THE CORPORATE ASSET CLASS BY GEOGRAPHIC REGION

	31 December 2022		
In millions of euros	**Non-defaulted exposure**	**Average PD**	**Average LGD**
Europe(*)	**463,470**	**1.31%**	**29%**
of which France	*148,753*	*1.32%*	*31%*
of which Belgium	*66,782*	*1.76%*	*20%*
of which Luxembourg	*23,845*	*1.07%*	*30%*
of which Italy	*60,301*	*1.06%*	*34%*
North America	**109,298**	**1.31%**	**30%**
Asia Pacific	**57,924**	**1.24%**	**35%**
Rest of the world	**34,178**	**1.14%**	**29%**
TOTAL	**664,871**	**1.29%**	**30%**

(*) Within the European Union and the European Free Trade Association (EFTA).

	31 December 2021		
In millions of euros	**Non-defaulted exposure**	**Average PD**	**Average LGD**
Europe(*)	**438,697**	**1.32%**	**30%**
of which France	*138,215*	*1.40%*	*32%*
of which Belgium	*65,320*	*1.91%*	*19%*
of which Luxembourg	*24,042*	*0.92%*	*29%*
of which Italy	*60,014*	*1.06%*	*36%*
North America	**97,180**	**1.55%**	**29%**
Asia Pacific	**58,290**	**1.00%**	**35%**
Rest of the world	**31,612**	**1.27%**	**31%**
TOTAL	**625,779**	**1.32%**	**30%**

(*) Within the European Union and the European Free Trade Association (EFTA).

INTERNAL RATING SYSTEM SPECIFIC TO RETAIL CUSTOMERS

Retail customers are characterised by a high degree of granularity, small unit volumes and a standard risk profile.

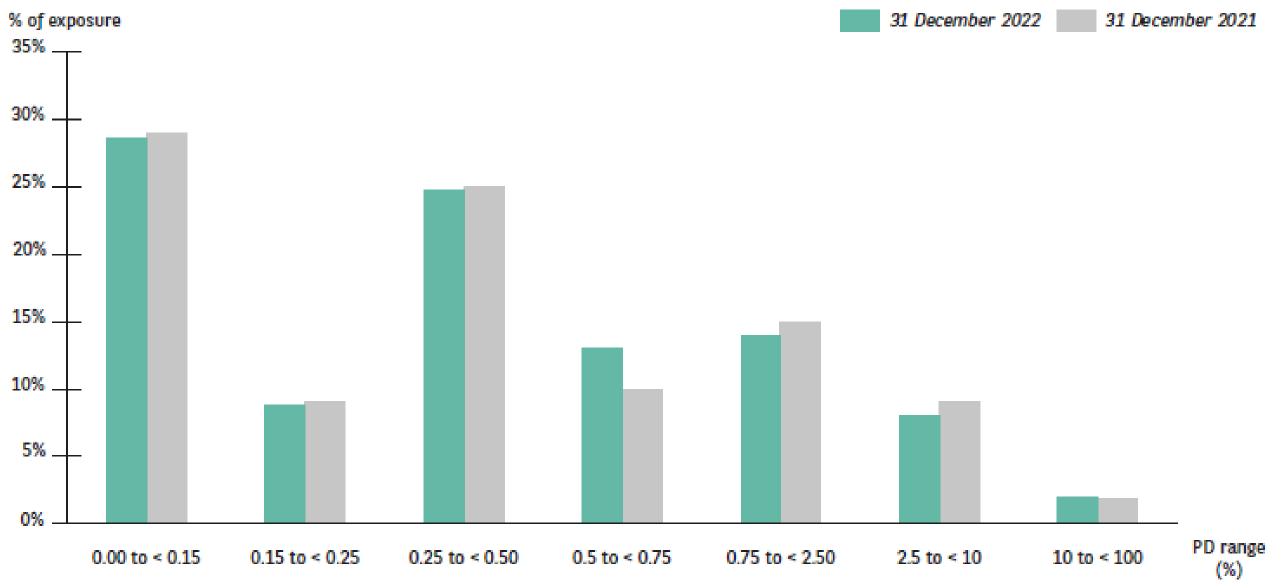
The majority of retail borrowers are assigned a behavioural score which serves as a basis to determine the probability of default and, for each transaction, the Global Recovery Rate (GRR) and exposure at default (EAD). These parameters are calculated every month on the basis of the most up-to-date information. They are supplemented by different scores that are made available to the commercial function. The latter has no involvement in determining risk parameters. These methods are used consistently for all retail customers. The general principles of the rating system are set out in the *Rating System* paragraph in the section *Credit Risk Management Policy*.

Scoring techniques are used to assign retail customers to risk groups presenting the same default risk characteristics. This also applies to the other credit risk parameters: EAD and LGD.

The chart below shows a breakdown by PD range of non-defaulted loans and commitments in the retail book for all the Group's business lines, measured using the internal ratings-based approach (see Table 27: *Indicative mapping of internal counterparty rating with agency rating scale and average PD*).

This retail exposure to non-defaulted loans represents EUR 282 billion at 31 December 2022, stable compared with 31 December 2021.

FIGURE 5: IRBA EXPOSURE BY PD RANGE – RETAIL PORTFOLIO



RETAIL PORTFOLIO

The following table gives the breakdown by PD range of the retail loans and commitments for all of the Group's business lines using the advanced IRB Approach. Total exposure represents EUR 289 billion as at 31 December 2022 compared with EUR 291 billion as at 31 December 2021.

TABLE 41: IRBA EXPOSURE BY PD SCALE AND ASSET CLASS – RETAIL GUARANTEED BY REAL PROPERTY PORTFOLIO (EU CR6)

	a	b	c	d	e	f	h	i	j	k	l	m
												31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – secured by residential property	0.00 to < 0.15%	65,449	2,210	100%	67,660	0.10%	9%	5	1,995	3%	6	
	0.00 to < 0.10%	*14,153*	*443*	*100%*	*14,596*	*0.06%*	*11%*	*5*	*294*	*2%*	*1*	
	0.10 to < 0.15%	*51,296*	*1,767*	*100%*	*53,063*	*0.11%*	*9%*	*5*	*1,701*	*3%*	*5*	
	0.15 to < 0.25%	16,199	684	103%	16,905	0.18%	16%	5	1,158	7%	5	
	0.25 to < 0.50%	44,554	1,060	100%	45,614	0.37%	13%	5	4,643	10%	23	
	0.50 to < 0.75%	26,389	758	101%	27,153	0.59%	11%	5	3,548	13%	18	
	0.75 to < 2.50%	17,759	423	100%	18,181	1.47%	14%	5	4,812	26%	36	
	0.75 to < 1.75%	*12,753*	*239*	*100%*	*12,992*	*1.26%*	*14%*	*5*	*3,259*	*25%*	*23*	
	1.75 to < 2.5%	*5,006*	*184*	*100%*	*5,190*	*1.99%*	*13%*	*5*	*1,553*	*30%*	*13*	
	2.50 to < 10%	8,608	352	101%	8,963	4.28%	14%	5	4,356	49%	54	
	2.5 to < 5%	*6,308*	*323*	*101%*	*6,634*	*3.41%*	*13%*	*5*	*2,969*	*45%*	*31*	
	5 to < 10%	*2,300*	*29*	*100%*	*2,329*	*6.77%*	*15%*	*5*	*1,387*	*60%*	*23*	
	10 to < 100%	2,376	35	100%	2,412	22.41%	13%	5	1,987	82%	70	
	10 to < 20%	*1,475*	*23*	*100%*	*1,499*	*13.28%*	*13%*	*5*	*1,192*	*80%*	*25*	
	20 to < 30%	*366*	*6*	*100%*	*373*	*25.76%*	*13%*	*5*	*356*	*96%*	*12*	
	30 to < 100%	*535*	*6*	*101%*	*541*	*45.43%*	*13%*	*5*	*439*	*81%*	*33*	
	100% (default)	2,163	3	98%	2,169	100.00%	33%	3	1,061	49%	703	
SUB-TOTAL		**183,497**	**5,527**	**101%**	**189,058**	**2.00%**	**12%**	**5**	**23,560**	**12%**	**917**	**(834)**

	a	b	c	d	e	f	h	i	j	k	l	m
												31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – secured by commercial property	0.00 to < 0.15%	182	33	46%	201	0.09%	23%	4	9	4%		
	0.00 to < 0.10%	*96*	*15*	*49%*	*106*	*0.06%*	*26%*	*4*	*4*	*4%*		
	0.10 to < 0.15%	*85*	*18*	*44%*	*95*	*0.12%*	*19%*	*4*	*4*	*5%*		
	0.15 to < 0.25%	371	87	34%	414	0.18%	20%	4	29	7%		
	0.25 to < 0.50%	4,074	314	44%	4,249	0.39%	24%	5	628	15%	4	
	0.50 to < 0.75%	1,133	109	44%	1,192	0.66%	19%	4	187	16%	2	
	0.75 to < 2.50%	2,784	302	41%	2,930	1.41%	17%	4	698	24%	7	
	0.75 to < 1.75%	*2,092*	*249*	*41%*	*2,211*	*1.20%*	*16%*	*4*	*436*	*20%*	*4*	
	1.75 to < 2.5%	*692*	*53*	*42%*	*720*	*2.03%*	*22%*	*4*	*262*	*36%*	*3*	
	2.50 to < 10%	1,858	167	40%	1,937	4.73%	18%	4	978	51%	17	
	2.5 to < 5%	*1,126*	*104*	*45%*	*1,180*	*3.48%*	*18%*	*4*	*517*	*44%*	*7*	
	5 to < 10%	*732*	*62*	*33%*	*757*	*6.69%*	*18%*	*4*	*461*	*61%*	*9*	
	10 to < 100%	424	24	57%	439	19.06%	22%	4	451	103%	19	
	10 to < 20%	*285*	*19*	*62%*	*298*	*13.63%*	*23%*	*4*	*307*	*103%*	*9*	
	20 to < 30%	*85*	*4*	*33%*	*87*	*23.64%*	*17%*	*4*	*74*	*85%*	*3*	
	30 to < 100%	*54*	*1*	*63%*	*54*	*41.69%*	*26%*	*4*	*70*	*130%*	*6*	
	100% (default)	310	6	46%	320	100.00%	43%	3	166	52%	133	
SUB-TOTAL		**11,136**	**1,041**	**42%**	**11,681**	**4.81%**	**20%**	**4**	**3,146**	**27%**	**182**	**(132)**
TOTAL		**194,633**	**6,568**		**200,739**				**26,706**	**13%**	**1,098**	**(966)**

(*) Add-on included.

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

	a	b	c	d	e	f	h	i	j	k	l	m
												31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – secured by residential property	0.00 to < 0.15%	64,207	2,495	100%	66,702	0.09%	9%	5	1,551	2%	6	
	0.00 to < 0.10%	*57,254*	*2,172*	*100%*	*59,426*	*0.08%*	*9%*	*5*	*1,267*	*2%*	*5*	
	0.10 to < 0.15%	*6,953*	*323*	*100%*	*7,276*	*0.13%*	*12%*	*5*	*284*	*4%*	*1*	
	0.15 to < 0.25%	16,386	707	103%	17,115	0.19%	17%	5	1,354	8%	5	
	0.25 to < 0.50%	44,494	1,292	100%	45,786	0.37%	13%	5	4,430	10%	22	
	0.50 to < 0.75%	18,865	730	101%	19,603	0.64%	12%	5	6,573	34%	15	
	0.75 to < 2.50%	17,901	628	100%	18,530	1.42%	13%	5	4,948	27%	35	
	0.75 to < 1.75%	*14,204*	*469*	*100%*	*14,673*	*1.24%*	*13%*	*5*	*3,813*	*26%*	*24*	
	1.75 to < 2.5%	*3,697*	*159*	*100%*	*3,856*	*2.12%*	*13%*	*5*	*1,135*	*29%*	*11*	
	2.50 to < 10%	6,832	502	101%	7,338	4.76%	14%	5	4,435	60%	54	
	2.5 to < 5%	*4,355*	*464*	*101%*	*4,822*	*3.65%*	*14%*	*5*	*2,091*	*43%*	*25*	
	5 to < 10%	*2,478*	*39*	*100%*	*2,516*	*6.89%*	*14%*	*5*	*2,344*	*93%*	*29*	
	10 to < 100%	1,693	29	100%	1,722	23.48%	14%	5	1,577	92%	58	
	10 to < 20%	*949*	*13*	*100%*	*962*	*13.69%*	*14%*	*5*	*848*	*88%*	*18*	
	20 to < 30%	*377*	*7*	*100%*	*385*	*24.56%*	*13%*	*5*	*433*	*113%*	*12*	
	30 to < 100%	*366*	*9*	*100%*	*375*	*47.48%*	*15%*	*5*	*296*	*79%*	*27*	
	100% (default)	2,516	5	95%	2,520	100.00%	34%	3	1,068	42%	761	
SUB-TOTAL		**172,895**	**6,389**	**100%**	**179,316**	**2.19%**	**12%**	**5**	**25,936**	**14%**	**956**	**(964)**

	a	b	c	d	e	f	h	i	j	k	l	m
												31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – secured by commercial property	0.00 to < 0.15%	219	27	56%	238	0.09%	25%	4	10	4%	-	
	0.00 to < 0.10%	*128*	*14*	*60%*	*140*	*0.06%*	*27%*	*4*	*5*	*4%*	*-*	
	0.10 to < 0.15%	*90*	*12*	*51%*	*99*	*0.13%*	*23%*	*4*	*5*	*5%*	*-*	
	0.15 to < 0.25%	365	39	70%	405	0.19%	20%	4	26	6%	-	
	0.25 to < 0.50%	3,425	160	68%	3,559	0.38%	26%	5	502	14%	4	
	0.50 to < 0.75%	861	276	22%	934	0.57%	17%	4	136	15%	1	
	0.75 to < 2.50%	3,080	370	41%	3,263	1.42%	16%	4	673	21%	8	
	0.75 to < 1.75%	*2,391*	*285*	*38%*	*2,527*	*1.18%*	*16%*	*4*	*472*	*19%*	*5*	
	1.75 to < 2.5%	*689*	*85*	*50%*	*737*	*2.23%*	*16%*	*4*	*200*	*27%*	*3*	
	2.50 to < 10%	1,934	184	39%	2,021	5.11%	19%	4	998	49%	19	
	2.5 to < 5%	*1,033*	*75*	*51%*	*1,080*	*3.65%*	*19%*	*4*	*475*	*44%*	*8*	
	5 to < 10%	*901*	*109*	*30%*	*940*	*6.78%*	*18%*	*4*	*523*	*56%*	*12*	
	10 to < 100%	443	27	43%	457	19.49%	19%	4	377	82%	17	
	10 to < 20%	*298*	*20*	*41%*	*309*	*13.82%*	*19%*	*4*	*240*	*78%*	*8*	
	20 to < 30%	*87*	*4*	*52%*	*90*	*25.23%*	*22%*	*4*	*93*	*104%*	*5*	
	30 to < 100%	*57*	*3*	*46%*	*59*	*40.39%*	*17%*	*4*	*44*	*74%*	*4*	
	100% (default)	373	7	37%	377	100.00%	42%	3	192	51%	139	
SUB-TOTAL		**10,700**	**1,089**	**41%**	**11,254**	**5.64%**	**21%**	**4**	**2,914**	**26%**	**188**	**(161)**
TOTAL		**183,595**	**7,478**		**190,570**				**28,850**	**15%**	**1,144**	**(1,126)**

(*) Add-on included.
(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

TABLE 42: IRBA EXPOSURE BY PD SCALE AND ASSET CLASS – OTHER RETAIL PORTFOLIOS (EU CR6)

	a	b	c	d	e	f	h	i	j	k	l	m
In	**PD**											**31 December 2022**

millions of euros	range	Balance sheet exposure	Off-balance sheet exposure	Weighted average CCF	EAD	Weighted average PD	Weighted average LGD	Weighted average maturity	Risk-weighted assets(*)	Average weight	Amount of anticipated losses(**)	Value adjustments and provisions(**)
Retail – revolving exposures	0.00 to < 0.15%	54	1,798	76%	1,902	0.09%	81%	1	115	6%	1	
	0.00 to < 0.10%	*7*	*661*	*76%*	*676*	*0.03%*	*80%*	*1*	*17*	*2%*	*-*	
	0.10 to < 0.15%	*48*	*1,137*	*76%*	*1,226*	*0.12%*	*82%*	*1*	*99*	*8%*	*1*	
	0.15 to < 0.25%	62	3,476	74%	2,659	0.17%	29%	1	85	3%	1	
	0.25 to < 0.50%	267	1,551	49%	1,125	0.39%	51%	1	132	12%	2	
	0.50 to < 0.75%	46	615	71%	553	0.62%	54%	1	104	19%	2	
	0.75 to < 2.50%	362	689	53%	775	1.35%	56%	1	269	35%	6	
	0.75 to < 1.75%	*339*	*638*	*51%*	*704*	*1.29%*	*54%*	*1*	*220*	*31%*	*5*	
	1.75 to < 2.5%	*24*	*51*	*77%*	*71*	*1.94%*	*78%*	*1*	*49*	*69%*	*1*	
	2.50 to < 10%	1,361	502	67%	1,729	4.95%	49%	1	1,203	70%	42	
	2.5 to < 5%	*782*	*423*	*58%*	*1,049*	*3.48%*	*47%*	*1*	*561*	*53%*	*17*	
	5 to < 10%	*580*	*79*	*115%*	*681*	*7.21%*	*52%*	*1*	*642*	*94%*	*25*	
	10 to < 100%	623	67	111%	722	21.45%	52%	1	1,060	147%	80	
	10 to < 20%	*417*	*47*	*120%*	*482*	*12.92%*	*53%*	*1*	*637*	*132%*	*33*	
	20 to < 30%	*78*	*13*	*71%*	*93*	*24.27%*	*52%*	*1*	*167*	*179%*	*12*	
	30 to < 100%	*127*	*7*	*128%*	*146*	*47.77%*	*50%*	*1*	*256*	*175%*	*35*	
	100% (default)	582	30	70%	630	100.00%	63%	1	335	53%	383	
SUB-TOTAL		**3,359**	**8,728**	**68%**	**10,095**	**8.86%**	**51%**	**1**	**3,304**	**33%**	**517**	**(430)**

	a	b	c	d	e	f	h	i	j	k	l	m
												31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – SME	0.00 to < 0.15%	1,342	637	65%	1,806	0.09%	30%	3	113	6%	-	
	0.00 to < 0.10%	*844*	*308*	*70%*	*1,086*	*0.06%*	*29%*	*3*	*53*	*5%*	-	
	0.10 to < 0.15%	*498*	*329*	*61%*	*721*	*0.12%*	*32%*	*3*	*60*	*8%*	-	
	0.15 to < 0.25%	1,342	1,060	56%	1,990	0.18%	30%	2	204	10%	1	
	0.25 to < 0.50%	7,280	1,803	73%	8,717	0.37%	30%	3	1,454	17%	10	
	0.50 to < 0.75%	2,247	471	67%	2,601	0.63%	31%	3	602	23%	5	
	0.75 to < 2.50%	7,576	1,787	78%	9,072	1.54%	32%	3	3,086	34%	45	
	0.75 to < 1.75%	*4,191*	*1,280*	*78%*	*5,257*	*1.15%*	*30%*	*2*	*1,530*	*29%*	*18*	
	1.75 to < 2.5%	*3,385*	*507*	*78%*	*3,815*	*2.08%*	*34%*	*3*	*1,556*	*41%*	*27*	
	2.50 to < 10%	4,022	685	74%	4,595	5.07%	27%	2	1,925	42%	63	
	2.5 to < 5%	*1,924*	*449*	*77%*	*2,305*	*3.60%*	*29%*	*3*	*906*	*39%*	*24*	
	5 to < 10%	*2,098*	*236*	*68%*	*2,291*	*6.55%*	*25%*	*2*	*1,019*	*45%*	*39*	
	10 to < 100%	1,695	176	85%	1,882	18.73%	36%	3	1,159	62%	113	
	10 to < 20%	*1,241*	*139*	*85%*	*1,380*	*12.87%*	*39%*	*3*	*851*	*62%*	*67*	
	20 to < 30%	*193*	*25*	*78%*	*219*	*24.22%*	*28%*	*2*	*124*	*57%*	*15*	
	30 to < 100%	*261*	*12*	*103%*	*284*	*43.02%*	*26%*	*3*	*184*	*65%*	*31*	
	100% (default)	1,989	99	90%	2,199	100.00%	53%	1	1,035	47%	1,099	
SUB-TOTAL		**27,492**	**6,718**	**71%**	**32,861**	**9.06%**	**31%**	**3**	**9,579**	**29%**	**1,335**	**(1,250)**

	a	b	c	d	e	f	h	i	j	k	l	m
												31 December 2022
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – Other	0.00 to < 0.15%	7,299	1,699	83%	8,771	0.10%	41%	3	1,188	14%	4	
	0.00 to < 0.10%	*1,850*	*986*	*72%*	*2,574*	*0.05%*	*37%*	*3*	*165*	*6%*	*-*	
	0.10 to < 0.15%	*5,449*	*713*	*98%*	*6,197*	*0.12%*	*43%*	*3*	*1,023*	*17%*	*3*	
	0.15 to < 0.25%	1,802	779	97%	2,572	0.19%	37%	2	450	17%	2	
	0.25 to < 0.50%	7,405	1,667	95%	9,044	0.38%	39%	3	2,727	30%	13	
	0.50 to < 0.75%	3,574	436	103%	4,136	0.60%	39%	3	1,653	40%	10	
	0.75 to < 2.50%	7,361	1,097	97%	8,481	1.37%	40%	2	4,827	57%	47	
	0.75 to < 1.75%	*5,608*	*1,017*	*97%*	*6,643*	*1.20%*	*40%*	*2*	*3,651*	*55%*	*32*	
	1.75 to < 2.5%	*1,753*	*80*	*92%*	*1,838*	*2.00%*	*40%*	*2*	*1,176*	*64%*	*15*	
	2.50 to < 10%	4,857	239	115%	5,149	4.60%	42%	2	3,804	74%	101	
	2.5 to < 5%	*3,527*	*154*	*126%*	*3,731*	*3.54%*	*40%*	*2*	*2,561*	*69%*	*53*	
	5 to < 10%	*1,330*	*85*	*97%*	*1,418*	*7.39%*	*46%*	*2*	*1,244*	*88%*	*48*	
	10 to < 100%	1,253	49	97%	1,308	22.41%	44%	2	1,475	113%	127	
	10 to < 20%	*742*	*39*	*96%*	*785*	*13.45%*	*45%*	*2*	*802*	*102%*	*47*	
	20 to < 30%	*244*	*4*	*101%*	*249*	*24.38%*	*44%*	*2*	*320*	*128%*	*27*	
	30 to < 100%	*266*	*6*	*101%*	*274*	*46.30%*	*42%*	*2*	*354*	*129%*	*53*	
	100% (default)	1,896	19	92%	1,919	100.00%	64%	2	1,053	55%	1,242	
SUB-TOTAL		**35,447**	**5,985**	**94%**	**41,380**	**6.38%**	**40%**	**2**	**17,178**	**42%**	**1,545**	**(1,466)**
TOTAL		**66,298**	**21,432**		**84,336**				**30,061**	**36%**	**3,398**	**(3,145)**

(*) Add-on included.

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

	a	b	c	d	e	f	h	i	j	k	l	m
In	**PD**											**31 December 2021**

millions of euros	**range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – revolving exposures	0.00 to < 0.15%	82	2,315	87%	2,290	0.07%	76%	1	88	4%	1	
	0.00 to < 0.10%	*59*	*2,039*	*92%*	*2,118*	*0.07%*	*76%*	*1*	*79*	*4%*	*1*	
	0.10 to < 0.15%	*24*	*276*	*49%*	*172*	*0.12%*	*69%*	*1*	*9*	*5%*	*-*	
	0.15 to < 0.25%	49	3,020	72%	2,246	0.17%	34%	1	79	4%	1	
	0.25 to < 0.50%	273	2,322	47%	1,458	0.37%	51%	1	129	9%	3	
	0.50 to < 0.75%	50	1,500	46%	767	0.63%	52%	1	105	14%	2	
	0.75 to < 2.50%	408	974	51%	948	1.34%	57%	1	282	30%	7	
	0.75 to < 1.75%	*397*	*944*	*50%*	*909*	*1.29%*	*56%*	*1*	*257*	*28%*	*6*	
	1.75 to < 2.5%	*11*	*30*	*75%*	*39*	*2.34%*	*77%*	*1*	*25*	*63%*	*1*	
	2.50 to < 10%	1,953	1,119	73%	2,790	4.68%	49%	1	1,469	53%	64	
	2.5 to < 5%	*1,217*	*868*	*71%*	*1,841*	*3.37%*	*48%*	*1*	*847*	*46%*	*30*	
	5 to < 10%	*736*	*251*	*82%*	*949*	*7.22%*	*51%*	*1*	*622*	*66%*	*35*	
	10 to < 100%	912	225	84%	1,111	19.01%	52%	1	1,072	97%	111	
	10 to < 20%	*656*	*168*	*90%*	*810*	*13.07%*	*50%*	*1*	*730*	*90%*	*53*	
	20 to < 30%	*131*	*44*	*57%*	*159*	*23.54%*	*60%*	*1*	*135*	*85%*	*23*	
	30 to < 100%	*125*	*13*	*103%*	*142*	*47.93%*	*52%*	*1*	*207*	*146%*	*35*	
	100% (default)	751	69	56%	815	100.00%	65%	1	411	50%	536	
SUB-TOTAL		**4,479**	**11,545**	**65%**	**12,425**	**9.54%**	**53%**	**1**	**3,635**	**29%**	**727**	**(667)**

	a	b	c	d	e	f	h	i	j	k	l	m
												31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – SME	0.00 to < 0.15%	2,738	676	81%	3,333	0.08%	30%	2	183	5%	1	
	0.00 to < 0.10%	*2,054*	*387*	*78%*	*2,389*	*0.07%*	*29%*	*2*	*107*	*4%*	*-*	
	0.10 to < 0.15%	*684*	*290*	*84%*	*943*	*0.13%*	*31%*	*2*	*77*	*8%*	*-*	
	0.15 to < 0.25%	2,473	381	84%	2,856	0.21%	26%	3	256	9%	2	
	0.25 to < 0.50%	7,637	1,459	89%	9,041	0.38%	29%	4	1,332	15%	10	
	0.50 to < 0.75%	2,089	1,097	45%	2,618	0.58%	31%	3	2,368	90%	5	
	0.75 to < 2.50%	6,193	2,077	65%	7,645	1.44%	28%	3	2,044	27%	30	
	0.75 to < 1.75%	*4,660*	*1,777*	*62%*	*5,834*	*1.21%*	*28%*	*3*	*1,527*	*26%*	*20*	
	1.75 to < 2.5%	*1,533*	*301*	*86%*	*1,811*	*2.19%*	*26%*	*3*	*516*	*29%*	*11*	
	2.50 to < 10%	5,307	1,105	71%	6,174	4.90%	28%	3	1,804	29%	87	
	2.5 to < 5%	*3,607*	*575*	*87%*	*4,155*	*3.64%*	*27%*	*3*	*1,330*	*32%*	*41*	
	5 to < 10%	*1,700*	*530*	*54%*	*2,019*	*7.48%*	*29%*	*3*	*475*	*24%*	*47*	
	10 to < 100%	819	122	85%	943	21.71%	30%	3	515	55%	63	
	10 to < 20%	*499*	*91*	*82%*	*585*	*14.59%*	*30%*	*3*	*292*	*50%*	*26*	
	20 to < 30%	*240*	*27*	*92%*	*270*	*27.57%*	*30%*	*3*	*169*	*63%*	*23*	
	30 to < 100%	*80*	*4*	*102%*	*87*	*51.33%*	*31%*	*2*	*54*	*62%*	*14*	
	100% (default)	2,123	102	88%	2,260	100.00%	54%	1	1,188	53%	1233	
SUB-TOTAL		**29,380**	**7,019**	**71%**	**34,868**	**8.42%**	**28%**	**3**	**9,689**	**28%**	**1,430**	**(1,431)**

	a	b	c	d	e	f	h	i	j	k	l	m
												31 December 2021
In millions of euros	**PD range**	**Balance sheet exposure**	**Off-balance sheet exposure**	**Weighted average CCF**	**EAD**	**Weighted average PD**	**Weighted average LGD**	**Weighted average maturity**	**Risk-weighted assets(*)**	**Average weight**	**Amount of anticipated losses(**)**	**Value adjustments and provisions(**)**
Retail – Other	0.00 to < 0.15%	7,054	2,041	82%	8,818	0.08%	39%	3	848	10%	3	
	0.00 to < 0.10%	*5,896*	*1,636*	*83%*	*7,336*	*0.08%*	*39%*	*3*	*672*	*9%*	*2*	
	0.10 to < 0.15%	*1,158*	*404*	*79%*	*1,482*	*0.12%*	*37%*	*3*	*175*	*12%*	*1*	
	0.15 to < 0.25%	2,184	915	101%	3,134	0.20%	39%	3	559	18%	2	
	0.25 to < 0.50%	8,728	1,677	98%	10,456	0.39%	38%	3	3,225	31%	15	
	0.50 to < 0.75%	3,471	479	91%	3,937	0.61%	38%	3	1,471	37%	9	
	0.75 to < 2.50%	9,249	1,293	99%	10,614	1.35%	40%	2	5,667	53%	57	
	0.75 to < 1.75%	*7,303*	*1,206*	*99%*	*8,579*	*1.18%*	*41%*	*2*	*4,439*	*52%*	*41*	
	1.75 to < 2.5%	*1,947*	*86*	*94%*	*2,035*	*2.07%*	*39%*	*2*	*1,228*	*60%*	*16*	
	2.50 to < 10%	6,013	328	109%	6,402	4.75%	44%	2	4,444	69%	136	
	2.5 to < 5%	*4,200*	*211*	*117%*	*4,473*	*3.56%*	*42%*	*2*	*2,947*	*66%*	*68*	
	5 to < 10%	*1,813*	*117*	*94%*	*1,929*	*7.50%*	*47%*	*2*	*1,497*	*78%*	*68*	
	10 to < 100%	1,386	59	95%	1,448	21.37%	45%	2	1,383	95%	140	
	10 to < 20%	*837*	*44*	*98%*	*884*	*13.37%*	*45%*	*2*	*777*	*88%*	*53*	
	20 to < 30%	*314*	*3*	*98%*	*318*	*23.55%*	*47%*	*2*	*324*	*102%*	*35*	
	30 to < 100%	*235*	*12*	*81%*	*246*	*47.35%*	*45%*	*2*	*282*	*115%*	*53*	
	100% (default)	2,573	25	89%	2,598	100.00%	64%	2	1,431	55%	1645	
SUB-TOTAL		**40,659**	**6,816**	**94%**	**47,407**	**7.24%**	**40%**	**3**	**19,026**	**40%**	**2,008**	**(1,975)**
TOTAL		**74,518**	**25,380**		**94,699**				**32,351**	**34%**	**4,164**	**(4,073)**

(*) Add-on included.

(**) The expected losses and provisions are not directly comparable data: the expected one-year losses are statistical estimates through the cycle (TTC) whilst the provisions for credit risk are calculated according to the IFRS 9 standard as explained in note 1.e.5 to the financial statements.

Most of the mortgage exposures concern Commercial & Personal Banking in France, Commercial & Personal Banking in Belgium and Commercial & Personal Banking in Luxembourg. Mortgages are issued according to strict and well-defined procedures. Average probability of default on retail clients' non-defaulted loans is 1.30%. The low average Loss Given Default level reflects the guarantees put in place when the mortgages were granted. Most of the Revolving exposures and Other exposures relate to consumer loans subsidiaries that have a wider range of customers in terms of credit quality and a lower level of guarantees.

TABLE 43: AVERAGE PD AND LGD OF THE RETAIL PORTFOLIO BY GEOGRAPHIC REGION

	31 December 2022		
In millions of euros	**Non-defaulted exposure**	**Average PD**	**Average LGD**
Europe(*)	**281,267**	**1.30%**	**20%**
of which France	*152,218*	*1.42%*	*20%*
of which Belgium	*83,212*	*1.14%*	*17%*
of which Luxembourg	*9,148*	*0.73%*	*23%*
of which Italy	*35,197*	*1.30%*	*21%*
North America	**251**	**n.s.**	**n.s.**
Asia Pacific	**102**	**n.s.**	**n.s.**
Rest of the world	**213**	**n.s.**	**n.s.**
TOTAL	**281,833**	**1.30%**	**20%**

(*) Within the European Union and the European Free Trade Association (EFTA).

	31 December 2021		
In millions of euros	**Non-defaulted exposure**	**Average PD**	**Average LGD**
Europe(*)	**282,026**	**1.28%**	**20%**
of which France	*147,584*	*1.19%*	*20%*
of which Belgium	*81,263*	*1.15%*	*18%*
of which Luxembourg	*9,095*	*0.73%*	*23%*
of which Italy	*34,745*	*1.43%*	*22%*
North America	**138**	**n.s.**	**n.s.**
Asia Pacific	**74**	**n.s.**	**n.s.**
Rest of the world	**189**	**n.s.**	**n.s.**
TOTAL	**282,427**	**1.28%**	**20%**

(*) Within the European Union and the European Free Trade Association (EFTA).

CREDIT RISK: STANDARDISED APPROACH

For exposures under the standardised approach, BNP Paribas uses the external ratings from External Credit Assessment Institutions (ECAIs) Standard & Poor's, Moody's, Fitch Ratings, Cerved and Banque de France recognised by the supervisor.

The Group uses the correspondence tables published by the EBA and the ACPR to compare the external ratings and weighting rates used to calculate risk-weighted assets specific to each exposure class.

The ratings supplied by Standard & Poor's, Moody's and Fitch Ratings are mainly used for exposures to Central governments and central banks, Regional and local authorities, Public sector entities and Multilateral development banks, Institutions and

Corporates. The ratings supplied by the Banque de France are mainly used for corporate exposures and exposures secured by a mortgage on a real estate asset. The ratings supplied by Cerved are mainly used for Corporate exposures.

When there is no directly applicable external rating, the issuer's senior unsecured rating may, if available, be obtained from external databases and used for risk-weighting purposes in some cases.

As at 31 December 2022, standardised approach exposure represented 24% of the BNP Paribas Group's total gross exposures to credit risk. This breakdown is stable compared to 31 December 2021.

The following table shows a summary of standardised risk-weighted exposures broken down by regulatory asset class. The equity exposures weighted using the standardised approach consist primarily of asset value guarantees given to fund unit holders.

Since 30 June 2021, exposures in the form of units or shares of collective investment undertakings (UCI) are treated in accordance with the provisions of articles 132 to 132 c (transparency approach) of Regulation (EU) 2019/876. The underlying exposures of these UCI units, for which the exposure at default (after application of the CCF) of the underlying assets reached EUR 3.3 billion as of 31 December 2022 and are treated according to the standardised approach and presented in tables CR4 and CR5, mainly in the line "Equity".

TABLE 44: STANDARDISED CREDIT RISK EXPOSURE BY STANDARD EXPOSURE CLASS (EU CR4)

				a	b	c	d	e	f
		31 December 2022							
		Gross exposure		Exposure net of provisions		EAD			
	In millions of euros	Balance sheet	Off-balance sheet	Balance sheet	Off-balance sheet	Balance sheet	Off-balance sheet	RWAs	RWA density
1	Central governments or central banks	36,914	527	36,871	527	41,834	183	6,236	15%
2	Regional government or local authorities	4,121	2,032	4,117	2,032	3,778	551	774	18%
3	Public sector entities	17,674	1,498	17,671	1,498	18,381	392	2,236	12%
4	Multilateral development banks	221		221		221			0%
5	International organisations	989	34	989	34	989	33		0%
6	Institutions	10,850	1,829	10,845	1,827	11,937	967	4,479	35%
7	Corporates	92,577	41,300	92,109	41,184	85,521	15,325	80,989	80%
8	Retail	107,851	33,597	106,236	33,526	102,256	3,945	73,410	69%
9	Exposures secured by mortgages on immovable property	62,509	7,570	62,006	7,535	57,196	1,538	26,941	46%
10	Exposures in default	10,494	364	5,112	302	4,974	105	5,684	112%
11	Exposures associated with particularly high risk(*)	288	367	287	367	287	183	705	150%
12	Covered bonds								
13	Institutions and corporates with a short-term credit assessment								
14	Collective investment undertakings								
15	Equity	2,298	2,596	2,298	2,596	2,298	1,050	8,771	262%
16	Other items	39,334	1,352	39,334	1,352	39,334	1,203	21,150	52%

17	**TOTAL**	**386,121**	**93,066**	**378,097**	**92,778**	**369,008**	**25,475**	**231,375**	**59%**

(*) Exposures in the property development sector for which risk profile may be influenced by market conditions.

		a	b	c	d	e	f		
									31 December 2021
		Gross exposure		**Exposure net of provisions**		**EAD**			
	In millions of euros	**Balance sheet**	**Off-balance sheet**	**Balance sheet**	**Off-balance sheet**	**Balance sheet**	**Off-balance sheet**	**RWAs**	**RWA density**
1	Central governments or central banks	41,953	23	41,917	23	47,181	6	6,529	14%
2	Regional government or local authorities	3,172	2,253	3,166	2,253	2,663	535	624	20%
3	Public sector entities	17,895	1,704	17,891	1,704	18,539	420	2,194	12%
4	Multilateral development banks	185		185		185			0%
5	International organisations	740	25	740	25	740	25		0%
6	Institutions	10,980	1,267	10,977	1,266	11,764	602	4,422	36%
7	Corporates	79,362	37,736	78,911	37,641	70,568	13,314	67,767	81%
8	Retail	96,772	29,278	95,686	29,224	91,667	2,841	64,863	69%
9	Exposures secured by mortgages on immovable property	56,213	6,662	55,618	6,634	51,246	1,536	23,067	44%
10	Exposures in default	10,684	379	5,040	334	4,915	143	5,595	111%
11	Exposures associated with particularly high risk(*)	719	626	699	625	592	296	1,310	148%
12	Covered bonds								
13	Institutions and corporates with a short-term credit assessment								
14	Collective investment undertakings	1		1		1		1	100%
15	Equity	2,036	2,353	2,036	2,353	2,036	901	7,790	265%
16	Other items	40,849	1,067	40,849	1,067	40,849	985	21,586	52%
17	**TOTAL**	**361,561**	**83,375**	**353,716**	**83,148**	**342,946**	**21,603**	**205,747**	**56%**

(*) Exposures in the property development sector for which risk profile may be influenced by market conditions.

In 2022, excluding currency effects, outstanding loans under the standardised approach (excluding Other items), presented a significant increasing trend compared to 2021, focused on CPBS (+EUR 38 billion), mostly in Europe on Retail (+EUR 24 billion), and Corporates (+EUR 14 billion).

The following table gives the breakdown by standard asset class, the distribution by risk weight of the loans and commitments in the book for all the Group's business lines using the standardised approach. Exposure at default was EUR 394 billion at 31 December 2022 compared to EUR 365 billion at 31 December 2021.

TABLE 45: STANDARDISED CREDIT EXPOSURE AT DEFAULT (EU CR5)

		a	e	f	g	i	j	k	m	n	o	p	q
													31 December 2022
													EAD (on-balance and off-balance)
	Risk weight ***In millions of euros***	**0%**	**20%**	**35%**	**50%**	**75%**	**100%**	**150%**	**370%**	**1,250%**	**Other**	**Total**	**of which unrated(*)**
1	Central governments or central banks	35,517	211		192		6,096	1				**42,018**	10,815
2	Regional government or local authorities	706	3,556				66					**4,328**	1,728
3	Public sector entities	11,021	6,718		267		768					**18,773**	11,122
4	Multilateral development banks	221										**221**	
5	International organisations	1,023										**1,023**	132
6	Institutions		9,236		2,085		1,476	107				**12,904**	359
7	Corporates	617	13,395	3,732	9,022		72,789	1,292				**100,846**	67,611
8	Retail			4,193		102,007						**106,201**	106,201
9	Exposures secured by mortgages on immovable property			34,186	16,586	2,815	4,339	808				**58,734**	40,307
10	Exposures in default						3,870	1,209				**5,079**	5,033
11	Exposures associated with particularly high risk(**)							470				**470**	19
12	Covered bonds											**-**	
13	Institutions and corporates with a short-term credit assessment											-	
14	Unit or shares in collective investment undertakings											**-**	
15	Equity								165	135	3,047	**3,347**	3,347
16	Other items	13,777	190		141		16,064				10,366	**40,538**	27,705
17	**TOTAL**	**62,881**	**33,306**	**42,111**	**28,293**	**104,822**	**105,468**	**3,888**	**165**	**135**	**13,414**	**394,482**	**274,379**

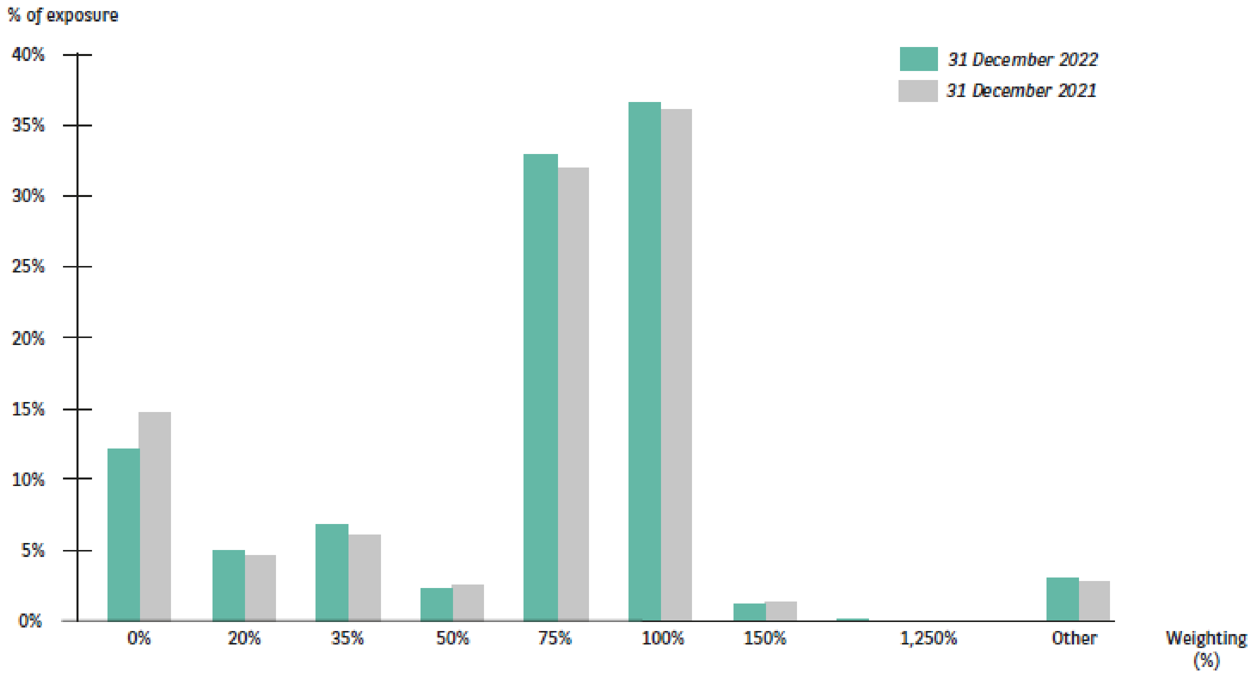
(*) Exposures to counterparties without a credit rating from external rating agencies.
(**) Exposures in the property development sector for which risk profile may be influenced by market conditions.

		a	e	f	g	i	j	k	m	n	o	p	q
													31 December 2021
													EAD (on-balance and off-balance)
Risk weight ***In millions of euros***		**0%**	**20%**	**35%**	**50%**	**75%**	**100%**	**150%**	**370%**	**1,250%**	**Other**	**Total**	**of which unrated(*)**
1	Central governments or central banks	40,376	192		257		6,361	1				**47,187**	21,819
2	Regional government or local authorities	375	2,750				74					**3,199**	1,054
3	Public sector entities	11,825	6,118		75		941					**18,959**	11,984
4	Multilateral development banks	185										**185**	
5	International organisations	765										**765**	34
6	Institutions		8,458		2,315		1,553	41				**12,366**	580
7	Corporates	790	11,907	2,793	6,047		61,206	1,137				**83,881**	56,414
8	Retail			4,006		90,502						**94,508**	94,508
9	Exposures secured by mortgages on immovable property			29,476	18,091	2,378	2,803	34				**52,782**	35,309
10	Exposures in default						3,985	1,073				**5,058**	5,021
11	Exposures associated with particularly high risk(**)							888				**888**	
12	Covered bonds											**-**	
13	Institutions and corporates with a short-term credit assessment												
14	Unit or shares in collective investment undertakings						1					**1**	1
15	Equity								97	123	2,716	**2,936**	2,936
16	Other items	16,285	88		951		16,164				8,346	**41,834**	25,890
17	**TOTAL**	**70,602**	**29,512**	**36,275**	**27,736**	**92,880**	**93,087**	**3,174**	**97**	**123**	**11,061**	**364,549**	**255,550**

(*) Exposures to counterparties without a credit rating from external rating agencies.
(**) Exposures in the property development sector for which risk profile may be influenced by market conditions.

The following chart shows the breakdown by risk weight of EAD outstandings relating to credit risk for all the Group's business lines, measured using the standardised approach.

FIGURE 6: STANDARDISED EXPOSURE AT DEFAULT BY RISK WEIGHT



CREDIT RISK: EQUITIES UNDER THE SIMPLE WEIGHTING METHOD

Exposure

Exposures under the simple weighting method at 31 December 2022 amounted to EUR 12.1 billion, *versus* EUR 14.4 billion at 31 December 2021.

Since 30 June 2021, exposures in the form of units or shares in undertakings for collective investment (UCIs) are treated in accordance with the provisions of articles 132 to 132c of Regulation (EU) No. 2019/876 (transparency approach) and no longer using the simple weighting method. The underlying exposures of these UCI units are treated according to the standardised approach and presented in tables CR4 and CR5, mainly in the line "Equity" (see previous section).

Scope

The equities held by the Group outside trading portfolios are securities "conferring residual and subordinated rights on issuer's assets or income, or securities representing a similar economic nature". They encompass:

- listed and unlisted equities, including shares in investment funds;
- embedded options of convertible bonds, redeemable or exchangeable for equities;
- equity options;
- Super Subordinated Securities;
- private funds on given commitments;
- equity holdings hedge;
- shares of consolidated entities using the equity method.

The scope of exposures processed according to the simple weighting method does not include the following items:

- stakes higher than 10% in credit or financial institutions, mainly consolidated by the equity method or held as financial assets at fair value through equity, are exempt from the equity deduction, being weighted at a flat rate of 250% (exposure of EUR 4.6 billion at 31 December 2022 compared with EUR 4.3 billion at 31 December 2021);
- exposures in the form of units or shares of undertakings for collective investment (UCI) treated according to the transparency approach in accordance with the provisions of articles 132 to 132c of Regulation (EU) No. 2019/876 (exposure of EUR 4.9 billion at 31 December 2022 compared with EUR 4.2 billion at 31 December 2021).

Accounting principles and valuation methods

Accounting principles and valuation methods are set out in note 1.e to the consolidated financial statements – *Financial assets and liabilities*.

Total gains and losses

Total unrealised gains and losses recorded in shareholders' equity are set out in note 4.c. to the consolidated financial statements – *Financial assets at fair value through equity*.

Risk-weighted assets

The simple weighting method gives the following risk weights for the calculation of risk-weighted assets:

- 190% for investments held for medium/long-term valuation purposes within the activity of the Principal Investments business, as well as private equity exposures in diversified portfolios in line with the Bank's business line activities;
- 290% for exposures in the form of listed securities, including primarily investments related to the Bank's business line activities. In addition, some exposures relating to Principal Investments are also included in this category;
- 370% for all other exposures in the form of equities, primarily including entities consolidated using the equity method (including the Group's insurance entities in the prudential scope that are included in the Table 47 *Insurance undertakings (EU INS1)*). Furthermore, this risk weight is also applied to unlisted investments in non-diversified portfolios.

TABLE 46: EQUITY POSITIONS UNDER THE SIMPLE WEIGHTING METHOD (EU CR10)

	a	b	c	d	e	f
						31 December 2022
In millions of euros	**On-balance sheet gross exposure**	**Off-balance sheet gross exposure**	**Risk weight**	**Exposure value**	**Risk-weighted exposure amount**	**Expected loss amount**
Private equity exposures	1,529	50	190%	1,554	2,952	12
Exchange-traded equity exposures	1,026		290%	1,026	2,976	8
Other equity exposures	9,531		370%	9,531	35,263	229
TOTAL	**12,086**	**50**		**12,111**	**41,192**	**249**

	a	b	c	d	e	f
						31 December 2021
In millions of euros	**On-balance sheet gross exposure**	**Off-balance sheet gross exposure**	**Risk weight**	**Exposure value**	**Risk-weighted exposure amount**	**Expected loss amount**
Private equity exposures	1,207	80	190%	1,247	2,370	10
Exchange-traded equity exposures	1,057		290%	1,057	3,066	8
Other equity exposures	12,051		370%	12,051	44,589	289
TOTAL	**14,316**	**80**		**14,356**	**50,025**	**308**

The decrease of EUR 9 billion in risk-weighted assets in 2022 is mainly linked to exposure to investments in insurance companies impacted by market effects.

The Group does not use the simple weighting method for specialised financing portfolios.

TABLE 47: INSURANCE UNDERTAKINGS (EU INS1)

		a	b
In millions of euros		**31 December 2022**	**31 December 2021**
1	Holdings in insurance companies(*) (before 370% risk weight)	4,561	7,723
TOTAL RISK-WEIGHTED ASSETS		**16,876**	**28,575**

(*) Significant financial holdings in insurance companies consolidated by the equity method within the prudential scope, benefitting from the provisions of article 49 of Regulation (EU) No. 575/2013 on exemptions from deduction from regulatory capital of holdings in an insurance company. Under the provisions of article 48 of Regulation (EU) No. 575/2013, a potential deduction from regulatory capital would have a limited impact with a decrease of less than 10 basis points in the CET1 ratio.

EXPOSURES, PROVISIONS AND COST OF RISK [Audited]

Impaired exposures (stage 3) related to assets at amortised cost and financing and guarantee commitments given, as well as the guarantees received as collateral, are presented in note 4.f to the financial statements. The definition of impaired loans (stage 3) is presented in note 1.e.5 paragraph *Definition of default*.

The following table shows the carrying amount of performing and non-performing[1] financial assets included in the prudential consolidation scope.

An exposure is deemed to be non-performing when it falls into one of the following categories:

- exposures in default;
- 90 days past-due exposures which are not in default;
- restructured loans (see the *Restructured loans* section) during the one-year minimal period required before returning to performing status.

In this part, in accordance with the Commission Implementing Regulation (EU) No. 2021/637, the scope of the tables in this section includes the following items:

- current accounts with central banks (cash accounts are not considered);
- loans and receivables and debt securities at amortised cost;
- loans and receivables and debt securities at fair value through equity;
- loans and receivables and debt securities at fair value through profit or loss excluding the trading portfolio;
- financing and guarantee commitments outside the trading portfolio.

Exposures in default include impaired outstandings (stage 3) as well as doubtful loans and receivables and debt securities at fair value through profit or loss excluding the trading portfolio.

The classifications used for exposures shown are taken from financial reports intended for the supervisory authority[2] and so differ from the exposure classes usually used within the context of Pillar 3. The classification includes:

- central banks;
- public administrations including mainly central governments, regional or local authorities and international organisations;
- credit institutions including credit institutions and multilateral development banks;
- other financial corporations including institutions (notably supervised investment companies and clearing houses) and corporations (mainly investment funds, pension funds and insurance companies);
- non-financial corporations including mainly corporations and small and medium enterprises (SME);
- households: mainly non-SME retail portfolio.

In addition, in accordance with Appendices III and V of Implementing Regulation (EU) No. 680/2014 regarding supervisory reporting of financial institutions, the assets of activities held for sale[3] for the items listed above, are presented on a separate line in the tables.

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1 *At 31 December 2022, the Group's non-performing loans ratio was 2.1%, compared with 2.3% at 31 December 2021. This ratio is used by the European Banking Authority to monitor non-performing outstandings in Europe. It is calculated on the basis of gross outstanding of loans, receivables and deposits with central banks, not netted of guarantees received.*

2 *Appendices III and V of Implementing Regulation (EU) No. 680/2014 on supervisory reporting.*

3 *See note 7.d Discontinued activities to the consolidated financial statements.*

TABLE 48: PERFORMING AND NON-PERFORMING EXPOSURES AND RELATED PROVISIONS (EU CR1) [Audited]

		a	b	c	d	e	f	g	h	i	j	k	l	n	o
														31 December 2022	
		Gross carrying amount						**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**						**Collateral and financial guarantees received**	
		Performing exposures			**Non-performing exposures**			**Performing exposures**			**Non-performing exposures**				
In millions of euros			**of which stage 1**	**of which stage 2**		**of which stage 1 & 2**	**of which defaulted**		**of which stage 1**	**of which stage 2**		**of which stage 1 & 2**	**of which defaulted**	**On performing exposures**	**On non-performing exposures**
005	**Current accounts at central banks and other demand deposits**	**326,410**	**325,762**	**648**	**4**	**1**	**3**	**(29)**	**(20)**	**(9)**	**(1)**		**(1)**	**829**	
010	**Loans and advances**	**905,208**	**818,136**	**87,072**	**26,337**	**447**	**25,890**	**(4,862)**	**(2,045)**	**(2,817)**	**(13,513)**	**(10)**	**(13,503)**	**540,589**	**8,359**
020	Central banks	13,619	13,612	7										4,807	
030	General governments	31,523	30,155	1,368	199	99	100	(15)	(6)	(9)	(26)	(2)	(24)	8,138	151
040	Credit institutions	8,044	7,912	132	84	1	83	(13)	(6)	(7)	(79)		(79)	3,817	1
050	Other financial corporations	84,667	79,895	4,772	1,106		1,106	(169)	(70)	(99)	(778)		(778)	25,770	284
060	Non-financial corporations	437,918	374,954	62,964	13,196	329	12,867	(2,267)	(803)	(1,464)	(6,920)	(7)	(6,913)	267,929	4,711
070	*of which SMEs*	*125,350*	*110,545*	*14,805*	*4,984*	*89*	*4,895*	*(804)*	*(327)*	*(477)*	*(2,277)*	*(4)*	*(2,273)*	*87,527*	*2,154*
080	Households	329,437	311,608	17,829	11,752	18	11,734	(2,398)	(1,160)	(1,238)	(5,710)	(1)	(5,709)	230,128	3,212
090	**Debt Securities**	**154,741**	**154,209**	**532**	**348**		**348**	**(68)**	**(42)**	**(26)**	**(231)**		**(231)**	**3,182**	**20**
100	Central banks	6,012	6,012												
110	General governments	105,318	104,965	353				(32)	(23)	(9)				476	
120	Credit institutions	13,320	13,320		103		103	(5)	(5)		(103)		(103)	2,390	

		a	b	c	d	e	f	g	h	i	j	k	l	n	o
															31 December 2022
		Gross carrying amount						**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**						**Collateral and financial guarantees received**	
		Performing exposures			**Non-performing exposures**			**Performing exposures**			**Non-performing exposures**				
In millions of euros			**of which stage 1**	**of which stage 2**		**of which stage 1 & 2**	**of which defaulted**		**of which stage 1**	**of which stage 2**		**of which stage 1 & 2**	**of which defaulted**	**On performing exposures**	**On non-performing exposures**
130	Other financial corporations	24,801	24,635	166	111		111	(24)	(7)	(17)	(44)		(44)	316	
140	Non-financial corporations	5,290	5,277	13	134		134	(7)	(7)		(84)		(84)		20
	Assets held for sale	**79,542**	**76,392**	**3,150**	**553**		**553**	**(267)**	**(141)**	**(126)**	**(62)**		**(62)**	**46,754**	**283**
150	**Off-balance sheet exposures**	**565,733**	**533,619**	**32,114**	**1,730**		**1,730**	**(664)**	**(325)**	**(339)**	**(316)**		**(316)**	**127,110**	**386**
160	Central banks	50,759	50,742	17	1		1							48,718	
170	General governments	12,256	11,128	1,128	10		10	(6)	(2)	(4)				947	
180	Credit institutions	13,832	13,033	799	1		1	(12)	(5)	(7)				652	
190	Other financial corporations	68,425	66,541	1,884	24		24	(50)	(36)	(14)	(9)		(9)	15,334	5
200	Non-financial corporations	363,252	336,133	27,119	1,489		1,489	(500)	(221)	(279)	(299)		(299)	57,571	377
210	Households	57,209	56,042	1,167	205		205	(96)	(61)	(35)	(8)		(8)	3,888	4
220	**TOTAL**	**2,031,634**	**1,908,118**	**123,516**	**28,972**	**448**	**28,524**	**(5,890)**	**(2,573)**	**(3,317)**	**(14,123)**	**(10)**	**(14,113)**	**718,464**	**9,048**

		a	b	c	d	e	f	g	h	i	j	k	l	n	o
															31 December 2021
					Gross carrying amount				**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**					**Collateral and financial guarantees received**	
				Performing exposures			**Non-performing exposures**			**Performing exposures**			**Non-performing exposures**		
In millions of euros			**of which stage 1**	**of which stage 2**		**of which stage 1 & 2**	**of which defaulted**		**of which stage 1**	**of which stage 2**		**of which stage 1 & 2**	**of which defaulted**	**On performing exposures**	**On non-performing exposures**
005	**Current accounts at central banks and other demand deposits**	**354,453**	**354,163**	**290**	**9**	**1**	**8**	**(22)**	**(16)**	**(6)**	**(4)**		**(4)**	**287**	
010	**Loans and advances**	**852,797**	**748,331**	**104,466**	**28,994**	**390**	**28,604**	**(4,578)**	**(1,881)**	**(2,697)**	**(15,517)**	**(6)**	**(15,511)**	**494,028**	**8,907**
020	Central banks	2,885	2,883	2										1,674	
030	General governments	28,873	27,293	1,580	209	116	93	(20)	(5)	(15)	(29)	(3)	(26)	7,743	120
040	Credit institutions	10,071	9,905	166	78		78	(11)	(10)	(1)	(74)		(74)	3,003	1
050	Other financial corporations	91,970	87,352	4,618	1,066	7	1,059	(159)	(54)	(105)	(672)		(672)	15,584	301
060	Non-financial corporations	402,999	340,888	62,111	14,607	234	14,373	(2,063)	(607)	(1,456)	(8,182)	(2)	(8,180)	240,729	5,018
070	*of which SMEs*	*121,242*	*100,494*	*20,748*	*5,678*	*73*	*5,605*	*(820)*	*(269)*	*(551)*	*(2,797)*	*(1)*	*(2,796)*	*85,405*	*2,332*
080	Households	315,999	280,010	35,989	13,034	33	13,001	(2,325)	(1,205)	(1,120)	(6,560)	(1)	(6,559)	225,295	3,467
090	**Debt Securities**	**155,295**	**154,680**	**615**	**491**		**491**	**(81)**	**(27)**	**(54)**	**(278)**		**(278)**	**924**	**25**
100	Central banks	6,274	6,250	24	1		1				(1)		(1)		
110	General governments	110,911	110,680	231	7		7	(29)	(25)	(4)					
120	Credit institutions	15,907	15,907		102		102				(101)		(101)	924	
130	Other financial corporations	18,582	18,258	324	146		146	(50)	(1)	(49)	(32)		(32)		
140	Non-financial corporations	3,621	3,585	36	235		235	(2)	(1)	(1)	(144)		(144)		25
	Assets held for sale	**85,135**	**80,765**	**4,370**	**409**		**409**	**(389)**	**(172)**	**(217)**	**(87)**		**(87)**	**44,531**	**271**
150	**Off-balance sheet exposures**	**536,752**	**502,063**	**34,689**	**1,951**	**18**	**1,933**	**(603)**	**(230)**	**(373)**	**(354)**		**(354)**	**116,926**	**259**
160	Central banks	20,209	20,207	2										18,283	
170	General governments	34,137	32,701	1,436	8		8	(8)	(1)	(7)				22,896	1
180	Credit institutions	13,513	12,976	537				(11)	(4)	(7)				300	

		a	b	c	d	e	f	g	h	i	j	k	l	n	o
															31 December 2021
							Gross carrying amount						**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**		**Collateral and financial guarantees received**
				Performing exposures			**Non-performing exposures**			**Performing exposures**			**Non-performing exposures**		
In millions of euros			**of which stage 1**	**of which stage 2**		**of which stage 1 & 2**	**of which defaulted**		**of which stage 1**	**of which stage 2**		**of which stage 1 & 2**	**of which defaulted**	**On performing exposures**	**On non-performing exposures**
190	Other financial corporations	79,424	76,596	2,828	50		50	(35)	(16)	(19)	(16)		(16)	22,455	2
200	Non-financial corporations	332,992	304,779	28,213	1,660	14	1,646	(458)	(150)	(308)	(328)		(328)	49,284	251
210	Households	56,477	54,804	1,673	233	4	229	(91)	(59)	(32)	(10)		(10)	3,708	5
220	**TOTAL**	**1,984,432**	**1,840,002**	**144,430**	**31,854**	**409**	**31,445**	**(5,673)**	**(2,326)**	**(3,347)**	**(16,240)**	**(6)**	**(16,234)**	**656,696**	**9,462**

Changes in the stock of non-performing loans and advances (EU CR2) are presented in note 4.f to the financial statements.

TABLE 49: PERFORMING AND NON-PERFORMING EXPOSURES BY PAST DUE DAYS (EU CQ3) [Audited]

		a	b	c	d	e	f	g	h	i	j	k	l
													31 December 2021
		Performing exposures			**Non-performing exposures**								
	In millions of euros		**Not past due or ≤ 30 days**	**> 30 days ≤ 90 days**		**Unlikely to pay that are not past due or are past due ≤ 90 days**	**> 90 days ≤ 180 days**	**> 180 days ≤ 1 year**	**> 1 year ≤ 2 years**	**> 2 years ≤ 5 years**	**> 5 year ≤ 7 years**	**> 7 years**	**of which defaulted**
005	**Current accounts at central banks and other demand deposits**	**326,410**	**326,410**		**4**	**1**						**3**	**3**
010	**Loans and advances**	**905,208**	**900,706**	**4,502**	**26,337**	**7,736**	**1,773**	**2,163**	**2,246**	**5,434**	**1,662**	**5,323**	**25,890**
020	Central banks	13,619	13,619										
030	General governments	31,523	31,462	61	199	35	6	7	40	68	35	8	100
040	Credit institutions	8,044	8,028	16	84				3			81	83
050	Other financial corporations	84,667	84,598	69	1,106	572	1	10	64	251	5	203	1,106
060	Non-financial corporations	437,918	434,683	3,235	13,196	4,314	687	970	903	2,286	968	3,068	12,867
070	*of which SMEs*	*125,350*	*124,698*	*652*	*4,984*	*1,422*	*365*	*472*	*508*	*914*	*401*	*902*	*4,895*
080	Households	329,437	328,316	1,121	11,752	2,815	1,079	1,176	1,236	2,829	654	1,963	11,734
090	**Debt securities**	**154,741**	**154,741**		**348**	**232**				**4**	**101**	**11**	**348**
100	Central banks	6,012	6,012										
110	General governments	105,318	105,318										
120	Credit institutions	13,320	13,320		103	4					99		103
130	Other financial corporations	24,801	24,801		111	100					2	9	111
140	Non-financial corporations	5,290	5,290		134	128				4		2	134
	Assets held for sale	**79,542**	**79,130**	**412**	**553**	**372**	**67**	**91**	**15**	**8**			**553**
150	**Off-balance sheet exposures**	**565,733**			**1,730**								**1,730**
160	Central banks	50,759			1								1
170	General governments	12,256			10								10
180	Credit institutions	13,832			1								1
190	Other financial corporations	68,425			24								24

200	Non-financial corporations	363,252			1,489								1,489
210	Households	57,209			205								205
220	**TOTAL**	**2,031,634**	**1,460,987**	**4,914**	**28,972**	**8,341**	**1,840**	**2,254**	**2,261**	**5,446**	**1,763**	**5,337**	**28,524**

		a	b	c	d	e	f	g	h	i	j	k	l
													31 December 2021
			Performing exposures										**Non-performing exposures**
In millions of euros			**Not past due or ≤ 30 days**	**> 30 days ≤ 90 days**		**Unlikely to pay that are not past due or are past due ≤ 90 days**	**> 90 days ≤ 180 days**	**> 180 days ≤ 1 year**	**> 1 year ≤ 2 years**	**> 2 years ≤ 5 years**	**> 5 year ≤ 7 years**	**> 7 years**	**of which defaulted**
005	**Current accounts at central banks and other demand deposits**	**354,453**	**354,452**	**1**	**9**	**6**						**3**	**8**
010	**Loans and advances**	**852,797**	**849,748**	**3,049**	**28,994**	**8,481**	**1,381**	**1,590**	**3,445**	**5,629**	**2,140**	**6,328**	**28,604**
020	Central banks	2,885	2,885										
030	General governments	28,873	28,850	23	209	20	46	5	1	104	19	14	93
040	Credit institutions	10,071	10,069	2	78				2		11	65	78
050	Other financial corporations	91,970	91,955	15	1,066	478	22	42	119	189	27	189	1,059
060	Non-financial corporations	402,999	401,013	1,986	14,607	4,850	380	571	1,837	2,045	1,176	3,748	14,373
070	*of which SMEs*	*121,242*	*120,709*	*533*	*5,678*	*1,508*	*236*	*352*	*624*	*1,174*	*548*	*1,236*	*5,605*
080	Households	315,999	314,976	1,023	13,034	3,133	933	972	1,486	3,291	907	2,312	13,001
090	**Debt securities**	**155,295**	**155,295**		**491**	**365**			**4**	**102**		**20**	**491**
100	Central banks	6,274	6,274		1	1							1
110	General governments	110,911	110,911		7	7							7
120	Credit institutions	15,907	15,907		102	1				99		2	102
130	Other	18,582	18,582		146	131				3		12	146

		a	b	c	d	e	f	g	h	i	j	k	l
													31 December 2021
			Performing exposures										**Non-performing exposures**
	In millions of euros		**Not past due or ≤ 30 days**	**> 30 days ≤ 90 days**		**Unlikely to pay that are not past due or are past due ≤ 90 days**	**> 90 days ≤ 180 days**	**> 180 days ≤ 1 year**	**> 1 year ≤ 2 years**	**> 2 years ≤ 5 years**	**> 5 year ≤ 7 years**	**> 7 years**	**of which defaulted**
	financial corporations												
140	Non-financial corporations	3,621	3,621		235	225			4			6	235
	Assets held for sale	**85,135**	**84,583**	**552**	**409**	**304**	**40**	**45**	**18**	**2**			**409**

		a	b	c	d	e	f	g	h	i	j	k	l
													31 December 2021
			Performing exposures										**Non-performing exposures**
	In millions of euros		**Not past due or ≤ 30 days**	**> 30 days ≤ 90 days**		**Unlikely to pay that are not past due or are past due ≤ 90 days**	**> 90 days ≤ 180 days**	**> 180 days ≤ 1 year**	**> 1 year ≤ 2 years**	**> 2 years ≤ 5 years**	**> 5 year ≤ 7 years**	**> 7 years**	**of which defaulted**
150	**Off-balance sheet exposures**	**536,752**			**1,951**								**1,933**
160	Central banks	20,209											
170	General governments	34,137			8								8
180	Credit institutions	13,513											
190	Other financial corporations	79,424			50								50
200	Non-financial corporations	332,992			1,660								1,646
210	Households	56,477			233								229
220	**TOTAL**	**1,984,432**	**1,444,078**	**3,602**	**31,854**	**9,156**	**1,421**	**1,635**	**3,467**	**5,733**	**2,140**	**6,351**	**31,445**

The table (EU CQ4) below shows the on- and off-balance sheet exposures. These exposures contribute to all Group risks, mainly credit risk.

TABLEAU 50: EXPOSURES AND PROVISIONS BY GEOGRAPHIC BREAKDOWN (EU CQ4) [Audited]

		a		b	c	d	e			f	g
											31 December 2022
		Gross carrying amount/Nominal amount					Accumulated impairment				
			of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	of which non-performing							
	In millions of euros				of which defaulted	of which loans and advances subject to impairment		of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	of which defaulted	Provisions on off-balance sheet commitments and financial guarantees given	Accumulated negative due to credit risk on non-performing exposures changes in fair value
010	**On balance sheet exposures**	**1,493,143**	**91,775**	**27,242**	**26,794**	**1,486,697**	**(18,972)**	**(2,978)**	**(13,736)**	**-**	**(61)**
	of which balance sheet exposures of continuing activities	**1,413,048**	**88,625**	**26,689**	**26,241**	**1,406,602**	**(18,643)**	**(2,852)**	**(13,674)**		**(61)**
	Europe(*)	**1,122,545**	**67,479**	**22,341**	**22,137**	**1,118,922**	**(14,740)**	**(2,322)**	**(10,662)**		**(61)**
	France	518,296	25,082	7,657	7,518	516,899	(4,949)	(855)	(3,518)		(17)
	Belgium	172,415	9,047	2,361	2,353	172,402	(1,368)	(180)	(1,035)		
	Luxembourg	52,880	2,334	300	298	52,674	(176)	(34)	(113)		(22)
	Italy	135,910	8,587	5,823	5,818	135,218	(4,068)	(543)	(3,132)		(16)
	United Kingdom	54,639	6,040	1,149	1,145	54,172	(799)	(119)	(585)		(3)
	Germany	47,965	5,405	1,224	1,207	47,620	(976)	(178)	(673)		
	Netherlands	21,341	1,803	118	114	21,321	(135)	(63)	(52)		
	Other European countries	119,099	9,181	3,709	3,684	118,616	(2,269)	(350)	(1,554)		(3)
	North America	**103,128**	**7,354**	**330**	**200**	**101,157**	**(238)**	**(112)**	**(94)**		
	Asia Pacific	**96,915**	**5,109**	**379**	**375**	**96,707**	**(356)**	**(78)**	**(174)**		
	Japan	23,942	1,225	70	70	23,942	(9)	(5)	(3)		
	North Asia	29,143	2,162	63	61	29,129	(132)	(24)	(41)		
	South-East Asia (ASEAN)	23,895	665	166	165	23,825	(168)	(38)	(108)		
	Indian peninsula & Pacific	19,935	1,057	80	79	19,811	(47)	(11)	(22)		

		a		b	c	d	e			f	g
											31 December 2022
		Gross carrying amount/Nominal amount					Accumulated impairment				
In millions of euros			of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	of which non-performing	of which defaulted	of which loans and advances subject to impairment		of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	of which defaulted	Provisions on off-balance sheet commitments and financial guarantees given	Accumulated negative due to credit risk on non-performing exposures changes in fair value
070	**Rest of the world**	**90,460**	**8,683**	**3,639**	**3,529**	**89,816**	**(3,309)**	**(340)**	**(2,744)**		
	Türkiye	14,962	911	233	233	14,962	(338)	(115)	(151)		
	Mediterranean	8,886	1,485	818	809	8,886	(722)	(75)	(608)		
	Gulf States & Africa	14,696	1,099	2,005	2,003	14,696	(1,734)	(71)	(1,613)		
	Latin America	17,922	1,999	295	294	17,922	(313)	(37)	(226)		
	Other countries	33,994	3,189	288	190	33,350	(202)	(42)	(146)		
	of which balance sheet exposures of assets held for sale	**80,095**	**3,150**	**553**	**553**	**80,095**	**(329)**	**(126)**	**(62)**		
080	**Off-balance sheet exposures**	**567,463**	**32,114**	**1,729**	**1,730**	**567,463**	**(980)**	**(338)**	**(316)**	**(980)**	**-**
	Europe(*)	**345,858**	**18,237**	**1,286**	**1,286**	**345,858**	**(633)**	**(204)**	**(196)**	**(633)**	
	France	101,899	4,072	179	179	101,899	(158)	(49)	(41)	(158)	
	Belgium	40,336	3,115	252	252	40,336	(125)	(22)	(70)	(125)	
	Luxembourg	16,102	614	20	20	16,102	(20)	(7)	(1)	(20)	
	Italy	36,399	1,519	340	340	36,399	(104)	(30)	(44)	(104)	
	United Kingdom	42,349	3,014	326	326	42,349	(60)	(33)	(1)	(60)	
	Germany	31,969	1,545	50	50	31,969	(64)	(25)	(18)	(64)	
	Netherlands	15,774	946	20	20	15,774	(24)	(11)	(5)	(24)	
	Other European countries	61,030	3,412	99	99	61,030	(78)	(27)	(16)	(78)	
	North America	**125,435**	**8,554**	**115**	**115**	**125,435**	**(133)**	**(67)**	**(19)**	**(133)**	
	Asia Pacific	**34,728**	**1,655**	**3**	**3**	**34,728**	**(20)**	**(8)**		**(20)**	
	Japan	2,764	158			2,764	(1)			(1)	
	North Asia	18,354	588			18,354	(10)	(4)		(10)	

		a		b	c	d	e			f	g
											31 December 2022
		Gross carrying amount/Nominal amount					**Accumulated impairment**				
			of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	**of which non-performing**				**of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)**			
In millions of euros					**of which defaulted**	**of which loans and advances subject to impairment**			**of which defaulted**	**Provisions on off-balance sheet commitments and financial guarantees given**	**Accumulated negative due to credit risk on non-performing exposures changes in fair value**
	South-East Asia (ASEAN)	5,841	263	3	3	5,841	(4)	(1)		(5)	
	Indian peninsula & Pacific	7,769	646			7,769	(5)	(3)		(4)	
140	**Rest of the world**	**61,442**	**3,668**	**325**	**325**	**61,442**	**(194)**	**(60)**	**(101)**	**(194)**	
	Türkiye	4,891	338	13	13	4,891	(35)	(19)	(7)	(35)	
	Mediterranean	2,492	287	92	92	2,492	(54)	(11)	(37)	(54)	
	Gulf States & Africa	40,860	578	73	73	40,860	(79)	(14)	(56)	(79)	
	Latin America	5,316	1,026	141	141	5,316	(16)	(10)	(1)	(16)	
	Other countries	7,883	1,439	6	6	7,883	(10)	(6)		(10)	
150	**TOTAL**	**2,060,606**	**123,889**	**28,971**	**28,524**	**2,054,160**	**(19,952)**	**(3,316)**	**(14,052)**	**(980)**	**(61)**

(*) Within the European Union, the European Free Trade Association (EFTA) and the United Kingdom.

		a		b	c	d	e			f	g
											31 December 2021
		Gross carrying amount/Nominal amount					**Accumulated impairment**				
			of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	**of which non-performing**				**of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)**			
	In millions of euros				**of which defaulted**	**of which loans and advances subject to impairment**			**of which defaulted**	**Provisions on off-balance sheet commitments and financial guarantees given**	**Accumulated negative due to credit risk on non-performing exposures changes in fair value**
010	**On balance sheet exposures**	**1,477,584**	**110,059**	**29,903**	**29,512**	**1,470,951**	**(20,892)**	**(2,980)**	**(15,815)**	**-**	**(64)**
	of which balance sheet exposures of continuing activities	**1,392,039**	**105,689**	**29,494**	**29,103**	**1,385,407**	**(20,416)**	**(2,763)**	**(15,728)**		**(64)**
	Europe(*)	**1,128,857**	**88,462**	**24,523**	**24,280**	**1,124,518**	**(16,142)**	**(2,270)**	**(12,245)**		**(62)**
	France	495,890	43,880	7,947	7,828	494,407	(5,479)	(987)	(4,028)		(22)
	Belgium	186,737	12,722	2,414	2,325	186,714	(1,330)	(184)	(1,055)		
	Luxembourg	55,596	1,525	199	197	55,452	(154)	(33)	(94)		(3)
	Italy	135,674	8,038	7,495	7,494	135,226	(4,940)	(489)	(4,034)		(29)
	United Kingdom	52,301	6,044	1,557	1,552	51,834	(1,023)	(92)	(809)		(1)
	Germany	53,544	4,436	1,193	1,181	52,396	(876)	(125)	(643)		
	Netherlands	21,250	2,264	122	120	21,220	(106)	(46)	(46)		
	Other European countries	127,866	9,552	3,597	3,584	127,270	(2,234)	(313)	(1,535)		(7)
	North America	**82,882**	**4,570**	**265**	**248**	**82,836**	**(215)**	**(99)**	**(104)**		**(1)**
	Asia Pacific	**85,311**	**4,712**	**486**	**483**	**84,740**	**(354)**	**(52)**	**(238)**		**(1)**
	Japan	15,456	1,270	71	71	15,456	(14)	(11)	(2)		
	North Asia	34,369	1,292	74	72	34,038	(97)	(12)	(42)		
	South-East Asia (ASEAN)	15,412	810	177	176	15,206	(157)	(20)	(123)		
	Indian peninsula & Pacific	20,074	1,339	164	163	20,040	(86)	(8)	(72)		(1)

		a		b	c	d	e			f	g
											31 December 2021
		Gross carrying amount/Nominal amount					**Accumulated impairment**				
	In millions of euros		**of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)**	**of which non-performing**	**of which defaulted**	**of which loans and advances subject to impairment**		**of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)**	**of which defaulted**	**Provisions on off-balance sheet commitments and financial guarantees given**	**Accumulated negative due to credit risk on non-performing exposures changes in fair value**
70	**Rest of the world**	**94,989**	**7,946**	**4,220**	**4,091**	**93,314**	**(3,705)**	**(341)**	**(3,142)**		
	Türkiye	13,707	1,016	393	393	13,706	(412)	(117)	(230)		
	Mediterranean	8,456	1,584	858	843	8,456	(757)	(110)	(610)		
	Gulf States & Africa	13,683	1,537	2,048	2,046	13,683	(1,802)	(45)	(1,703)		
	Latin America	15,485	1,616	291	289	15,485	(229)	(35)	(158)		
	Other countries	43,659	2,193	630	520	41,984	(505)	(34)	(440)		
	of which balance sheet exposures of assets held for sale	**85,544**	**4,370**	**409**	**409**	**85,544**	**(476)**	**(217)**	**(87)**		
80	**Off-balance sheet exposures**	**538,703**	**34,703**	**1,951**	**1,933**	**538,703**	**(958)**	**(374)**	**(354)**	**(958)**	**-**
	Europe(*)	**338,950**	**22,703**	**1,730**	**1,712**	**338,950**	**(663)**	**(216)**	**(262)**	**(663)**	
	France	97,831	6,668	525	525	97,831	(160)	(64)	(44)	(160)	
	Belgium	40,339	2,532	347	334	40,339	(190)	(50)	(111)	(190)	
	Luxembourg	16,393	1,130	23	23	16,393	(9)	(3)	(1)	(9)	
	Italy	37,174	1,942	285	285	37,174	(101)	(28)	(39)	(101)	
	United Kingdom	37,911	4,335	225	225	37,911	(42)	(29)	(1)	(42)	
	Germany	33,695	1,367	118	118	33,695	(60)	(10)	(35)	(60)	
	Netherlands	15,072	1,180	60	60	15,072	(12)	(3)	(6)	(12)	
	Other European countries	60,536	3,550	147	142	60,536	(87)	(29)	(27)	(87)	
	North America	**117,396**	**6,769**	**69**	**69**	**117,396**	**(120)**	**(97)**	**(9)**	**(120)**	
	Asia Pacific	**24,381**	**1,453**	**3**	**3**	**24,381**	**(21)**	**(12)**		**(21)**	
	Japan	2,260				2,260					
	North Asia	8,259	626	1	1	8,259	(14)	(9)		(14)	

		a		b	c	d	e			f	g
											31 December 2021
		Gross carrying amount/Nominal amount					**Accumulated impairment**				
			of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)	**of which non-performing**				**of which instruments with significant increase in credit risk since initial recognition but not credit-impaired (Stage 2)**		**Provisions on off-balance sheet commitments and financial guarantees given**	**Accumulated negative due to credit risk on non-performing exposures changes in fair value**
In millions of euros					**of which defaulted**	**of which loans and advances subject to impairment**			**of which defaulted**		
	South-East Asia (ASEAN)	5,941	230	2	2	5,941	(4)	(1)		(4)	
	Indian peninsula & Pacific	7,920	598			7,920	(4)	(2)		(4)	
140	**Rest of the world**	**57,976**	**3,777**	**149**	**148**	**57,976**	**(154)**	**(47)**	**(82)**	**(154)**	
	Türkiye	3,842	553	16	16	3,842	(25)	(16)	(3)	(25)	
	Mediterranean	2,602	499	91	91	2,602	(43)	(10)	(25)	(43)	
	Gulf States & Africa	39,507	616	31	31	39,507	(73)	(13)	(53)	(73)	
	Latin America	4,901	604	2	2	4,901	(5)	(3)		(5)	
	Other countries	7,125	1,505	8	8	7,125	(7)	(5)	(1)	(7)	
150	**TOTAL**	**2,016,287**	**144,762**	**31,854**	**31,445**	**2,009,654**	**(21,850)**	**(3,354)**	**(16,170)**	**(958)**	**(64)**

(*) Within the European Union, the European Free Trade Association (EFTA) and the United Kingdom.

In accordance with Commission Implementing Regulation (EU) No. 2021/637, the table below (EU CQ5) shows the breakdown of loans and receivables with the scope of non-financial corporations. It does not take into account all exposures to central governments and central banks, credit institutions, financial companies and households. These on-balance sheet and off-balance sheet exposures contribute to all Group risks, mainly credit risk.

These same balance sheet exposures of continuing activities, broken down by sector, are included in Table 114 – Credit quality of exposures by sector and residual maturities of section 5.11 Environmental, social and governance risks of this chapter. In the latter, exposures include, however, debt securities and equity instruments not held for trading. The breakdown by sector is made on the basis of economic activity as defined by the European Statistical Classification of Economic Activities (NACE), declared by the legal entity counterparty of the asset.

TABLE 51: BREAKDOWN OF LOANS AND ADVANCES AND PROVISIONS TO NON-FINANCIAL CORPORATIONS BY INDUSTRY (EU CQ5) [Audited]

		a		b	c	d	e			f
		31 December 2022								
		Gross carrying amount/Nominal amount					**Accumulated impairment**			
				of which non-performing						
	In millions of euros		**of which instruments with significant increase in credit risk since initial recognition but not credit impaired (Stage2)**		**of which defaulted**	**of which loans and advances subject to impairment**		**of which instruments with significant increase in credit risk since initial recognition but not credit impaired (Stage2)**	**of which defaulted**	**Accumulated negative changes in fair value due to credit risk on non-performing exposures**
	On balance sheet exposures	**482,673**	**64,359**	**13,622**	**13,242**	**479,359**	**(9,306)**	**(1,492)**	**(6,929)**	**(22)**
	of which balance sheet exposures of continuing activities	**451,114**	**63,221**	**13,196**	**12,816**	**447,800**	**(9,165)**	**(1,470)**	**(6,892)**	**(22)**
010	Agriculture, forestry and fishing	13,302	1,409	526	510	13,102	(325)	(69)	(211)	
020	Mining and quarrying	9,452	909	156	155	9,452	(123)	(15)	(93)	
030	Manufacturing	90,538	11,715	2,723	2,687	88,733	(2,238)	(323)	(1,742)	
040	Electricity, gas, steam and air conditioning supply	20,640	1,874	137	136	20,477	(135)	(43)	(68)	
050	Water supply	2,934	195	148	148	2,935	(134)	(4)	(124)	
060	Construction	24,991	3,288	2,262	2,226	24,970	(1,593)	(83)	(1,449)	(3)
070	Wholesale and retail trade	62,880	11,433	1,919	1,818	62,857	(1,287)	(195)	(964)	
080	Transport and storage	30,129	6,804	781	777	30,100	(551)	(121)	(386)	
090	Accommodation and food service activities	7,567	2,299	528	527	7,540	(365)	(113)	(232)	
100	Information and communication	15,925	1,824	204	201	15,435	(177)	(27)	(126)	
110	Financial and insurance actvities	24,136	3,361	664	616	24,038	(346)	(101)	(195)	
120	Real estate activities	65,402	6,708	1,199	1,188	65,209	(649)	(146)	(415)	
130	Professional, scientific and technical activities	20,782	2,592	478	472	20,782	(333)	(55)	(228)	
140	Administrative and support service activities	45,608	4,130	855	852	45,342	(588)	(103)	(444)	
150	Public administration and defence, compulsory social security	288	35	6	5	288	(5)		(4)	
160	Education	817	91	43	43	817	(18)	(2)	(14)	
170	Human health services and	5,606	882	190	187	5,606	(134)	(29)	(94)	

		a		b	c	d	e			f
										31 December 2022
		Gross carrying amount/Nominal amount					**Accumulated impairment**			
			of which instruments with significant increase in credit risk since initial recognition but not credit impaired (Stage2)	**of which non-performing**		**of which loans and advances subject to impairment**		**of which instruments with significant increase in credit risk since initial recognition but not credit impaired (Stage2)**		**Accumulated negative changes in fair value due to credit risk on non-performing exposures**
In millions of euros					**of which defaulted**				**of which defaulted**	
	social work activities									
180	Arts, entertainment and recreation	2,207	433	153	153	2,207	(74)	(17)	(54)	
190	Other services	7,911	3,239	224	115	7,910	(91)	(24)	(49)	(19)
	of which balance sheet exposures of assets held for sale	**31,559**	**1,138**	**426**	**426**	**31,559**	**(141)**	**(22)**	**(37)**	
200	**Off-balance sheet exposures**	**364,740**	**27,119**	**1,489**	**1,489**	**364,740**	**(795)**	**(280)**	**(295)**	**-**
	Agriculture, forestry and fishing	2,164	132	10	10	2,164	(8)	(2)		
	Mining and quarrying	9,136	758	88	88	9,136	(9)	(4)		
	Manufacturing	118,678	7,287	326	326	118,678	(219)	(89)	(50)	
	Electricity, gas, steam and air conditioning supply	26,268	1,300	49	49	26,268	(29)	(9)	(7)	
	Water supply	3,535	170	4	4	3,535	(2)		(1)	
	Construction	34,086	3,754	431	431	34,086	(126)	(30)	(78)	
	Wholesale and retail trade	42,621	2,591	178	178	42,621	(126)	(29)	(70)	
	Transport and storage	21,354	4,634	267	267	21,354	(64)	(49)	(7)	
	Accommodation and food service activities	2,334	167	23	23	2,334	(6)	(2)	(2)	
	Information and communication	21,653	694	18	18	21,653	(16)	(3)	(2)	
	Financial and insurance actvities	21,368	1,091	14	14	21,368	(68)	(14)	(43)	
	Real estate activities	19,422	1,228	29	29	19,422	(22)	(5)	(8)	
	Professional, scientific and technical activities	17,887	1,097	49	49	17,887	(20)	(8)	(2)	
	Administrative and support service activities	14,374	1,152	130	130	14,374	(38)	(19)	(9)	
	Public administration and defence, compulsory social security	748	28			748				
	Education	366	21	1	1	366				

	a		b	c	d	e			f
									31 December 2022
	Gross carrying amount/Nominal amount					**Accumulated impairment**			
		of which instruments with significant increase in credit risk since initial recognition but not credit impaired (Stage2)	**of which non-performing**						
In millions of euros				**of which defaulted**	**of which loans and advances subject to impairment**		**of which instruments with significant increase in credit risk since initial recognition but not credit impaired (Stage2)**	**of which defaulted**	**Accumulated negative changes in fair value due to credit risk on non-performing exposures**
Human health services and social work activities	1,777	147	2	2	1,777	(16)	(2)	(12)	
Arts, entertainment and recreation	1,333	284	7	7	1,333	(6)	(4)		
Other services	5,636	584	39	39	5,636	(20)	(11)	(4)	
TOTAL	**847,413**	**91,478**	**15,111**	**14,731**	**844,099**	**(10,101)**	**(1,772)**	**(7,224)**	**(22)**

		a	b	c	d	e	f
							31 December 2021
		Gross carrying amount/Nominal amount					
			of which non-performing		of which loans and advances subject to impairment	Accumulated impairment	Accumulated negative changes in fair value due to credit risk on non-performing exposures
	In millions of euros			of which defaulted			
	On balance sheet exposures	**446,833**	**14,827**	**14,566**	**44,4752**	**(10,446)**	**-**
	of which balance sheet exposures of continuing activities	**417,607**	**14,607**	**14,347**	**415,526**	**(10,245)**	
010	Agriculture, forestry and fishing	13,096	629	611	12,811	(355)	
020	Mining and quarrying	8,768	511	511	8,768	(438)	
030	Manufacturing	82,820	3,366	3,353	82,819	(2,741)	
040	Electricity, gas, steam and air conditioning supply	21,678	138	138	21,064	(83)	
050	Water supply	2,316	158	158	2,316	(139)	
060	Construction	23,574	2,326	2,307	23,568	(1,626)	
070	Wholesale and retail trade	59,619	2,030	1,978	59,606	(1,491)	
080	Transport and storage	30,900	888	886	30,857	(599)	
090	Accommodation and food service activities	8,490	664	652	8,486	(395)	
100	Information and communication	10,394	172	171	10,394	(139)	
110	Financial and insurance actvities	18,733	253	252	17,890	(242)	
120	Real estate activities	62,950	1,614	1,589	62,694	(904)	
130	Professional, scientific and technical activities	18,865	400	389	18,865	(266)	
140	Administrative and support service activities	38,134	772	768	38,127	(371)	
150	Public administration and defence, compulsory social security	400	54	54	400	(41)	
160	Education	817	36	35	817	(21)	
170	Human health services and social work activities	5,220	165	165	5,213	(119)	
180	Arts, entertainment and recreation	2,076	129	129	2,076	(115)	
190	Other services	8,758	301	200	8,755	(162)	
	of which balance sheet exposures of assets held for sale	**29,226**	**219**	**219**	**29,226**	**(201)**	

Industry risks are monitored in terms of gross exposure[(1)] and risk-weighted assets. Certain sectors, defined in accordance with the principles of the Group's Risk Appetite Statement, are subject to increased monitoring and specific reviews. Their monitoring is performed on a broadened scope, taking into account all the exposures of Business Group, and Legal Entities related to these sectors as defined by the internal risk management nomenclature.

- the leveraged finance sector:

The Group's exposure to Leverage Buy-Out transactions ("LBO") with financial sponsors rises to EUR 18.4 billion at 31 December 2022, or 0.9% of the Group's gross on-balance sheet and off-balance sheet commitments compared to EUR 15.4 billion, or 0.8% at 31 December 2021. These exposures are individually very small with an average amount of EUR 5 million per commitment (EUR 14 million taking account of all business group exposures).

This portfolio has been resilient in the current economic situation, with a decrease of defaulted outstandings (2%, compared to 2.7% in 2021) and also stage 3 provisions (EUR 125 million at 31 December 2022, *versus* EUR 211 million as at 31 December 2021).

Moreover, the Group has reinforced during the year its monitoring and analysis process for leveraged companies, including during the syndication phases, in accordance with the guidelines given by the ECB, the Group introduced a set of new Risk Appetite Statement metrics for Leverage Finance ensuring a reinforced comprehensive supervision of all risks on this portfolio.

- the shipping sector:

  the shipping sector covers a set of segments with very different dynamics: bulk, oil and gas tankers, container carriers, oil services and cruises. In 2022, these different segments were affected in very heterogeneous ways by the evolution of the macro-economic environment. The cruise segment benefitted from a progressive recovery of demand but remains with the burden of banking debt and export finance repayments that were delayed during the pandemic. Some signs of slowdown of the maritime container transport are visible since the second half of 2022, however this segment is still doing very well. Lastly, the dry bulk and tanker segments remain subject to high market volatility due to the consequences of the invasion of Ukraine. LNG and Floating Storage and Regasification Units (FSRUs) benefited from a decrease of Russian natural gas exports to Europe and the change in the geopolitical context.

  The shipping industry has to face new environmental constraints (International Maritime Organisation (IMO) standards) involving investment efforts. A growing number of new orders concern hybrid LNG (Liquefied Natural Gas) propulsion or other technologies with a reduced impact on the environment. At 31 December 2022, gross exposure of the shipping finance sector was EUR 21.5 billion, *i.e.* 1.1% of the Group's on-balance sheet and off-balance sheet credit exposures, compared to EUR 20.4 billion or 1.1% at 31 December 2021. Most of this exposure is borne by Corporate and Institutional Banking (more than 90%, stable compared to 2021), with good geographical diversification of the client base. Doubtful loans account for 3.2% of the Group's exposure to the shipping finance segment (compared to 4.1% of doubtful loans at 31 December 2021) and stage 3 provisions were EUR 230 million (compared to EUR 286 million in provisions at 31 December 2021).

- the aviation sector:

  Business activity in this sector is evenly split between airlines and aircraft leasing companies. The gross exposure is EUR 14.4 billion at 31 December 2022, *i.e.* 0.7% of the Group's total gross on- and off-balance sheet commitments, *versus* EUR 12.9 billion, *i.e.* 0.7% of the Group's total gross commitments at 31 December 2021. The increase of exposure of EUR 1.5 billion is mainly linked to the dollar increase compared to euro and short-term financings intended to be quickly refinanced (bridge, underwriting). Origination continues to be concentrated on leading airlines and the latest technology aircrafts with lower environmental impact.

  The direct and indirect consequences of the invasion of Ukraine are limited on the cost of risk of this portfolio are limited. Thus, the amount of doubtful loans remains low at 31 December 2022, representing 5.2% of the sector's outstandings (*versus* 4.5% in 2021). As aircrafts financing is a highly collateralised business, stage 3 provisions are limited and represent EUR 111 million at 31 December 2022, compared to EUR 91 million at 31 December 2021;

- the commercial real estate sector:

  The commercial real estate sector comprises a set of sub-segments with very different dynamics depending on the destination of the asset (logistics, office properties, accommodation and tourism, shopping centres, *etc.*) and the nature of the owner (institutional investor, asset manager, Private Equity funds, industrial, promoter, *etc.*) The portfolio is resilient, although certain sub-segments were more heavily affected, such as offices in the inner suburbs, shopping centers or tourist accommodation, which are gradually recovering from the consequences of the health crisis.

  At 31 December 2022, the gross exposure to the commercial real estate sector is EUR 82.6 billion, of which EUR 11.2 billion held for sale at Bank of the West (EUR 76.6 billion at 31 December 2021), *i.e.* 4.2% of the Group's total gross on- and off-balance sheet commitments (4.0% of total commitments in 2021), mainly in Europe and highly diversified between the various market segments, countries and entities of the Group. Furthermore, 46% of the commercial real estate counterparties have an Investment Grade rating (*versus* 45% in 2021). Doubtful loans represented 1.5% of the sector's total gross exposure (*versus* 1.8% in 2021). The segments most impacted by the health crisis are shopping centres (14% of the commercial real estate portfolio; the same as in 2021) and hotels (4% of the commercial real estate portfolio *versus* 5% in 2021). Commercial real estate stage 3 provisions represented EUR 411 million at 31 December 2022 (EUR 409 million at 31 December 2021);

- the electricity sector:

  The activity of this sector includes the production, transport and distribution of electricity. At 31 December 2022, Gross Exposure to the electricity sector represented EUR 55.3 billion (or 2.8% of the Group's total gross on- and off-balance sheet commitments) compared to EUR 44.5 billion at 31 December 2021 (2.3% of total commitment in 2021). 84% of the counterparties benefit from a good credit quality rating (Investment Grade rating), and the amount of doubtful exposures is low, representing 0.4% of the sector as of 31 December 2022 (compared to 0.5% in 2021). Stage 3 provisions amount to 74 million at 31 December 2022, a stable level compared to last year.

The Group remains diversified. No sector makes up more than 10% of total corporate lending or more than 4.2% of total lending at 31 December 2022, as at 31 December 2021.

At 31 December 2022, doubtful loans decreased resulting from a decrease in corporate (-EUR 1.7 billion) and retail (-EUR 1.6 billion), especially in Italy, followed by Personal Finance linked with the disposal of non-performing portfolios.

The main effects explaining changes in the amount of doubtful outstandings in 2022 (EU CR2-B) are presented in note 4.f to the consolidated financial statements.

The cost of risk and the change in impairment in respect of credit risk are presented in note 2.h to the consolidated financial statements (*Cost of risk*).

The following table shows the carrying amounts of the financial assets and commitments at amortised cost and fair value through equity subject to impairment provisions for credit risk (*i.e.* excluding instruments at fair value through profit and loss) broken down by stage of impairment and by BNP Paribas internal rating in the prudential scope. Financial assets subject to impairment are recognised in the following accounting categories:

- amounts due from central banks (excluding cash);
- debt securities at fair value through equity or at amortised cost;
- loans and advances at amortised cost;
- financing and guarantee commitments given (off-balance sheet).

TABLE 52: BREAKDOWN OF FINANCIAL ASSETS SUBJECT TO IMPAIRMENT BY STAGE AND RATING [Audited]

	31 December 2022							
	Gross carrying value							
	BNP Paribas rating or equivalent							Net carrying value
In millions of euros	1 to 3	4 to 5	6 to 8	9 to 10	Defaulted	TOTAL	Impairments	
Central Banks	**310,779**	**2,185**	**2,368**	**226**		**315,558**	**(21)**	**315,537**
Stage 1	310,779	2,126	2,070			314,975	(15)	314,960
Stage 2		59	298	226		583	(6)	577
Stage 3								
Debt securities at fair value through equity	**35,431**	**1,856**	**1,291**	**14**	**108**	**38,700**	**(130)**	**38,570**
Stage 1	35,431	1,794	1,208	14		38,447	(15)	38,432
Stage 2		62	83			145	(15)	130
Stage 3					108	108	(100)	8
Loans and advances at amortised cost	**224,883**	**287,238**	**378,444**	**22,095**	**25,842**	**938,502**	**(18,361)**	**920,141**
Stage 1	221,538	274,000	321,860	7,752		825,150	(2,050)	823,100
Stage 2	3,345	13,238	56,584	14,343		87,510	(2,829)	84,681
Stage 3					25,842	25,842	(13,482)	12,360
Debt securities at amortised cost	**95,454**	**13,614**	**4,521**	**97**	**155**	**113,841**	**(130)**	**113,711**
Stage 1	95,454	13,593	4,199	53		113,299	(27)	113,272
Stage 2		21	322	44		387	(10)	377
Stage 3					155	155	(93)	62
Assets held for sale	**24,979**	**7,923**	**46,036**	**605**	**553**	**80,096**	**(329)**	**79,767**
Stage 1	24,979	7,795	43,251	368		76,393	(141)	76,252

Stage 2		128	2,785	237		3,150	(126)	3,024
Stage 3					553	553	(62)	491
Financing and guarantee commitments	**268,021**	**161,600**	**128,697**	**7,415**	**1,730**	**567,463**	**(980)**	**566,483**
Stage 1	265,880	154,481	111,371	1,887		533,619	(326)	533,293
Stage 2	2,141	7,119	17,326	5,528		32,114	(338)	31,776
Stage 3					1,730	1,730	(316)	1,414
TOTAL	**959,547**	**474,416**	**561,357**	**30,452**	**28,388**	**2,054,160**	**(19,951)**	**2,034,209**

Financial assets subject to impairments were up by EUR 45 billion, an increase of 2% compared to 31 December 2021. This change mainly relates to financial assets and commitments rated 1 to 3 (+EUR 16 billion, *i.e.* +2% compared to 31 December 2021) and rated 4 to 5 (+EUR 18 billion, *i.e.* +4% compared to 31 December 2021).

The change in the criteria for assessing a significant increase in credit risk (see note 2.h *Cost of risk*) also contributed to a transfer of EUR 27 billion in loans and receivables recognised at amortised cost from stage 2 to stage 1. This transfer mainly concerns the least risky outstandings among those previously classified in stage 2 (mainly financial assets rated 5 to 7).

Excluding the effect of this change in estimate, loans and receivables classified in stage 2 increased by EUR 10 billion during 2022. This change is closely linked to the deterioration of the economic environment, which weighed on the assessment of the significant increase in credit risk criterion.

								31 December 2021
	Gross carrying value							
	BNP Paribas rating or equivalent							
In millions of euros	**1 to 3**	**4 to 5**	**6 to 8**	**9 to 10**	**Defaulted**	**TOTAL**	**Impairments**	**Net carrying value**
Central Banks	**340,622**	**1,927**	**2,728**	**174**		**345,451**	**(18)**	**345,433**
Stage 1	340,622	1,927	2,573	114		345,236	(13)	345,223
Stage 2			155	60		215	(5)	210
Stage 3								
Debt securities at fair value through equity	**37,169**	**3,076**	**1,374**	**13**	**105**	**41,737**	**(140)**	**41,597**
Stage 1	37,169	2,999	1,251	11		41,430	(7)	41,423
Stage 2		77	123	2		202	(29)	173
Stage 3					105	105	(104)	1
Loans and advances at amortised cost	**200,532**	**274,826**	**368,707**	**16,050**	**28,558**	**888,673**	**(20,090)**	**868,583**
Stage 1	200,532	255,746	298,977			755,255	(1,884)	753,371
Stage 2		19,080	69,730	16,050		104,860	(2,704)	102,156
Stage 3					28,558	28,558	(15,502)	13,056
Debt securities at amortised cost	**94,628**	**10,513**	**3,633**	**513**	**260**	**109,547**	**(168)**	**109,379**
Stage 1	94,628	10,513	3,304	429		108,874	(20)	108,854
Stage 2			329	84		413	(25)	388
Stage 3					260	260	(123)	137

Assets held for sale	**35,768**	**6,548**	**42,685**	**134**	**409**	**85,544**	**(476)**	**85,068**
Stage 1	35,768	6,158	38,839			80,765	(172)	80,593
Stage 2		390	3,846	134		4,370	(217)	4,153
Stage 3					409	409	(87)	322
Financing and guarantee commitments	**234,745**	**159,347**	**133,879**	**8,799**	**1,933**	**538,703**	**(958)**	**537,745**
Stage 1	234,745	154,075	113,247			502,067	(230)	501,837
Stage 2		5,272	20,632	8,799		34,703	(374)	34,329
Stage 3					1,933	1,933	(354)	1,579
TOTAL	**943,464**	**456,237**	**553,006**	**25,683**	**31,265**	**2,009,655**	**(21,850)**	**1,987,805**

RESTRUCTURED LOANS [Audited]

When a borrower is bordering on or is in financial difficulties, he may receive a concession from the Bank that would otherwise not have been granted if the borrower had not met with financial difficulties. The concession may be:

- a change to the contract terms and conditions;
- partial or total refinancing of the debt.

The loan is then said to be "restructured". It must retain the status of "restructured" during a period of observation, known as a probation period, for at least two years. The concept of restructuring is described in the accounting principles (note 1.e.5 to the consolidated financial statements) and is aligned with the definition in Annex V to Regulation (EU) No. 680/2014.

According to the principles for identifying the restructured exposure amounts for the Group as a whole, for the non-retail business, exposures are identified individually during the loan process, notably during Committees. As for restructured exposures for retail customers, they are usually identified *via* a systematic process requiring the use of algorithms whose parameters are validated by the RISK and Finance & Strategy Functions.

Information on restructured loans is reported to the supervisory authority on a quarterly basis.

The following table shows the gross value and impairment amounts of performing and non-performing loans that have been restructured.

TABLE 53: CREDIT QUALITY OF RESTRUCTURED LOANS (EU CQ1) [Audited]

	a	b	c	e	f	g	h
							31 December 2022
	Gross carrying amount			**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**		**Collaterals received and financial guarantees received**	
		Non-performing exposures					
In millions of euros	**Performing exposures**		**of which defaulted**	**On performing exposures**	**On non-performing exposures**		**of which Collateral and financial guarantees received on non-performing exposures**
Loans and advances	**9,461**	**7,889**	**7,866**	**(491)**	**(3,154)**	**8,749**	**2,662**
General governments	7	7	7	(1)	(4)	4	
Credit institutions		5	5		(5)		

Other financial corporations	313	427	427	(18)	(194)	315	206
Non-financial corporations	6,870	3,720	3,701	(319)	(1,533)	6,278	1,604
Households	2,271	3,731	3,727	(154)	(1,417)	2,151	852
Debt securities		**102**	**102**		**(53)**	**20**	**20**
Assets held for sale	**123**	**134**	**134**	**(5)**	**(6)**	**239**	**127**
Loan commitments given	**2,209**	**150**	**150**	**(34)**	**(14)**	**1,401**	**29**
TOTAL	**11,793**	**8,275**	**8,252**	**(530)**	**(3,227)**	**10,409**	**2,838**

	a	b	c	e	f	g	h
							31 December 2021
	Gross carrying amount			**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**		**Collaterals received and financial guarantees received**	
		Non-performing exposures					
In millions of euros	**Performing exposures**		**of which defaulted**	**On performing exposures**	**On non-performing exposures**		**of which Collateral and financial guarantees received on non-performing exposures**
Loans and advances	**11,027**	**9,042**	**8,930**	**(523)**	**(3,614)**	**9,851**	**3,054**
General governments	7	10	10	(1)	(6)	5	1
Credit institutions		4	4		(4)		
Other financial corporations	478	252	249	(14)	(98)	413	120
Non-financial corporations	7,188	4,433	4,345	(300)	(1,801)	6,706	2,009
Households	3,354	4,343	4,322	(208)	(1,705)	2,727	924
Debt securities		**203**	**203**		**(81)**	**25**	**25**
Assets held for sale	**98**	**134**	**134**	**(5)**	**(15)**	**188**	**106**
Loan commitments given	**2,768**	**389**	**371**	**(17)**	**(28)**	**1,884**	**33**
TOTAL	**13,893**	**9,768**	**9,638**	**(545)**	**(3,737)**	**11,948**	**3,218**

EXPOSURES SUBJECT TO MORATORIA AND PUBLIC GUARANTEE SCHEMES

EXPOSURES SUBJECT TO MORATORIA

In response to the public health crisis, the Group has granted its customers moratoria, most often consisting of extensions of a few months (see also the paragraph *Restructuring of financial assets due to financial difficulties* in note 1.e.5 to the consolidated financial statements). These moratoria may be based on national law (so-called legislative moratoria) or on an agreed or coordinated payment reduction initiative within the banking sector (so-called non-legislative moratoria).

At 31 December 2022, the Group's exposure to loans subject to moratoria[1] (including expired moratoria) amounted to EUR 27.3 billion.

Around 425,000 moratoria[2] expired as at 31 December 2022, *i.e.* 99.9% of the Group's exposure to loans subject to moratoria. More than 96% of expired moratoria are performing.

The amount of unexpired moratoria at 31 December 2022 is EUR 18 million, compared with EUR 113 million at 31 December 2021.

TABLE 54: BREAKDOWN OF EXPOSURES SUBJECT TO LEGISLATIVE AND NON-LEGISLATIVE MORATORIA(1) BY RESIDUAL MATURITY OF MORATORIA [Audited]

	31 December 2022								
		Gross carrying amount							
					Residual maturity of moratoria				
In millions of euros	**Number of obligors**		**of which legislative moratoria**	**of which expired moratoria**	**≤ 3 months**	**> 3 months ≤ 6 months**	**> 6 months ≤ 9 months**	**> 9 months ≤ 12 months**	**> 12 months**
Loans and advances for which moratorium was offered	**427,260**	**27,347**							
Loans and advances subject to moratorium (granted)	**427,052**	**27,316**	**2,712**	**27,298**	**18**				
of which households		10,156	1,340	10,152	3				
of which collateralised by residential immovable property		*5,337*	*1,059*	*5,337*					
of which non-financial corporations		16,723	1,357	16,708	15				
of which SME		*9,727*	*915*	*9,727*					
of which collateralised by commercial immovable property		*6,919*	*261*	*6,919*					

1 Moratoria qualified as "Covid-19 moratorium measure" meeting the criteria defined in EBA Guidelines published on 2 April 2020.

2 Number of individual customers and companies whose moratoria expired.

									31 December 2021
		Gross carrying amount							
					Residual maturity of moratoria				
In millions of euros	**Number of obligors**		**of which legislative moratoria**	**of which expired moratoria**	**≤ 3 months**	**> 3 months ≤ 6 months**	**> 6 months ≤ 9 months**	**> 9 months ≤ 12 months**	**> 12 months**
Loans and advances for which moratorium was offered	**591,841**	**36,267**							
Loans and advances subject to moratorium (granted)	**591,479**	**36,199**	**3,680**	**36,086**	**76**	**15**	**21**		
of which households		12,455	1,708	12,418	27	7	2		
of which collateralised by residential immovable property		*6,048*	*1,134*	*6,030*	*11*	*4*	*2*		
of which non-financial corporations		22,607	1,965	22,530	49	8	19		
of which SME		*13,410*	*1,444*	*13,369*	*16*	*7*	*18*		
of which collateralised by commercial immovable property		*6,284*	*377*	*6,284*					

(1) Moratoria qualified as "Covid-19 moratorium measure" meeting the criteria defined in EBA Guidelines published on 2 April 2020.

Loans and advances subject to a moratorium(1) (including expired moratoria) were granted to households in the amount of EUR 10.2 billion and to non-financial companies in the amount of EUR 16.7 billion.. The breakdown of the residual maturities of the moratoria reflects the measures taken in the countries where the Group operates. At 31 December 2022, all of the unexpired moratoria have a residual maturity of less than three months.

TABLE 55: EXPOSURES SUBJECT TO NON-EXPIRED MORATORIA(1) [Audited]

	31 December 2022														
	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							
		Performing exposure			Non-performing exposure				Performing exposure			Non-performing exposure			
In millions of euros			of which exposures with forbearance measures	of which stage 2		of which exposures with forbearance measures	of which unlikely to pay that are not past-due or past-due ≤ 90 days			of which exposures with forbearance measures	of which stage 2		of which exposures with forbearance measures	of which unlikely to pay that are not past-due or past-due ≤ 90 days	Gross carrying amount – inflows to non-performing exposures since 30 June 2022
Loans and advances subject to moratorium	**18**	**16**	**1**	**10**	**2**	**2**	**2**	**(2)**	**(1)**		**(1)**	**(1)**	**(1)**		**1**
of which households	3	1	1	1	2	2	2	(1)				(1)	(1)		1
of which collateralised by residential immovable property															
of which non-financial corporations	15	15		9				(1)	(1)		(1)				
of which SME															
of which collateralised by commercial immovable property															

31 December 2021

In millions of euros	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount – inflows to non-performing exposures since 30 June 2021
		Performing exposure			Non-performing exposure				Performing exposure			Non-performing exposure			
			of which exposures with forbearance measures	of which stage 2		of which exposures with forbearance measures	of which unlikely to pay that are not past-due or past-due ≤ 90 days			of which exposures with forbearance measures	of which stage 2		of which exposures with forbearance measures	of which unlikely to pay that are not past-due or past-due ≤ 90 days	
Loans and advances subject to moratorium	**113**	**97**	**12**	**41**	**16**	**15**	**4**	**(11)**	**(7)**	**(1)**	**(4)**	**(5)**	**(4)**	**(1)**	**12**
of which households	37	27	4	7	10	9	3	(7)	(3)		(1)	(4)	(4)	(1)	2
of which collateralised by residential immovable property	*17*	*11*	*4*	*5*	*6*	*6*		*(3)*				*(3)*	*(3)*		
of which non-financial corporations	76	70	8	34	6	6	1	(5)	(4)	(1)	(4)				10
of which SME	*41*	*37*	*6*	*7*	*4*	*4*	*1*	*(2)*	*(1)*	*(1)*	*(1)*				*9*
of which collateralised by commercial immovable property															

(1) Moratoria qualified as "Covid-19 moratorium measure" meeting the criteria defined in EBA Guidelines published on 2 April 2020.

PUBLIC GUARANTEE SCHEMES

At 31 December 2022, the Group has granted more than 110,000 loans guaranteed by States through its Retail Banking networks of Domestic Markets and international networks.

TABLE 56: LOANS AND ADVANCES SUBJECT TO PUBLIC GUARANTEE SCHEMES [Audited]

				31 December 2022
	Gross carrying amount			
In millions of euros		of which exposures with forbearance measures	Public guarantees received	Gross carrying amount – inflows to non-performing exposures since 30 June 2022
Newly originated loans and advances subject to public guarantee schemes	**17,378**	**238**	**15,423**	**162**
of which households	671			12
of which collateralised by residential immovable property	*1*			
of which non-financial corporations	16,342	231	14,497	149
of which SME	*8,672*			*137*
of which collateralised by commercial immovable property	*211*			*18*

				31 December 2021
	Gross carrying amount			
In millions of euros		of which exposures with forbearance measures	Public guarantees received	Gross carrying amount – inflows to non-performing exposures since 30 June 2021
Newly originated loans and advances subject to public guarantee schemes	**20,100**	**203**	**17,893**	**122**
of which households	803			8
of which collateralised by residential immovable property	*1*			
of which non-financial corporations	18,708	194	16,633	113
of which SME	*10,267*			*75*
of which collateralised by commercial immovable property	*250*			*3*

At 31 December 2022, the total amount of loans guaranteed by States, granted by the Group, mainly in France and Italy, amounted to EUR 17.4 billion, for a corresponding guarantee amount of EUR 15.4 billion, (*i.e.* 89% of outstandings). These loans are spread across all sectors.

State-guaranteed loans (SGL) have enabled their subscribers to benefit from a repayment grace period of one year. At the end of this first year, subscribers had the option to repay their loan, partially or in full, or to extend it over a maximum period of five years with the possibility of another repayment grace period of one year.

CREDIT RISK MITIGATION TECHNIQUES

Credit risk mitigation techniques are divided into two main categories:

- funded credit protection (collateral) pledged to the Bank is used to secure timely performance of a borrower's financial obligations;
- unfunded credit protection (personal guarantee) is the commitment by a third party to replace the primary obligor in the event of default. Thus, public guarantee mechanisms are considered as personal guarantees. By extension, credit insurance and credit derivatives (purchased protection) fall into this category.

The amount of personal guarantees and collateral recognised on loans and receivables, and debt securities in the prudential reporting scope amounted to EUR 600 billion at 31 December 2022.

TABLE 57: CREDIT RISK MITIGATION TECHNIQUES (EU CR3) [Audited]

			a	b	c	d	e
		31 December 2022					
				Secured net carrying amount			
						Secured by personal guarantees	
	In millions of euros	**Gross carrying amount**	**Unsecured net carrying amount**		**Secured by physical collateral**		**Secured by credit derivatives**
1	Loans and advances	1,257,959	689,778	549,777	298,331	251,446	
2	Debt securities	155,088	151,587	3,202	1,122	2,080	
	Assets held for sale	80,095	32,729	47,037	38,998	8,039	
3	**TOTAL**	**1,493,143**	**874,094**	**600,016**	**338,451**	**261,565**	-
4	*of which non-performing exposures*	*26,689*	*4,565*	*8,378*	*5,616*	*2,762*	
EU-5	*of which defaulted*	*26,240*	*4,378*	*8,217*	*5,590*	*2,626*	

			a	b	c	d	e
		31 December 2021					
				Secured net carrying amount			
						Secured by personal guarantees	
	In millions of euros	**Gross carrying amount**	**Unsecured net carrying amount**		**Secured by physical collateral**		**Secured by credit derivatives**
1	Loans and advances	1,236,254	712,911	503,222	254,125	249,097	
2	Debt securities	155,785	154,477	950	950		
	Assets held for sale	85,544	40,267	44,802	35,257	9,545	
3	**TOTAL**	**1,477,584**	**907,655**	**548,973**	**290,331**	**258,642**	-
4	*of which non-performing exposures*	*29,494*	*4,762*	*8,932*	*6,075*	*2,857*	
EU-5	*of which defaulted*	*29,103*	*4,627*	*8,718*	*5,998*	*2,720*	

Credit Risk Mitigants (CRM) are taken into account in accordance with the regulation. In particular, their effect is assessed under conditions characteristic of an economic downturn.

For the scope under the IRB approach, personal guarantees and collaterals are taken into account, provided they are eligible, by decreasing the Loss Given Default (LGD) parameter corresponding to an increase in the Global Recovery Rate (GRR) that applies to the transactions of the banking book. The value taken into consideration takes account, where relevant, of currency and maturity mismatches and, for funded credit protection, of a haircut applied to the market value of the pledged asset based on a default scenario during an economic downturn. The amount of unfunded credit protection to which a haircut is applied depends on the enforceable nature of the commitment and the risk of simultaneous default by the borrower and guarantor.

For the scope under the standardised approach, unfunded credit protection is taken into account provided it is eligible, by applying the more favourable risk weight of the guarantor to a portion of the secured exposure adjusted for currency and maturity mismatches. Funded credit protection is taken into account as a decrease in the exposure, after adjustment for any currency and maturity mismatches and a discount to take account of volatility in market value for financial security collaterals.

The assessment of the credit risk mitigating effect follows a methodology that is approved for each activity and is used throughout the Group. These techniques are monitored in accordance with the monitoring and portfolio management procedures described in the *Credit risk management policy* section.

TABLE 58: CREDIT RISK MITIGATION IN IRBA AND STANDARDISED APPROACH

	31 December 2022				31 December 2021			
		Risk mitigation amount				Risk mitigation amount		
In millions of euros	**Gross exposure**	**Collateral**	**Guarantees and credit derivatives**	**Total risk mitigation**	**Gross exposure**	**Collateral**	**Guarantees and credit derivatives**	**Total risk mitigation**
IRB approach	1,464,345	234,920	197,444	432,365	1,449,996	203,634	200,184	403,818
Standardised approach	433,607	68,758	23,479	92,237	398,631	62,264	21,072	83,336
TOTAL	**1,897,952**	**303,679**	**220,923**	**524,602**	**1,848,627**	**265,898**	**221,256**	**487,154**

TABLE 59: SECURED EXPOSURES IN IRB APPROACH (EU CR7-A)

		a		b	c	d	e	f	g	h	i	j	k	l	m
		31 December 2022													
				Credit Risk Mitigation techniques											
				Funded credit protection, physical collateral									**Unfunded credit protection**		
					Part covered by other eligible physical collaterals *(%)*				**Part covered by other physical funded credit protection** *(%)*						
	In millions of euros	**Total gross exposures(*)**	**Total of the risk-exposed value**	**Part covered by financial collaterals**		**of which immovable property collaterals**	**of which receivables**	**of which other physical collateral**		**of which cash on deposit**	**of which life insurance policies**	**of which Instruments held by a third party**	**Part covered by guarantees**	**Part covered by credit derivatives**	**Total RWA (reduction effects only)(**)**
1	Central governments and central banks	454,775	452,804	0.00%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.75%	0.00%	4,620
2	Institutions	45,960	38,441	0.72%	1.05%	1.01%	0.02%	0.02%	0.36%	0.35%	0.00%	0.00%	15.03%	0.00%	8,280
3	Corporates	674,680	491,948	2.65%	17.78%	8.91%	1.75%	7.12%	0.85%	0.71%	0.13%	0.00%	19.61%	0.01%	237,260
3.1	*of which SMEs*	*51,583*	*41,754*	*1.63%*	*35.65%*	*27.20%*	*7.62%*	*0.83%*	*0.73%*	*0.41%*	*0.32%*	*0.00%*	*17.57%*	*0.00%*	*20,979*
3.2	*of which specialised lending*	*82,887*	*71,400*	*1.04%*	*50.88%*	*17.79%*	*1.97%*	*31.12%*	*2.78%*	*2.78%*	*0.00%*	*0.00%*	*16.69%*	*0.00%*	*24,001*
3.3	*of which other*	*540,210*	*378,795*	*3.07%*	*9.57%*	*5.22%*	*1.06%*	*3.29%*	*0.50%*	*0.36%*	*0.14%*	*0.00%*	*20.39%*	*0.02%*	*192,280*

		a		b	c	d	e	f	g	h	i	j	k	l	m
															31 December 2022
				Credit Risk Mitigation techniques											
				Funded credit protection, physical collateral									**Unfunded credit protection**		
					Part covered by other eligible physical collaterals *(%)*				**Part covered by other physical funded credit protection** *(%)*						
In millions of euros		**Total gross exposures(*)**	**Total of the risk-exposed value**	**Part covered by financial collaterals**		**of which immovable property collaterals**	**of which receivables**	**of which other physical collateral**		**of which cash on deposit**	**of which life insurance policies**	**of which Instruments held by a third party**	**Part covered by guarantees**	**Part covered by credit derivatives**	**Total RWA (reduction effects only)(**)**
4	Retail	288,930	285,075	0.42%	44.20%	44.02%	0.14%	0.04%	0.78%	0.05%	0.73%	0.00%	32.19%	0.00%	56,766
4.1	*of which immovable property SMEs*	*12,176*	*11,681*	*0.11%*	*90.50%*	*90.46%*	*0.03%*	*0.01%*	*0.08%*	*0.02%*	*0.06%*	*0.00%*	*2.24%*	*0.00%*	*3,146*
4.2	*of which immovable property non-SMEs*	*189,024*	*189,058*	*0.02%*	*57.05%*	*57.04%*	*0.00%*	*0.00%*	*0.05%*	*0.01%*	*0.05%*	*0.00%*	*41.60%*	*0.00%*	*23,559*
4.3	*of which qualifying revolving*	*12,087*	*10,095*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*3,304*
4.4	*of which other SMEs*	*34,210*	*32,861*	*1.53%*	*17.76%*	*16.22%*	*1.23%*	*0.31%*	*1.81%*	*0.25%*	*1.56%*	*0.00%*	*31.96%*	*0.00%*	*9,579*
4.5	*of which other non-SMEs*	*41,432*	*41,380*	*1.51%*	*4.20%*	*4.20%*	*0.00%*	*0.00%*	*3.65%*	*0.11%*	*3.54%*	*0.00%*	*5.67%*	*0.00%*	*17,178*
5	**TOTAL**	**1,464,345**	**1,268,269**	**1.14%**	**16.87%**	**13.38%**	**0.71%**	**2.77%**	**0.51%**	**0.30%**	**0.22%**	**0.00%**	**15.56%**	**0.00%**	**306,927**

(*) Excluding derivatives and securities financing transactions subject to counterparty risk exposures.
(**) In accordance with the Group's IRBA methodology, the impact of risk mitigation techniques is treated only by reducing LGD (no substitution approach).

		a		b	c	d	e	f	g	h	i	j	k	l	m
															31 December 2021
				Credit Risk Mitigation techniques											
				Funded credit protection, physical collateral									**Unfunded credit protection**		
					Part covered by other eligible physical collaterals *(%)*		**Part covered by other physical funded credit protection** *(%)*								
	In millions of euros	**Total gross exposures(*)**	**Total of the risk-exposed value**	**Part covered by financial collaterals**		**of which immovable property collaterals**	**of which receivables**	**of which other physical collateral**		**of which cash on deposit**	**of which life insurance policies**	**of which Instruments held by a third party**	**Part covered by guarantees**	**Part covered by credit derivatives**	**Total RWA (reduction effects only)(**)**
1	Central governments and central banks	469,741	469,143	0.00%	0.01%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.64%	0.00%	4,359
2	Institutions	52,369	43,767	1.32%	1.63%	0.96%	0.27%	0.40%	0.24%	0.24%	0.00%	0.00%	13.28%	0.00%	9,983
3	Corporates	636,914	464,043	1.35%	17.16%	7.80%	1.96%	7.40%	1.29%	1.13%	0.16%	0.00%	19.42%	0.02%	222,100
3.1	*of which SMEs*	*52,282*	*43,188*	*1.84%*	*27.56%*	*21.25%*	*5.25%*	*1.06%*	*0.92%*	*0.47%*	*0.45%*	*0.00%*	*19.42%*	*0.00%*	*21,355*
3.2	*of which specialised lending*	*83,561*	*70,658*	*0.34%*	*53.62%*	*16.53%*	*3.16%*	*33.93%*	*4.02%*	*4.01%*	*0.01%*	*0.00%*	*17.57%*	*0.00%*	*23,429*
3.3	*of which other*	*501,072*	*350,196*	*1.50%*	*8.52%*	*4.38%*	*1.31%*	*2.83%*	*0.79%*	*0.63%*	*0.16%*	*0.00%*	*19.79%*	*0.03%*	*177,316*

		a		b	c	d	e	f	g	h	i	j	k	l	m
															31 December 2021
				Credit Risk Mitigation techniques											
				Funded credit protection, physical collateral									**Unfunded credit protection**		
					Part covered by other eligible physical collaterals *(%)*		**Part covered by other physical funded credit protection** *(%)*								
In millions of euros		**Total gross exposures(*)**	**Total of the risk-exposed value**	**Part covered by financial collaterals**		**of which immovable property collaterals**	**of which receivables**	**of which other physical collateral**		**of which cash on deposit**	**of which life insurance policies**	**of which Instruments held by a third party**	**Part covered by guarantees**	**Part covered by credit derivatives**	**Total RWA (reduction effects only)(**)**
4	Retail	290,972	285,269	0.35%	37.69%	37.57%	0.08%	0.04%	0.61%	0.06%	0.55%	0.00%	35.45%	0.00%	56,242
4.1	*of which immovable property SMEs*	*11,789*	*11,254*	*0.17%*	*63.70%*	*63.57%*	*0.11%*	*0.01%*	*0.11%*	*0.04%*	*0.07%*	*0.00%*	*26.16%*	*0.00%*	*2,914*
4.2	*of which immovable property non-SMEs*	*179,284*	*179,316*	*0.05%*	*53.36%*	*53.36%*	*0.00%*	*0.00%*	*0.03%*	*0.01%*	*0.02%*	*0.00%*	*44.80%*	*0.00%*	*21,140*
4.3	*of which qualifying revolving*	*16,024*	*12,425*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*3,635*
4.4	*of which other SMEs*	*36,399*	*34,868*	*0.69%*	*9.18%*	*8.27%*	*0.63%*	*0.28%*	*0.77%*	*0.27%*	*0.50%*	*0.00%*	*44.58%*	*0.00%*	*9,664*
4.5	*of which other non-SMEs*	*47,475*	*47,407*	*1.37%*	*3.09%*	*3.07%*	*0.00%*	*0.01%*	*2.99%*	*0.14%*	*2.85%*	*0.00%*	*4.88%*	*0.00%*	*18,889*
5	**TOTAL**	**1,449,996**	**1,262,222**	**1.67%**	**14.89%**	**11.39%**	**0.75%**	**2.75%**	**0.62%**	**0.44%**	**0.18%**	**0.00%**	**15.85%**	**0.01%**	**292,684**

(*) Excluding derivatives and securities financing transactions subject to counterparty risk exposures.
(**) In accordance with the Group's IRBA methodology, the impact of risk mitigation techniques is treated only by reducing LGD (no substitution approach).

The main providers of unfunded credit protection (personal guarantees) are the guarantee institutions in the Commercial & Personal Banking of CPBS mortgage business (mainly housing loans in France) and, since 2020, States or public organisms that have set up public guarantee mechanisms to counter the public health crisis.

As at 31 December 2022, 73% of exposure to property loans is concentrated in the Group's two main Domestic Markets (France, Belgium). In view of the specific features of these markets (amortising long-term financing, primarily at fixed rates), the LTV (Loan-to-value) ratio is not a main monitoring indicator at Group level.

FUNDED CREDIT PROTECTION

Funded credit protection is divided into two categories:

- financial collateral:

  This consists of cash amounts (including gold), shares in collective investment funds, equities (listed or unlisted) and bonds;
- other diverse forms of collateral:

  These include real estate mortgages or ship mortgages, pledge of equipment or inventories, transfer of commercial receivables or any other rights to an asset of the counterparty.

To be considered as eligible, funded credit protection must fulfil the following conditions:

- the value of the collateral must not be highly correlated with the risk on the obligor (in particular, shares of the obligor are not eligible);
- the pledge must be documented;
- the pledged asset must be traded on a liquid secondary market to enable rapid resale;
- the Bank must have a regularly updated value of the pledged asset;
- the Bank must have a reasonable level of comfort in the potential appropriation and realisation of the asset concerned.

In the Retail Banking business, the presence or absence of a particular type of collateral may, depending on the coverage ratio, lead to assigning the exposure to particular LGD class on a statistical basis.

UNFUNDED CREDIT PROTECTION

Guarantors are subject to the same rigorous credit risk assessment process as primary obligors and are assigned risk parameters according to similar methods and procedures.

Guarantees are granted by the obligor's parent company or by other entities such as financial institutions. Other examples of guarantees are credit derivatives, guarantees from public insurers for export financing or private insurers.

Consideration of a guarantee consists in determining the average amount the Bank can expect to recover if the borrower defaults and the guarantee is called in. It depends on the amount of the guarantee, the risk of simultaneous default by the borrower and the guarantor (which is a function of the probability of default of the borrower, of the guarantor, and the degree of correlation between borrower and guarantor default, which is high if they belong to the same business group or the same sector and low if not) and the enforceable nature of the guarantee.

OPTIMISING CREDIT RISK MANAGEMENT THROUGH CDS (EU CR7)

As part of its role of optimising credit risk management for CIB, Portfolio Management (PM) sets up hedges using credit derivatives, and mainly credit default swaps (CDS). These CDS are used as part of an active management policy, the main aim being to hedge migration and concentration risks and manage major exposures. The underlying assets are loans made to large corporates by CIB Global Banking, and occasionally those made by the Commercial & Personal Banking activity.

These hedges are put on by CIB to hedge exposures mainly treated under the IRB approach. Provided they are eligible, they have the effect of decreasing the estimated Loss Given Default for the underlying asset, and, therefore, reducing its consumption in terms of risk-weighted assets. The reduction in risk-weighted assets resulting from hedging operations *via* CDS concerns only the corporate asset class, and represents EUR 238 million as at 31 December 2022 compared to EUR 232 million as at 31 December 2021 (EU CR7).

COLLATERAL SEIZED

TABLE 60: COLLATERAL OBTAINED BY TAKING POSSESSION AND EXECUTION PROCESSES (EU CQ7) [Audited]

		a	b	a	b
		31 December 2022		**31 December 2021**	
		Collateral obtained by taking possession accumulated(*)		**Collateral obtained by taking possession accumulated(*)**	
In millions of euros		**Value at initial recognition**	**Accumulated negative changes**	**Value at initial recognition**	**Accumulated negative changes**
010	Property, Plant and Equipment (PP&E)				
020	Other than Property, Plant and Equipment	270	(35)	305	(56)
030	*Residential immovable property*	*224*	*(35)*	*258*	*(56)*
040	*Commercial immovable property*	*8*		*8*	
050	*Movable property (auto, shipping, etc.)*				
060	*Equity and debt instruments*	*22*		*24*	
070	*Other collateral*	*16*		*15*	
080	**TOTAL**	**270**	**(35)**	**305**	**(56)**

(*) The amount of assets held for sale are included in the amounts of collateral presented in the table above.

Collateral obtained by taking possession includes assets obtained in exchange for cancellation of the receivable, whether on a voluntary basis or on foot of legal proceedings.

5.5 Securitisation in the banking book

Securitisation means a transaction or scheme, whereby the credit risk associated with an exposure or pool of exposures is tranched, having the following characteristics:

- payments made in the transaction or scheme are dependent upon the performance of the exposure or pool of exposures;
- the subordination of tranches determines the distribution of losses during the life of the risk transfer.

Any commitment (including derivatives and liquidity lines) granted to a securitisation operation must be treated as a securitisation position. Most of these commitments are held in the prudential banking book (section 5.5). Commitments held in the trading book are set out in *Market risk* (section 5.7).

The securitisation transactions discussed below concern:

- the programmes originated by the Group for its own account, securitising its credit exposures ("originator" role) which are recognised as efficient under Basel 3 regulatory framework;
- the programmes that the Group has structured on behalf of its clients ("sponsor" role where clients' assets are securitised), in which it has retained positions;
- the programmes to which the Group has subscribed without having a role in structuring the operation ("investor" role).

Securitisation positions deducted from own funds, amounting to at EUR 217 million at 31 December 2022, are now included throughout section 5.5.

BNP PARIBAS SECURITISATION ACTIVITIES

The Group's activities in each of its roles as originator, sponsor and investor, are described below:

TABLE 61: SECURITISED EXPOSURES AND SECURITISATION POSITIONS (HELD OR ACQUIRED) BY ROLE

In millions of euros	31 December 2022			31 December 2021		
	Securitised exposures originated by BNP Paribas(*)			Securitised exposures originated by BNP Paribas(*)		
BNP Paribas role		**Efficient securitisation (SRT)(**)**	**Securitised positions held or acquired (EAD)(***)**		**Efficient securitisation (SRT)(**)**	**Securitised positions held or acquired (EAD)(***)**
Originator	114,890	49,900	39,893	121,469	46,775	35,582
Sponsor	3		31,353	3		22,688
Investor			21,005			13,547
TOTAL	**114,893**	**49,900**	**92,252**	**121,472**	**46,775**	**71,817**

(*) Securitised exposures originated by the Group correspond to the underlying exposures recognised on the Group's balance sheet and off-balance sheet which have been securitised.

(**) Securitisation programmes meeting the Significant Risk Transfer (SRT) criteria, see next paragraph.

(***) Securitisation positions correspond to tranches retained and off-balance sheet commitments granted by the Group in securitisation transactions originated or arranged by the Group, as well as tranches acquired by the Group in securitisation transactions arranged by other parties.

PROPRIETARY SECURITISATION (ORIGINATOR)

The Group acts as an originator by securitising its own credit exposures in order to obtain new sources of financing and improve the liquidity of its balance sheet, and to reduce its risk and capital requirements.

Where the purpose of the transaction is solely to reduce risk, the Group will favour so-called "synthetic" securitisation transactions, ensuring the risk transfer of exposures (mortgages, consumer loans, corporate loans, *etc.*) through credit derivatives or guarantees. These transactions are initiated mainly by CIB in collaboration with the Commercial, Personal Banking & Services business lines.

In the context of securitisation transactions carried out for financing purposes, the Group will favour so-called "cash" or "traditional" securitisations, characterised by the sale of securitised exposures to a specially created entity. These operations are initiated by ALM Treasury in collaboration with the businesses whose exposures are securitised in exchange for liquid assets eligible for central bank financing or included in the global liquidity reserve (see paragraph *Wholesale funding and liquidity reserve monitoring indicators* in section 5.8 *Liquidity risk*).

Risk transfer of own account securitisation transactions

The capital requirement of securitised credit exposures and securitisation positions depends on the risk transfer level of the transaction.

When the exposures securitised by the Group in the context of own-account securitisation transactions meet the Basel eligibility criteria, in particular that of significant risk transfer as defined in Regulation (EU) No. 2017/2401, they are excluded from the calculation of credit risk-weighted assets and the securitisation transaction is said to be efficient. In this case, only the positions retained by the institution and any commitments granted to the structure after securitisation are subject to risk-weighted assets calculation.

Exposures securitised through proprietary securitisation transactions that do not meet Basel eligibility criteria (inefficient securitisations) remain in their original prudential portfolio. Their capital requirement is calculated as if they were not securitised and is included in section 5.4 *Credit risk*.

Efficient securitisations

Exposures retained in securitisation positions originated by BNP Paribas amounted to EUR 39.9 billion at 31 December 2022, corresponding to positions in thirty efficient securitisation programmes under Basel rules.

At 31 December 2022, the main securitisation transactions recognised as efficient are the following:

- a synthetic operation initiated in 2022 by Commercial & Personal Banking in France concerning an EUR 9.5 billion portfolio of large corporate loans;
- a synthetic operation initiated in 2022 by Commercial & Personal Banking in France concerning an EUR 6.1 billion portfolio of large corporate loans;
- a synthetic operation initiated in 2022 by BNL bc concerning an EUR 1.3 billion portfolio of corporate loans;
- a synthetic operation initiated in 2022 by Commercial & Personal Banking in France concerning an EUR 0.9 billion portfolio of large corporate loans;
- a synthetic operation initiated in 2022 by Commercial & Personal Banking in France concerning an EUR 0.8 billion portfolio of large corporate loans;
- a synthetic operation initiated in 2022 by Commercial & Personal Banking in France concerning an EUR 0.7 billion portfolio of large corporate loans;
- a synthetic operation initiated in 2021 by Commercial & Personal Banking in France concerning an EUR 4.0 billion portfolio of large corporate loans;
- a synthetic operation initiated in 2021 by Corporate and Institutional Banking concerning an EUR 1.8 billion portfolio of corporate loans;
- a synthetic operation initiated in 2021 by BNL bc concerning an EUR 1.3 billion portfolio of corporate loans;
- a synthetic operation initiated in 2020 by Commercial & Personal Banking in France concerning an EUR 1.2 billion portfolio of corporate loans;
- a synthetic transaction initiated in 2019 by Commercial & Personal Banking in France concerning an EUR 5.0 billion portfolio of corporates loans;
- a synthetic transaction initiated in 2019 by Commercial & Personal Banking in Belgium concerning an EUR 1.8 billion portfolio of corporates loans;
- a synthetic transaction initiated in 2018 by Commercial & Personal Banking in France concerning an EUR 2.3 billion portfolio of large corporates loans;

The Group has not set up own account securitisations of revolving exposures with an anticipated repayment clause.

At 31 December 2022, there were no assets awaiting securitisation.

TABLE 62: SECURITISED EXPOSURES ORIGINATED BY BNP PARIBAS

	Securitised exposures originated by BNP Paribas	
In millions of euros	31 December 2022	31 December 2021
Traditional	**8,712**	**10,270**
of which IRB approach	*3,532*	*4,846*
of which standardised approach(*)	*5,180*	*5,423*
Synthetic	**41,188**	**36,505**
of which IRB approach	*41,188*	*36,505*
TOTAL	**49,900**	**46,775**

(*) Securitisation programmes processed under SEC-ERBA approach.

TABLE 63: SECURITISED EXPOSURES BY BNP PARIBAS AS AN ORIGINATOR BY UNDERLYING ASSET CATEGORY(*)

Originated securitised exposures	31 December 2022			31 December 2021		
In millions of euros	Traditional	Synthetic	Total	Traditional	Synthetic	Total
Residential mortgages			**-**	10		**10**
Consumer loans	6,592		**6,592**	7,566		**7,566**
Credit card receivables			**-**			**-**
Loans to corporates	1,620	41,188	**42,808**	1,688	36,505	**38,192**
Trade receivables			**-**			**-**
Commercial mortgages			**-**			**-**
Finance leases	500		**500**	1,007		**1,007**
Other assets			**-**			**-**
TOTAL	**8,712**	**41,188**	**49,900**	**10,270**	**36,505**	**46,775**

(*) This breakdown is based on the predominant underlying asset of the securitisations.

Inefficient securitisations

Inefficient securitisation transactions are mainly carried out for refinancing purposes. These operations, which do not result in any risk transfer within the meaning of Regulation (EU) No. 2017/2401, do not have a diminishing effect on the calculation of risk-weighted assets. Securitised exposures are included in customer loans and subject to credit risk-weighted assets calculation.

As at 31 December 2022, BNP Paribas originated 28 securitisation transactions, for a total amount of EUR 66.9 billion of securitised exposures. The main transactions concern: BNP Paribas Fortis (EUR 31.5 billion), BNP Paribas Personal Finance (EUR 11.6 billion), Commercial & Personal Banking in France (EUR 23.7 billion) and BNL bc (EUR 0.1 billion). In 2022, two transactions without a significant risk transfer were completed by Commercial & Personal Banking in France, for a total amount of EUR 8.1 billion. The relevant exposures are therefore included in the section on credit risk (see section 5.4).

Credit quality of securitised exposures

The table below presents all exposures securitised by BNP Paribas as part of efficient and inefficient securitisation transactions carried out as originator:

TABLE 64: EXPOSURES SECURITISED BY THE INSTITUTION – EXPOSURES IN DEFAULT (EU SEC5)

		a	b	a	b
		31 December 2022		**31 December 2021**	
		Exposures securitised by the institution as originator		**Exposures securitised by the institution as originator**	
		Total gross exposure amount(*)		**Total gross exposure amount(*)**	
In millions of euros			**of which in default**		**of which in default**
2	**Retail**	**50,546**	**529**	**59,768**	**1,064**
3	Residential real estate	37,330	362	41,227	883
4	Credit card and consumer loans	13,216	167	18,541	181
7	**Corporate**	**64,344**	**146**	**61,702**	**193**
8	Loans to corporates	63,856	143	60,437	187
9	Commercial real estate				
10	Finance lease and commercial receivables	488	3	1,265	6
1	**TOTAL**	**114,890**	**675**	**121,469**	**1,257**

(*) Underlying exposures of efficient and inefficient securitisation transactions.

SECURITISATION ON BEHALF OF CLIENTS (SPONSOR)

As part of their third-party securitisation activity, CIB enables its large corporate and institutional clients to obtain attractive financing conditions directly from the financing markets, through multiple conduits (short-term refinancing markets) or specific structured operations (medium and long-term refinancing).

TABLE 65: SECURITISED EXPOSURES BY BNP PARIBAS AS A SPONSOR(*) BY UNDERLYING ASSET CATEGORY(**)

Securitised exposures	**31 December 2022**			**31 December 2021**		
In millions of euros	**Traditional**	**Synthetic**	**Total**	**Traditional**	**Synthetic**	**Total**
Residential mortgages	953		**953**	502		**502**
Consumer loans	12,019		**12,019**	7,273		**7,273**
Credit card receivables	3,305		**3,305**	2,728		**2,728**
Loans to corporates	1,574		**1,574**	1,272		**1,272**
Trade receivables	5,964		**5,964**	5,294		**5,294**
Commercial mortgage			**-**	131		**131**
Finance leases	7,057		**7,057**	5,236		**5,236**
Other assets	479		**479**	251		**251**
TOTAL	**31,350**	**-**	**31,350**	**22,685**	**-**	**22,685**

(*) Within the securitised exposures by the Group as a sponsor, EUR 3 million correspond to exposures included in BNP Paribas' balance sheet

at 31 December 2022 (compared with EUR 3 million at 31 December 2021).

(**) This breakdown is based on the predominant underlying asset of the securitisation.

The financing structures thus put in place are accompanied by liquidity lines and, where appropriate, by the granting of guarantees by the Group, which are subject to a capital requirement. Commitments and positions retained or acquired by BNP Paribas on securitisation programmes as sponsor, amounted to EUR 31.3 billion at 31 December 2022.

Short-term refinancing

At 31 December 2022, two consolidated multi-seller conduits (Starbird and Matchpoint) were sponsored by the Group. These conduits, by seeking refinancing on the local short-term commercial paper market, are able to provide CIB clients, large corporates and institutions with an attractive financing solution in exchange for some of their assets (trade receivables, finance leases for automobiles or various equipment, credit card receivables, etc.).

BNP Paribas provides each of these conduits with a liquidity line which amounted to EUR 28.9 billion at 31 December 2022, compared with EUR 20.9 billion at 31 December 2021.

Medium/long-term refinancing

In Europe and North America, the BNP Paribas Group's structuring platform provides financing solutions to its clients, based on products adapted to current conditions in terms of risk and liquidity. Altogether, the facilities granted by the Group through these transactions amounted to EUR 2.0 billion at 31 December 2022, compared with EUR 1.8 billion at 31 December 2021.

SECURITISATION AS INVESTOR

The securitisation positions of BNP Paribas as an investor amounted to EUR 21.0 billion at 31 December 2022, with an increase of EUR 7.5 billion compared with EUR 13.5 billion at 31 December 2021.

Investments made by the Group in third-party securitisation transactions are mainly concentrated in Capital markets, a joint-venture between Global Banking and Global Market with an exposure of EUR 20.6 billion at 31 December 2022 compared to EUR 12.9 billion at 31 December 2021. Capital Markets is involved in setting up, then financing and hedging (as a "swap" supplier) structured asset financing operations initiated by its clients, including mainly institutions, large companies or private equity platforms.

Investor securitisation exposures also include historical positions within the BNP Paribas Fortis entity managed in run-off. This portfolio, housed in the Corporate Centre, amounted to EUR 0.4 billion at 31 December 2022 compared with EUR 0.6 billion at 31 December 2021.

The table below shows the securitisation vehicles set up on behalf of the Group or its customers.

TABLE 66: LIST OF SECURITISATION VEHICLES INITIATED BY THE GROUP (SEC-A)

	Business line which initiated the vehicle	Underlying asset category(*)
VEHICLES SPONSORED BY THE GROUP		
ANCHORAGE CAPITAL CLO 23, LTD.	CIB	Corporate loans
AUDAX SENIOR DEBT WH-A, LLC	CIB	Corporate loans
AUDAX SENIOR DEBT WH-B, LLC	CIB	Corporate loans
BANCA IFIS SPA	CIB	Receivables
BNPP AM EURO CLO 2017 DESIGNATED ACTIVITY COMPANY	Asset management	Corporate loans
BNPP AM EURO CLO 2018 DAC	Asset management	Corporate loans
BNPP AM EURO CLO 2019 DAC	Asset management	Corporate loans
BNPP AM EURO CLO 2021 DAC	Asset management	Corporate loans
BNPP IP EURO CLO 2015-1 DAC	Asset management	Corporate loans
CARVAL INVESTORS GB LLP	CIB	Residential real estate
CREDIARC SPV S.R.L.	BNL bc	Other assets

	Business line which initiated the vehicle	Underlying asset category(*)
DOMIVEST B.V.	CIB	Residential real estate
DRYDEN 100 CLO, LTD.	CIB	Corporate loans
EXETER FUNDING II LLC	CIB	Consumer loans
MADISON PARK FUNDING LXI, LTD.	CIB	Corporate loans
MADISON PARK FUNDING LXIV, LTD.	CIB	Corporate loans
MATCHPOINT FINANCE PUBLIC LIMITED COMPANY	CIB	Other assets
PEAC FRANCE	CIB	Finance lease
REGATTA WAREHOUSE 1	CIB	Corporate loans
STARBIRD FUNDING CORPORATION	CIB	Other assets
STEAMBOAT HARBOR LTD.	CIB	Corporate loans
VIBRANT CLO XVIII, LTD.	CIB	Corporate loans
VEHICLES WHICH ACQUIRE EXPOSURES ORIGINATED BY THE GROUP (ORIGINATOR)(**)		
AUTOFLORENCE 1 SRL	Personal Finance	Consumer loans
AUTOFLORENCE 2 SRL	Personal Finance	Consumer loans
AUTONORIA 2019	Personal Finance	Consumer loans
AUTONORIA SPAIN 2019	Personal Finance	Consumer loans
AUTONORIA SPAIN 2021, FT	Personal Finance	Consumer loans
AUTONORIA SPAIN 2022, FT	Personal Finance	Consumer loans
BANK OF THE WEST AUTO TRUST 2019-1	Commercial & Personal Banking in the rest of the world	Consumer loans
BNL MINERVA 3	BNL bc	Corporate loans
BNP PARIBAS ARBITRAGE ISSUANCE B.V. – RESONANCE 3	Commercial & Personal Banking in France	Corporate loans
E-CARAT 10	Personal Finance	Consumer loans
E-CARAT 11 PLC	Personal Finance	Consumer loans
EUROPEAN INVESTMENT FUND	CIB	Corporate loans
EUROPEAN INVESTMENT FUND MINERVA	BNL bc	Corporate loans
EUROPEAN INVESTMENT FUND MINERVA 2	BNL bc	Corporate loans
EUROPEAN INVESTMENT FUND PROXIMA 2	Commercial & Personal Banking in France	Corporate loans
FCT MONTE CRISTO 2	Commercial & Personal Banking in France	Corporate loans
FCT MONTE CRISTO 2 COMPARTMENT HAREWOOD	CIB	Corporate loans
FCT MONTE CRISTO 2 COMPARTMENT RESONANCE 6B	CIB	Corporate loans
FCT MONTE CRISTO 2 COMPARTMENT RESONANCE 7	CIB	Corporate loans
FCT MONTE CRISTO 2 COMPARTMENT	CIB	Corporate loans

	Business line which initiated the vehicle	Underlying asset category(*)
RESONANCE 9		
FCT MONTE CRISTO 2 COMPARTMENT WAGNER	CIB	Corporate loans
FONDS COMMUN DE TITRISATION RESONANCE 4	CIB	Corporate loans
INTERNATIONAL FINANCE CORPORATION	CIB	Corporate loans
JUNO_1	BNL bc	Corporate loans
JUNO_2	BNL bc	Corporate loans
LIBERTY MUTUAL INSURANCE EUROPE SE	CIB	Corporate loans
NORIA 2018-1	Personal Finance	Consumer loans
NORIA 2021	Personal Finance	Consumer loans
PARK MOUNTAIN SECURITISATION 2019	Commercial & Personal Banking in France	Corporate loans
PIXEL 2021	Leasing Solutions	Finance lease
SYNDICATE 1458 – RESONANCE 5	Commercial & Personal Banking in France	Corporate loans
VEHICLES INCLUDED IN THE PRUDENTIAL CONSOLIDATION SCOPE	see note 7.l (reference t) to the consolidated financial statements	

(*) The category is based on the predominant underlying asset of the securitisation.
(**) Efficient securitisation.

ACCOUNTING METHODS [AUDITED]

(See note 1 to the consolidated financial statements – *Summary of significant accounting policies applied by the Group*.)

The accounting classification of securitisation positions in the banking book is shown in Table 9 *Prudential balance sheet by risk type (EU LI1-B)*.

Securitisation positions classified as "Financial assets at amortised cost" are measured using the method described in note 1.e.1 to the financial statements: the efficient interest rate used to recognise interest income is measured on the basis of an expected cash flow model. From the outset, these positions are subject to an impairment calculation for expected credit risk losses (see note 1.e.5).

Securitisation positions classified on an accounting basis as "Financial assets at fair value through equity" are measured using the method described in note 1.e.2 to the financial statements. Changes in fair value determined according to the principles listed in note 1.e.10 to the financial statements (excluding revenue recognised using the efficient interest method) are presented in a specific subsection of shareholders' equity along with expected credit risk losses calculated using the methods described in note 1.e.5 to the financial statements. Upon disposal, amounts previously recognised in recyclable equity are transferred to the profit and loss account.

Securitisation positions classified on an accounting basis as "Financial instruments at fair value through profit or loss" are measured using the method described in note 1.e.7 to the financial statements.

Proceeds from the sale of securitisation positions are recognised in accordance with rules for the category of origin of positions sold.

Synthetic securitisations in the form of credit derivatives (credit default swaps) or guarantees received follow accounting rules appertaining respectively:

- to trading portfolio derivatives. These are measured at fair value through profit or loss (see note 1.e.7 to the financial statements);
- to financial guarantees received, which cannot be considered as forming an integral part of secured assets. If it is virtually certain that a loss caused by a defaulting debtor will be offset by the guarantor, the guarantee is then recognised as a

reimbursement asset (right to reimbursement for expected credit losses) and expected credit losses on the asset are, at the same time, recognised in profit or loss. The overall impact in terms of profit or loss is the same as if the guarantee had been recognised in the measurement of expected credit losses, with the difference that the guarantee received is shown as a reimbursement asset rather than as a reduction in the expected credit losses on the asset.

Assets awaiting securitisation are classified as:

- financial instruments at amortised cost or at fair value through equity and in the prudential banking book in the case of exposures resulting from the bank's balance sheet, for which the Bank will be originator in the future securitisation within the meaning of Basel 3;
- financial instruments at fair value through profit or loss and in the prudential banking book in the case of exposures purchased and put into warehousing, for which the bank will be sponsor in the future securitisation within the meaning of regulation.

SECURITISATION RISK MANAGEMENT

The risk management framework for securitisation is part of the risk management described in section 5.3.

The business lines represents the first line of defence with responsibility for understanding all the risks incurred in order to ensure correct evaluation. RISK acts independently, as a second line of defence.

Positions taken are monitored to measure changes in individual and portfolio risks.

The monitoring of securitised assets covers credit, counterparty, market and liquidity risks on the underlying assets.

CREDIT RISK ON SECURITISED ASSETS

Securitisation assets outside the trading book are subject to specific approval by the Credit Committees. For new transactions, a credit proposal is prepared by the business, and a comprehensive risk analysis is carried out by the RISK analysts before presentation to the Credit Committee. All approvals are subject to an annual review. Exposures are monitored to ensure that they do not exceed the limits set by the Credit Committees.

The risk exposure of securitisation tranches is intrinsically linked to that of the underlying assets, whether for securitisation or re-securitisation. Through the customary governance of Credit Committees, the Group monitors changes in the quality of underlying assets for the entire duration of the programme concerned.

COUNTERPARTY RISK ON SECURITISATION RELATED TO INTEREST RATES OR FX DERIVATIVES

Securitisation-related derivative instruments are also subject to the approval of the Credit Committees. BNP Paribas integrates counterparty risk into the securitisation structure. The principles are the same as those described above in respect of credit risk.

MARKET RISK WITHIN THE BANKING BOOK

On fixed rate ABS positions, a macro hedge consisting of fixed/variable rate swaps is put in place to cover interest rate risk. The hedge is recorded in accordance with the rules of hedge accounting.

LIQUIDITY/FUNDING RISK

Securitisation positions are financed internally by the ALM – Treasury or *via* conduits sponsored by BNP Paribas.

TABLE 67: SECURITISATION EXPOSURES IN THE NON-TRADING BOOK [(1)] (EU SEC1)

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	
																	31 December 2022
		Originator							**Sponsor**				**Investor**				
		Traditional				**Synthetic**			**Traditional**				**Traditional**				
		STS[(2)]		**Non-STS**													
	In millions of euros		**of which SRT[(3)]**		**of which SRT[(3)]**		**of which SRT[(3)]**	**Total**	**STS[(2)]**	**Non-STS**	**Synthetic**	**Total**	**STS[(2)]**	**Non-STS**	**Synthetic**	**Total**	**Total**
2	**Retail**	**7,628**	**917**	**48,398**	**185**			**56,026**		**16,281**		**16,281**	**834**	**3,456**		**4,290**	**76,597**
3	*of which residential mortgages*	*388*		*43,247*				*43,636*		*953*		*953*	*137*	*3,072*		*3,209*	*47,798*
4	*of which credit card receivables*							*-*		*3,333*		*3,333*		*2*		*2*	*3,335*
5	*of which other retail*	*7,240*	*917*	*5,150*	*185*			*12,390*		*11,995*		*11,995*	*697*	*382*		*1,079*	*25,464*
6	*of which re-securitisation*							*-*		*-*		*-*				*-*	*-*
7	**Corporate**	**121**	**121**	**12,012**	**9**	**38,662**	**38,662**	**50,794**	**3,340**	**11,732**		**15,072**	**310**	**16,405**		**16,715**	**82,582**
8	*of which loans to corporates*			*12,012*	*9*	*38,662*	*38,662*	*50,674*	*100*	*1,474*		*1,574*		*16,110*		*16,110*	*68,357*
9	*of which commercial mortgages*							*-*				*-*		*16*		*16*	*16*
10	*of which finance leases*	*121*	*121*					*121*	*1,059*	*5,997*		*7,056*	*310*	*236*		*546*	*7,723*
11	*of which other assets*							*-*	*2,181*	*4,261*		*6,442*		*43*		*43*	*6,485*
12	*of which re-securitisation*							*-*				*-*				*-*	*-*
1	**TOTAL**	**7,749**	**1,037**	**60,409**	**194**	**38,662**	**38,662**	**106,820**	**3,340**	**28,013**	**-**	**31,353**	**1,144**	**19,861**	**-**	**21,005**	**159,178**

(1) Based on the predominant asset class in the asset pool of the securitisation in which the position is held.
(2) Simple, Transparent and Standards securitisation programmes (see next section).
(3) Efficient securitisation programmes, for which the criteria for significant risk transfer are met (see paragraph Risk transfer of own account securitisation transactions, in the section on BNP Paribas securitisation activities).

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	
																	31 December 2021
								Originator				**Sponsor**				**Investor**	
				Traditional		**Synthetic**				**Traditional**				**Traditional**			
		STS[(2)]		**Non-STS**													
In millions of euros			**of which SRT[(3)]**		**of which SRT[(3)]**		**of which SRT[(3)]**	**Total**	**STS[(2)]**	**Non-STS**	**Synthetic**	**Total**	**STS[(2)]**	**Non-STS**	**Synthetic**	**Total**	**Total**
2	**Retail**	**8,725**	**858**	**43,051**	**326**			**51,775**		**10,505**		**10,505**	**1,206**	**2,490**		**3,695**	**65,976**
3	*of which residential mortgages*	*154*		*37,577*	*10*			*37,731*		*502*		*502*	*437*	*1,937*		*2,374*	*40,608*
4	*of which credit card receivables*							*-*		*2,732*		*2,732*		*38*		*38*	*2,770*
5	*of which other retail*	*8,571*	*858*	*5,473*	*316*			*14,044*		*7,271*		*7,271*	*769*	*514*		*1,283*	*22,598*
6	*of which re-securitisation*							*-*				*-*					*-*
7	**Corporate**	**150**	**150**	**12,077**	**10**	**34,238**	**34,238**	**46,464**	**2,327**	**9,856**		**12,184**	**293**	**9,559**		**9,852**	**68,500**
8	*of which loans to corporates*			*11,978*	*10*	*34,238*	*34,238*	*46,216*	*102*	*1,170*		*1,272*		*8,938*		*8,938*	*56,426*
9	*of which commercial mortgages*							*-*		*131*		*131*		*18*		*18*	*149*
10	*of which finance leases*	*150*	*150*	*99*				*249*	*782*	*4,455*		*5,237*	*293*	*548*		*841*	*6,326*
11	*of which other assets*							*-*	*1,444*	*4,101*		*5,544*		*55*		*55*	*5,599*
12	*of which re-securitisation*							*-*				*-*					*-*
1	**TOTAL**	**8,875**	**1,008**	**55,128**	**336**	**34,238**	**34,238**	**98,240**	**2,327**	**20,361**	**-**	**22,688**	**1,498**	**12,049**	**-**	**13,547**	**134,475**

(1) Based on the predominant asset class in the asset pool of the securitisation in which the position is held.
(2) Simple, Transparent and Standards securitisation programmes (see next section).
(3) Efficient securitisation programmes, for which the criteria for significant risk transfer are met (see paragraph Risk transfer of own account securitisation transactions, in the section on BNP Paribas securitisation activities).

TABLE 68: BANKING BOOK SECURITISATION POSITION QUALITY

In millions of euros	**Securitisation positions held or acquired (EAD)**	
Tranche quality	**31 December 2022**	**31 December 2021**
Senior tranche	90,899	71,162
Mezzanine tranche	1,150	462
First-loss tranche	203	193
TOTAL	**92,252**	**71,817**

At 31 December 2022, 98.5% of the securitisation positions held or acquired by the Group were senior tranches, compared with 99.1% at 31 December 2021, reflecting the high quality of the Group's portfolio.

RISK-WEIGHTED ASSETS

The revised securitisation framework came into force on 1 January 2019 with the application of Regulation (EU) No. 2017/2401 and Regulation (EU) No. 2017/2402. It provides for:

- the creation of a specific status for programmes known as Simple, Transparent and Standardised, which comply with certain conditions:
  - the portfolio of underlying assets, which must be uniform in terms of asset type, may not include a re-securitisation position nor defaulting asset at origination,
  - the programme must be traditional and the payment of the interest for the securitisation positions must be based on standard benchmark interest rates,
  - investors must have sufficient information on the portfolio of underlying assets, specifically, information on the histories of defaults and losses.

  Subject to eligibility in terms of applicable risk-weight and concentration of the underlying asset portfolio, these programmes may benefit from preferential weightings;
- new approaches for the calculation of risk-weighted assets related to applicable securitisation positions according to the specificities of the underlying portfolio:
  - **internal ratings-based approach (SEC-IRBA):** the risk-weight applicable to the securitisation position depends on the one hand on the characteristics of the securitisation programme and on the other hand on the capital charge of the underlying portfolio calculated as credit risk,
  - **standardised approach (SEC-SA):** the risk-weight applicable to the securitisation position depends on the characteristics of the securitisation programme, the capital charge of the underlying portfolio calculated as credit risk and the proportion of assets in default in this portfolio,
  - **external ratings-based approach (SEC-ERBA):** the risk-weight applicable to the securitisation position is given directly by a correspondence table defined in Regulation (EU) No. 2017/2401, based on the external rating of the tranche, its subordination rank and its maturity. BNP Paribas uses the external ratings of the Standard & Poor's, Moody's, Fitch and DBRS rating agencies,
  - in other cases, Regulation (EU) No. 2017/2401 provides for the deduction of CET1 own funds.

Risk-weighted assets corresponding to securitisation positions held or acquired by the Group amounted to EUR 15.8 billion at 31 December 2022, or 2.1% of BNP Paribas total risk-weighted assets, compared with EUR 13.6 billion at 31 December 2021 (1.9% of Group total risk-weighted assets).

TABLE 69: SECURITISATION RISK-WEIGHTED ASSET MOVEMENTS BY KEY DRIVER

		Key driver								
In millions of euros	31 December 2021	Asset size	Asset quality	Model updates	Methodology and policy	Acquisitions and disposals	Currency variation	Other	Total variation	31 December 2022
Risk weighted assets - securitisation	13,627	1,326	756				246	(161)	2,167	15,794

TABLE 70: SECURITISATION EXPOSURES AND RISK-WEIGHTED ASSETS – INSTITUTION ACTING AS ORIGINATOR OR AS SPONSOR (EU SEC3)

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
																		31 December 2022
		Exposure values (by RW bands/deductions)					**Exposure values (by regulatory approach)**				**RWA**				**Capital charge after cap(**)**			
	In millions of euros	**≤ 20%**	**> 20% ≤ 50%**	**> 50% ≤ 100%**	**> 100% < 1,250%**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**
2	**Traditional transactions**	**28,044**	**3,715**	**711**	**99**	**15**	**1,387**	**3,456**	**27,727**	**15**	**408**	**851**	**4,978**		**33**	**68**	**398**	
3	Securitisation	28,044	3,715	711	99	15	1,387	3,456	27,727	15	408	851	4,978		33	68	398	
4	*Retail*	*14,487*	*2,607*	*239*	*50*		*395*	*2,091*	*14,897*		*162*	*518*	*2,582*		*13*	*41*	*207*	
5	*of which STS*	*867*	*17*	*9*	*23*		*226*	*691*			*61*	*196*			*5*	*16*		
6	*Wholesale*	*13,557*	*1,108*	*472*	*49*	*15*	*992*	*1,365*	*12,830*	*15*	*246*	*334*	*2,396*		*20*	*27*	*192*	
7	*of which STS*	*3,311*	*85*	*24*	*27*	*15*		*854*	*2,593*	*15*		*231*	*268*			*19*	*21*	
8	Re-securitisation																	
9	**Synthetic transactions**	**38,321**		**25**	**117**	**199**	**38,463**			**199**	**5,896**				**472**			
10	Securitisation	38,321		25	117	199	38,463			199	5,896				472			
11	*Retail underlying*																	
12	*Wholesale*	*38,321*		*25*	*117*	*199*	*38,463*			*199*	*5,896*				*472*			
13	Re-securitisation																	
1	**TOTAL**	**66,365**	**3,715**	**736**	**216**	**214**	**39,850**	**3,456**	**27,727**	**214**	**6,304**	**851**	**4,978**		**504**	**68**	**398**	

(*) The Group opted for the deduction of CET1 capital rather than the 1,250% weighting.
(**) After application of the regulatory ceiling. Capital requirements correspond to 8% of risk-weighted assets.

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
																		31 December 2021
		Exposure values (by RW bands/deductions)					**Exposure values (by regulatory approach)**				**RWA**				**Capital charge after cap(**)**			
In millions of euros		**≤ 20%**	**> 20% ≤ 50%**	**> 50% ≤ 100%**	**> 100% < 1,250%**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**
2	**Traditional transactions**	**19,347**	**4,060**	**511**	**95**	**19**	**1,440**	**2,275**	**20,298**	**19**	**454**	**710**	**3,595**		**36**	**57**	**288**	
3	Securitisation	19,347	4,060	511	95	19	1,440	2,275	20,298	19	454	710	3,595		36	57	288	
4	*Retail*	*8,711*	*2,698*	*238*	*39*	*2*	*627*	*1,460*	*9,600*	*2*	*153*	*452*	*1,743*		*12*	*36*	*139*	
5	*of which STS*	*819*	*2*	*9*	*26*	*2*	*327*	*529*		*2*	*85*	*151*			*7*	*12*		
6	*Wholesale*	*10,636*	*1,361*	*273*	*56*	*17*	*813*	*815*	*10,698*	*17*	*301*	*258*	*1,852*		*24*	*21*	*148*	
7	*of which STS*	*2,381*	*21*	*28*	*31*	*16*		*657*	*1,803*	*16*		*208*	*182*			*17*	*15*	
8	Re-securitisation																	
9	**Synthetic transactions**	**33,884**			**188**	**167**	**34,071**			**167**	**6,087**				**487**			
10	Securitisation	33,884			188	167	34,071			167	6,087				487			
11	*Retail underlying*																	
12	*Wholesale*	*33,884*			*188*	*167*	*34,071*			*167*	*6,087*				*487*			
13	Re-securitisation																	
1	**TOTAL**	**53,230**	**4,060**	**511**	**283**	**186**	**35,511**	**2,275**	**20,298**	**186**	**6,541**	**710**	**3,595**		**523**	**57**	**288**	

(*) The group opted for the deduction of CET1 capital rather than the 1,250% weighting.
(**) After application of the regulatory ceiling. Capital requirements correspond to 8% of risk-weighted assets.

TABLE 71: SECURITISATION POSITIONS AND RISK-WEIGHTED ASSETS – BNP PARIBAS ACTING AS INVESTOR (EU SEC4)

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
		31 December 2022																
		Exposure values (by RW bands/deductions)					**EAD**				**Risk-weighted assets**				**Capital charge after cap(**)**			
	In millions of euros	**≤ 20%**	**> 20% ≤ 50%**	**> 50% ≤ 100%**	**> 100% < 1,250%**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**
2	**Traditional transactions**	**18,540**	**2,302**	**84**	**79**	**-**	**15,086**	**449**	**5,471**	**-**	**2,474**	**296**	**912**		**198**	**24**	**73**	
3	Securitisation	18,540	2,302	84	79		15,086	449	5,471		2,474	296	912		198	24	73	
4	*Retail*	*3,891*	*254*	*83*	*63*			*362*	*3,928*			*283*	*567*			*23*	*45*	
5	*of which STS*	*834*							*834*				*84*				*7*	
6	*Wholesale*	*14,649*	*2,048*	*1*	*17*		*15,086*	*87*	*1,542*		*2,474*	*14*	*345*		*198*	*1*	*28*	
7	*of which STS*	*310*							*310*				*31*				*2*	
8	Re-securitisation																	
9	**Synthetic transactions**																	
10	Securitisation																	
11	*Retail underlying*																	
12	*Wholesale*																	
13	Re-securitisation																	
1	**TOTAL**	**18,540**	**2,302**	**84**	**79**	**-**	**15,086**	**449**	**5,471**	**-**	**2,474**	**296**	**912**		**198**	**24**	**73**	

(*) The Group opted for the deduction of CET1 capital instead of the 1,250% weighting.
(**) After application of the regulatory ceiling. Capital requirements correspond to 8% of risk-weighted assets.

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	EU-p	EU-q
																		31 December 2021
		Exposure values (by RW bands/deductions)								**EAD**					**Risk-weighted assets**		**Capital charge after cap(**)**	
In millions of euros		**≤ 20%**	**> 20% ≤ 50%**	**> 50% ≤ 100%**	**> 100% < 1,250%**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**	**SEC-IRBA**	**SEC-ERBA**	**SEC-SA**	**Deductions(*)**
2	**Traditional transactions**	**11,803**	**1,283**	**322**	**139**		**8,925**	**1,185**	**3,437**		**1,608**	**577**	**595**		**129**	**46**	**48**	
3	Securitisation	11,803	1,283	322	139		8,925	1,185	3,437		1,608	577	595		129	46	48	
4	*Retail*	*3,146*	*373*	*91*	*85*			*621*	*3,075*			*479*	*461*			*38*	*37*	
5	*of which STS*	*1,206*							*1,206*				*121*				*10*	
6	*Wholesale*	*8,657*	*910*	*231*	*54*		*8,925*	*564*	*363*		*1,608*	*98*	*134*		*129*	*8*	*11*	
7	*of which STS*	*292*							*293*				*29*				*2*	
8	Re-securitisation																	
9	**Synthetic transactions**																	
10	Securitisation																	
11	*Retail underlying*																	
12	*Wholesale*																	
13	Re-securitisation																	
1	**TOTAL**	**11,803**	**1,283**	**322**	**139**	**-**	**8,925**	**1,185**	**3,437**	**-**	**1,608**	**577**	**595**		**129**	**46**	**48**	

(*) The Group opted for the deduction of CET1 capital instead of the 1,250% weighting.
(**) After application of the regulatory ceiling. Capital requirements correspond to 8% of risk-weighted assets.

Guarantees on securitisation positions amounted to EUR 188 million as at 31 December 2022, down compared with EUR 231 million at 31 December 2021.

5.6 Counterparty credit risk

Counterparty credit risk is the translation of the credit risk embedded in financial transactions, investments and/or settlement transactions between counterparties. Those transactions include bilateral contracts such as over-the-counter (OTC) derivative contracts as well as contracts settled through clearing houses. The amount of this risk may vary over time in line with changing market parameters which then impacts the replacement value of the relevant transactions.

Counterparty risk lies in the event that a counterparty defaults on its obligations to pay the Bank the full present value of the flows relating to a transaction or a portfolio for which the Bank is a net receiver. Counterparty credit risk is also linked to the replacement cost of a derivative or portfolio in the event of counterparty default. Hence, it can be seen as a market risk in case of default or a contingent risk.

In respect of counterparty risk, the RISK Function is structured according to five main priorities:

- measuring exposure to counterparty credit risk;
- checking and analysing these exposures and the limits that apply to them;
- implementing mechanisms to reduce risk;
- calculating and managing credit valuation adjustments (CVA);
- defining and implementing stress tests.

COUNTERPARTY CREDIT RISK VALUATION

COUNTERPARTY EXPOSURE CALCULATION

Exposure to counterparty risk is measured using two approaches:

Modelled exposure – Internal model method

With regard to modelling counterparty risk exposure, the exposure at default (EAD) for counterparty risk is calculated based on the Effective Expected Positive Exposure (EEPE) indicator multiplied by the alpha regulatory factor as defined in article 284-4 of Regulation (EU) No. 575/2013. The Effective Expected Positive Exposure (EEPE) is measured using an internal exposure valuation model to determine exposure profiles. The model was developed by the Group and approved by the supervisor. The aim of the internal model is to determine exposure profiles.

The principle of the model is to simulate the main risk factors, such as commodity and equity prices, interest rates and foreign exchange rates, affecting the counterparty risk exposure, based on their initial respective values. The Bank uses Monte-Carlo simulations to generate thousands of time trajectories (corresponding to thousands of potential market scenarios) to define potential changes in risk factors. The diffusion processes used by the model are calibrated on the most recent historic data set over a four-year period.

Based on all the risk factor simulations, the model assesses the value of the positions from the simulation date to the transaction maturity date (from one day to more than thirty years for the longest-term transactions) to generate an initial set of exposure profiles.

Exposure may be reduced by a Master Agreement, and may also be covered by a Credit Support Annex (CSA). For each counterparty, the model aggregates the exposures taking into consideration any netting agreements and credit support annexes, as well as the potentially risky nature of the collateral exchanged.

Based on the breakdown of exposure to the counterparty, the model determines the following in particular:

- the average risk profile, the Expected Positive Exposure (EPE), from which the EEPE (Effective Expected Positive Exposure) is calculated:

  The Expected Positive Exposure (EPE) profile is calculated as the average of the breakdown of counterparty exposures at each point in the simulation, with the negative portions of the trajectories set to zero (the negative portions correspond to situations where BNP Paribas Group is a risk for the counterparty). The EEPE is calculated as the first-year average of the non-decreasing EPE profile: at each simulation date, the value taken is the maximum of the EPE value and the value on the previous simulation date;
- the Potential Future Exposure (PFE) profile:

  The Potential Future Exposure (PFE) profile is calculated as a 90% percentile of the breakdown of exposure to the counterparty at each point in the simulation. This percentile is raised to 99% for hedge fund counterparties. The highest Potential Future Exposure value (Max PFE) is used to monitor maximum limits.

Since 1 January 2014, date of entry into force of Regulation (EU) No. 575/2013, the system for measuring exposures to counterparty risk takes into account:

- extension of the margin periods of risk in accordance with article 285 of the CRR;
- inclusion of the specific correlation risk;
- determination of a stressed EEPE calculated based on a calibration reflecting a particular period of stress.

Non-modelled exposure – method SA-CCR

For non-modelled counterparty credit risk exposures, the derivative exposure at default is calculated using the standardised approach for counterparty credit risk (SA-CCR) in accordance with article 274 of Regulation (EU) No. 876/2019.

The exposure at default of a netting set using the standardised approach to counterparty risk is based on:

- the replacement cost (RC), calculated in accordance with article 275;
- potential future exposure (PFE), calculated in accordance with article 278;
- the regulatory factor alpha, set in accordance with article 274.

The exposure at default on securities financing transactions (SFTs) is calculated using the Financial Collateral Comprehensive Method in accordance with article 223 of Regulation (EU) No. 575/2013.

LIMIT/MONITORING FRAMEWORK

Limits reflecting the principles of the Group's Risk Appetite Statement are defined for the counterparty credit risk. These limits are set in accordance with the type of counterparty (banks, institutional investors, asset managers, corporates, clearing houses, *etc.*) and the type of exposure used to measure and manage counterparty risk:

- the highest value of potential future exposures (Max PFE) for modelled exposures;
- the exposure value calculated using the standardised approach for non-modelled exposures.

The exposure of each counterparty is calculated to verify compliance with credit decisions.

These limits are defined and calibrated as part of the risk approval process. They are approved in the following committees (listed in ascending order of discretionary authority): Local Credit Committee, Regional Credit Committee, Global Credit Committee, General Management Credit Committee.

These measures are complemented by sets of directives (covering contingent market risk sensitivities per counterparty which are extracted from the market risk system) which provide further tools in the monitoring of counterparty credit risk and the prevention of systemic risk concentrations.

MITIGATION OF COUNTERPARTY CREDIT RISK

As part of its risk management, the BNP Paribas Group implemented three counterparty risk mitigation mechanisms:

- the signature of netting agreements for OTC transactions;
- clearing through central counterparties, in the case of OTC or listed derivative transactions;
- Bilateral initial margin exchange.

Netting agreements

Netting is used by the Bank in order to mitigate counterparty credit risk associated with derivative trading. The main instance where netting occurs is in case of trades termination: if the counterparty defaults, all the trades are terminated at their current market value, and all the positive and negative market values are summed to obtain a single amount (net) to be paid to or received from the counterparty. The balance ("close-out netting") may be collateralised with cash, securities or deposits.

The Bank also applies settlement netting in order to mitigate counterparty credit risk in cases of currency settlement. This corresponds to the netting of all payments by counterparty. The netting results in a single amount (for each currency) to be paid either by the Bank or by the counterparty.

Transactions affected by this are processed in accordance with bilateral or multilateral agreements respecting the general principles of the national or international framework. The main forms of bilateral agreements are those issued by *Fédération Bancaire Française* (FBF) and on an international basis by the International Swaps and Derivatives Association (ISDA).

Trade clearing through central counterparties

Trade clearing through central counterparties (CCPs) is part of BNP Paribas usual capital market activities. As a global clearing member, BNP Paribas contributes to the risk management framework of the CCPs through payment to a default fund as well as daily margin calls. The rules which define the relationships between BNP Paribas and the CCPs of which it is a member are described in each CCP's rulebook.

For Europe, the United Kingdom and the United States in particular, this scheme enables the reduction of notional amounts through the netting of the portfolio, on one hand, and, on the other, a transfer of the risk from several counterparties to a single central counterparty with a robust risk management framework.

In its clearing for third parties' activity, BNP Paribas requests as well, and on a daily basis, the payment of margin calls from its clients.

Since default by one or more clearing houses would affect BNP Paribas, it has introduced dedicated monitoring of these central counterparties and closely tracks concentrations with them.

Bilateral initial margin exchange

Regulation (EU) No. 648/2012 (EMIR) stipulates the establishment of additional constraints for players in the derivatives markets, including the obligation to exchange collateral for contracts that are not centrally cleared. An initial guarantee deposit must be made by the Bank's most significant financial and non-financial counterparties. The purpose of this exchange is to mitigate the counterparty credit risk associated with over-the-counter derivative trading that is not centrally cleared. The Bank's transactions with sovereign borrowers, central banks, and supranational entities are excluded from this system.

If the counterparty defaults, all the trades are terminated at their current market value by the Bank. The initial guarantee deposit hedges the variation in the value of the transactions during this liquidation period. The initial deposit reflects an extreme but plausible estimate of potential losses corresponding to a unilateral interval of confidence of 99% over a ten-day period, based on historic data including an episode of significant financial tensions.

The initial deposit must be bilaterally traded on a gross basis between the Bank and the counterparty. It is kept by a third party so as to guarantee that the Bank immediately has access to the counterparty's deposit and that the Bank's deposit be protected in case the counterparty defaults.

CREDIT VALUATION ADJUSTMENTS (CVA)

The valuation of financial OTC trades carried out by BNP Paribas as part of its trading activities (mainly Global Markets) includes Credit Valuation Adjustments (CVA). CVA is an adjustment of the trading portfolio valuation to take into account each counterparty's credit risk. It is the fair value on any expected loss arising from counterparty exposure based on the potential positive value of the contract, the counterparty default probability and the estimated recovery rate in case of default.

The majority of counterparty credit risk exposures on derivatives are related to the Group's interest rate, credit and foreign exchange activities, all underlying assets, and all business lines combined.

The credit valuation adjustment is not only a function of the expected exposure but also the credit risk level of the counterparty, which is linked to the level of the Credit Default Swaps (CDS) spreads used in the default probability calculation.

In order to reduce the risk associated with the credit quality deterioration embedded in a financial operations portfolio, BNP Paribas uses a dynamic hedging strategy, involving the purchase of market instruments such as credit derivative instruments. (See *CVA risk management* in the section *Counterparty risk management*).

Risk related to the volatility of CVAs (CVA risk)

To protect banks against the risk of losses due to CVA variations, Regulation (EU) No. 575/2013 introduced a dedicated capital charge, the CVA charge. This charge aims at capitalising the risk of loss caused by changes in the credit spread of a counterparty to which the BNP Paribas Group is exposed. The CVA charge is computed by the Group using mainly the advanced method and relies on the Bank's model on market risk (see section *CVA Risk* hereafter).

STRESS TESTS AND WRONG WAY RISK

The BNP Paribas counterparty risk stress testing framework is consistent with the market risk framework (see section 5.7 *Market risk related to trading activities*). As such, the counterparty stress testing framework employs consistent market shifts where scenarios are shared. Testing also comprises factors specific to counterparty risk such as deteriorations in counterparty credit quality.

Such risk analysis is present within the Executive Management reporting framework which shares some common forums with the market risk reporting set up such as the Financial Markets Risk Committee (FMRC), core risk committee for market and counterparty credit risk. Both counterparty and market risk stress testing frameworks are governed by the Stress Testing Steering Committee.

Wrong Way Risk (or unfavourable correlation risk) is the case of exposure to a counterparty being inversely correlated with the counterparty's credit quality.

Such risk can be split in two parts:

- General Wrong Way Risk (GWWR), which corresponds to the risk that the probability of default by counterparty is positively correlated with general market risk factors;

- Specific Wrong Way Risk (SWWR), which corresponds to the risk arising when future exposure to a specific counterparty is positively correlated with the counterpart's probability of default due to the nature of the transactions with the counterparty or of the collateral received.

BNP Paribas' monitoring and analysis of General Wrong Way Risk is performed through stress tests that highlight the risk factors negatively correlated with the counterparty's credit quality. It combines a top-down approach and a bottom-up approach:

- for the top-down approach, the GWWR policy defines the generic rules and criteria to be used to detect GWWR. These criteria are based on the countries of incorporation of the counterparties, the region of which they are part and the industries in which they are involved. Derivative positions, structured financing, and collateral that counterparties may have with BNP Paribas have been defined as the situations where GWWR should be analysed and reported;
- the GWWR framework relies upon a robust bottom-up approach with the expertise of the counterparty credit analysts specifically needed to define the most impacting scenarios at portfolio level (the approach consists of the use of stressed market parameters reflecting extreme but realistic conditions).

When a legal link between the exposure underlyings and the counterparty is established, the SWWR is subject to prescribed regulatory capital treatment.

EXPOSURE TO COUNTERPARTY CREDIT RISK

The table below shows exposure to counterparty credit risk (measured as the exposure at default) by Basel asset class on derivative contracts and securities lending/borrowing transactions, after the impact of any netting agreement. Bilateral transactions between the Bank and customers (bilateral counterparty risk) are distinguished from transactions related to the clearing activities of the Bank, including essentially exposures to central counterparties (CCP).

TABLE 72: COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY ASSET CLASS (EXCL. CVA RISK CHARGE)

	31 December 2022			31 December 2021			Variation
EAD *In millions of euros*	**IRBA**	**Standardised approach**	**Total**	**IRBA**	**Standardised approach**	**Total**	**Total**
Bilateral counterparty credit risk	**147,061**	**1,975**	**149,036**	**171,668**	**2,503**	**174,171**	**(25,135)**
Central governments and central banks	26,737	49	26,786	43,779	209	43,988	(17,202)
Corporates(*)	93,069	1,103	94,172	99,277	1,680	100,962	(6,793)
Institutions(**)	27,255	795	28,050	28,612	608	29,215	(1,165)
Retail		27	27		6	6	21
Exposure to CCP related to clearing activities	**1,778**	**71,056**	**72,834**	**3,314**	**50,348**	**53,662**	**19,172**
TOTAL	**148,839**	**73,031**	**221,870**	**174,982**	**52,852**	**227,833**	**(5,964)**

(*) Asset class "Corporates" includes Other risk assets (EUR 3 million at 31 December 2022).
(**) Institutions asset class comprises credit institutions and investment firms, including those recognised in other countries, it also includes some exposures to regional and local authorities, public sector agencies and multilateral development banks that are not treated as central government authorities.

For bilateral counterparty credit risk, the share of exposures under the IRB approach represented 99% at 31 December 2022 (stable compared with 31 December 2021).

The following table summarises the exposures to counterparty credit risk with a breakdown by product. An indication of the Group's business volume on derivative financial instruments booked in the trading portfolio is presented in note 4.a to the consolidated financial statements.

TABLE 73: COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT BY PRODUCT (EXCL. CVA RISK CHARGE)

	31 December 2022					31 December 2021				
EAD *In millions of euros*	**Bilateral counterparty credit risk**		**Exposure to CCP related to clearing activities**		**Total**	**Bilateral counterparty credit risk**		**Exposure to CCP related to clearing activities**		**Total**
OTC derivatives	89,517	85.88%	14,715	14.12%	104,233	104,206	89.90%	11,704	10.10%	115,911
Securities Financing Transactions	59,514	93.82%	3,919	6.18%	63,434	69,965	93.86%	4,579	6.14%	74,544
Listed derivatives			38,315	100.00%	38,315			22,579	100.00%	22,579
Default fund contribution			15,885	100.00%	15,885			14,799	100.00%	14,799
TOTAL	**149,036**	**67.17%**	**72,834**	**32.83%**	**221,870**	**174,171**	**76.45%**	**53,662**	**23.55%**	**227,833**

BILATERAL COUNTERPARTY CREDIT RISK

The bilateral counterparty risk corresponds to the contracts treated bilaterally (or over-the-counter) by BNP Paribas with its clients.

The exposure at default (EAD) is primarily measured with the aid of internal models (see paragraph *Counterparty exposure calculation*). For the perimeter not covered by internal models (limited mainly to subsidiaries BNL, BancWest, TEB and BNP Paribas EXANE), EAD is calculated using the standardised approach to counterparty credit risk. Risk-weighted assets linked to counterparty credit risk are computed by multiplying EAD by an appropriate weighting according to the approach used (standardised or IRBA).

The following table shows a summary, by approach, of the regulatory exposures of counterparty credit risk and associated risk-weighted assets for the entire scope of the BNP Paribas Group's bilateral activities, which represents the bulk of counterparty credit risk exposures.

Since 30 June 2021, exposures not modelled are calculated according to the provisions of article 274 of Regulation (EU) No. 876/2019 (SA-CCR method) and no longer using the "Mark-to-market" valuation method.

TABLE 74: BILATERAL COUTERPARTY CREDIT RISK EXPOSURES AT DEFAULT BY APPROACH (EU CCR1)

		a	b	c	d	e	f	g	h		
											31 December 2022
											RWA
	In millions of euros	**Replacement cost (RC)**	**Potential future exposure (PFE)**	**EEPE(**)**	**Alpha used for computing regulatory exposure value**	**Exposure value pre-CRM(***)**	**Exposure value post-CRM(***)**	**Exposure value**		**Of which standardised approach**	**Of which IRB approach**
EU1	EU – Original Exposure Method (for derivatives)										
EU2	EU – Simplified SA-CCR (for derivatives)										
1	SA-CCR (for derivatives)	363	655		1.40	1,425	1,425	1,425	1,208	1,184	24
2	IMM (for derivatives and SFTs)(*)			91,812	1.60	146,900	146,900	146,873	31,072	203	30,869
2a	*of which securities financing transactions*			*36,738*		*58,781*	*58,781*	*58,781*	*6,618*	*100*	*6,518*
2b	*of which derivatives and long settlement transactions*			*55,074*		*88,119*	*88,119*	*88,092*	*24,454*	*103*	*24,351*
2c	*of which from contractual cross-product netting sets*										
3	Financial collateral simple method (for SFTs)										
4	Financial collateral comprehensive method (for SFTs)					734	734	734	1,031		1,031
5	VaR for SFTs										
6	**TOTAL**					**149,059**	**149,059**	**149,032**	**33,311**	**1,386**	**31,925**

(*) Securities Financing Transactions.
(**) Effective Expected Positive Exposure.
(***) Credit risk mitigation.

		a	b	c	d	e	f	g	h		
											31 December 2021
									RWA		
	In millions of euros	**Replacement cost (RC)**	**Potential future exposure (PFE)**	**EEPE(**)**	**Alpha used for computing regulatory exposure value**	**Exposure value pre-CRM(***)**	**Exposure value post-CRM(***)**	**Exposure value**		**Of which standardised approach**	**Of which IRB approach**
EU1	EU – Original Exposure Method (for derivatives)				1.60						
EU2	EU – Simplified SA-CCR (for derivatives)				1.60						
1	SA-CCR (for derivatives)	340	1,715		1.40	1,674	1,674	2,876	2,238	2,007	232
2	IMM (for derivatives and SFTs)(*)			103,800	1.65	173,503	173,503	171,270	31,629	2	31,627
2a	*of which securities financing transactions*			42,388				*69,940*	*6,106*	*2*	*6,104*
2b	*of which derivatives and long settlement transactions*			*61,412*				*101,330*	*25,523*		*25,523*
2c	*of which from contractual cross-product netting sets*										
3	Financial collateral simple method (for SFTs)							25	8		8
4	Financial collateral comprehensive method (for SFTs)										
5	VaR for SFTs										
6	**TOTAL**					**175,177**	**175,177**	**174,171**	**33,875**	**2,009**	**31,866**

(*) Securities Financing Transactions.
(**) Effective Expected Positive Exposure.
(***) Credit risk mitigation.

The following tables provide: the calculation of risk-weighted assets according to the Basel risk parameters using an IRB approach (see paragraph *Sovereign, financial institution, corporate and specialised financing portfolios* in *Credit risk: Internal Ratings-Based Approach (IRBA)* in section 5.4), then using the standardised approach.

TABLE 75: IRBA BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT (EU CCR4)

			a	b	c	d	e	f	g
			31 December 2022						
	In millions of euros	**PD scale**	**EAD**	**Average PD**	**Number of obligors**	**Average LGD**	**Average maturity**	**RWAs**	**Average RW**
1	Central governments or central banks	0.00 to < 0.15%	26,356	0.01%	100 to 1,000	1%	1	53	0%
2		0.15 to < 0.25%	147	0.17%	0 to 100	20%	2	26	18%
3		0.25 to < 0.50%	170	0.31%	0 to 100	47%		66	39%
4		0.50 to < 0.75%							
5		0.75 to < 2.50%	3	1.07%	0 to 100	50%	1	3	101%
6		2.50 to < 10.0%							
7		10 to < 100%	61	n.s.	0 to 100	n.s.	n.s.	n.s.	n.s.
8		100% (Default)							
	SUB-TOTAL		**26,737**	**0.07%**		**2%**	**1**	**436**	**2%**
1	Institutions	0.00 to < 0.15%	23,963	0.05%	10,000 to 20,000	41%	1	3,903	16%
2		0.15 to < 0.25%	1,293	0.18%	100 to 1,000	45%	1	527	41%
3		0.25 to < 0.50%	1,188	0.34%	100 to 1,000	52%	1	764	64%
4		0.50 to < 0.75%	201	0.61%	0 to 100	55%	1	185	92%
5		0.75 to < 2.50%	449	1.26%	100 to 1,000	56%	1	476	106%
6		2.50 to < 10.0%	117	3.70%	0 to 100	58%	1	181	154%
7		10 to < 100%	44	14.33%	0 to 100	49%	1	104	238%
8		100% (Default)			0 to 100				
	SUB-TOTAL		**27,255**	**0.13%**		**42%**	**1**	**6,140**	**23%**
1	Corporates	0.00 to < 0.15%	74,593	0.05%	20,000 to 30,000	32%	1	12,501	17%
2		0.15 to < 0.25%	6,124	0.17%	1,000 to 10,000	37%	1	2,065	34%
3		0.25 to < 0.50%	6,459	0.31%	1,000 to 10,000	34%	1	3,062	47%
4		0.50 to < 0.75%	776	0.68%	100 to 1,000	36%	2	519	67%
5		0.75 to < 2.50%	3,339	1.31%	1000 to 10,000	58%	2	4,308	129%
6		2.50 to < 10.0%	1,329	4.32%	1,000 to 10,000	59%	2	2,115	159%
7		10 to < 100%	356	15.85%	100 to 1,000	43%	2	778	218%
8		100% (Default)	93	100.00%	100 to 1,000				0%

	SUB-TOTAL		**93,069**	**0.35%**		**34%**	**1**	**25,349**	**27%**
	Retail		n.s.	n.s.		n.s.	n.s.	n.s.	n.s.
	TOTAL		**147,061**	**0.26%**		**30%**	**1**	**31,925**	**22%**

			a	b	c	d	e	f	g
									31 December 2021
	In millions of euros	**PD scale**	**EAD**	**Average PD**	**Number of obligors**	**Average LGD**	**Average maturity**	**RWAs**	**Average RW**
1	Central governments or central banks	0.00 to < 0.15%	43,333	0.02%	100 to 1,000	2%	2	172	0%
2		0.15 to < 0.25%	36	0.20%	0 to 100	20%	3	8	23%
3		0.25 to < 0.50%	335	0.30%	0 to 100	48%		110	33%
4		0.50 to < 0.75%		0.69%	0 to 100	50%	4	1	119%
5		0.75 to < 2.50%	70	1.75%	0 to 100	18%	5	39	56%
6		2.50 to < 10.0%							
7		10 to < 100%	5	n.s.	0 to 100	n.s.	n.s.	21	n.s.
8		100% (Default)							
	SUB-TOTAL		**43,779**	**0.03%**		**2%**	**2**	**351**	**1%**
1	Institutions	0.00 to < 0.15%	24,838	0.05%	1,000 to 10,000	42%	1	3,880	16%
2		0.15 to < 0.25%	1,597	0.18%	100 to 1,000	45%	1	550	34%
3		0.25 to < 0.50%	1,214	0.34%	100 to 1,000	51%	1	681	56%
4		0.50 to < 0.75%	178	0.58%	100 to 1,000	59%	1	168	94%
5		0.75 to < 2.50%	642	1.24%	100 to 1,000	46%	1	559	87%
6		2.50 to < 10.0%	141	3.98%	100 to 1,000	63%	1	258	183%
7		10 to < 100%	2		0 to 100	46%	1	5	246%
8		100% (Default)							
	SUB-TOTAL		**28,612**	**0.12%**		**43%**	**1**	**6,101**	**21%**
1	Corporates	0.00 to < 0.15%	75,811	0.06%	20,000 to 30,000	32%	1	11,615	15%
2		0.15 to < 0.25%	7,930	0.18%	1,000 to 10,000	37%	2	2,571	32%
3		0.25 to < 0.50%	6,543	0.33%	1,000 to 10,000	32%	2	2,621	40%
4		0.50 to < 0.75%	1,976	0.69%	100 to 1,000	36%	3	1,326	67%
5		0.75 to < 2.50%	4,854	1.26%	1,000 to 10,000	46%	1	4,594	95%
6		2.50 to < 10.0%	1,645	4.25%	1,000 to 10,000	42%	2	2,226	135%
7		10 to < 100%	295	15.85%	100 to 1,000	35%	2	462	156%
8		100% (Default)	224	100.00%	100 to 1,000	0%			0%

SUB-TOTAL	**99,277**	**0.50%**		**33%**	**1**	**25,415**	**26%**
Retail	-	n.s.		n.s.	n.s.	-	n.s.
TOTAL	**171,668**	**0.31%**		**27%**	**1**	**31,866**	**19%**

TABLE 76: STANDARDISED BILATERAL COUNTERPARTY CREDIT RISK EXPOSURE AT DEFAULT (EU CCR3)

		a	e	f	h	i	j	l	
									31 December 2022
								EAD	
							Risk weight		
	In millions of euros	**0%**	**20%**	**50%**	**75%**	**100%**	**150%**	**Total**	**RWAs**
1	Central governments or central banks			41		8		**49**	**28**
2;3;4;5;6	Institutions		574	140		81		**795**	**266**
7;9;10	Corporates(*)		8	78		972	46	**1,103**	**1,076**
8	Retail				27			**27**	**20**
	TOTAL	**-**	**582**	**259**	**27**	**1,061**	**46**	**1,975**	**1,390**

(*) Asset class "Corporates" includes Other risk assets (an amount of EUR 3 million at 31 December 2022, stable compared to 31 December 2021).

		a	e	f	h	i	j	l	
									31 December 2021
								EAD	
							Risk weight		
	In millions of euros	**0%**	**20%**	**50%**	**75%**	**100%**	**150%**	**Total**	**RWAs**
1	Central governments or central banks			209		1		**209**	**105**
2;3;4;5;6	Institutions		215	353		34	6	**608**	**253**
7;9;10	Corporates		19	69		1,553	39	**1,680**	**1,646**
8	Retail			0	6			**6**	**5**
	TOTAL	**-**	**234**	**630**	**6**	**1,588**	**45**	**2,503**	**2,009**

COUNTERPARTY CREDIT RISK FOR EXPOSURES TO CENTRAL COUNTERPARTIES ASSOCIATED WITH CLEARING ACTIVITIES

The capital requirements related to central counterparties (CCP) exposures correspond to an extension of the bilateral counterparty credit risk perimeter to clearing activities; it covers the cleared part of the portfolio of OTC derivatives, repurchase agreements and securities lending/borrowing as well as the listed derivatives portfolio.

It is equal to the sum of the following three elements:

- a charge resulting from exposures generated by clearing activities (proprietary and client clearing);
- a requirement resulting from the non-segregated initial margins posted to the CCP;

- a requirement resulting from the default fund contribution of the central counterparties.

For central counterparties (CCP), Regulation (EU) No. 575/2013 distinguishes qualifying central counterparties (QCCP) from non-qualifying central counterparties. Qualifying central counterparties correspond to central counterparties authorised or recognised in accordance with Regulation (EU) No. 648/2012.

The table below presents the breakdown of the risk-weighted assets by method and category of exposure to central counterparties.

TABLE 77: EXPOSURES TO CCPs (EU CCR8)

		a	b	a	b
		31 December 2022		**31 December 2021**	
In millions of euros		**EAD**	**RWAs**	**EAD**	**RWAs**
1	**Exposures to QCCPs (total)**		**2,349**		**2,647**
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions);	44,669	1,140	25,507	1,186
3	*of which OTC derivatives*	*4,208*	*93*	*4,325*	*113*
4	*of which Exchange-traded derivatives*	*37,723*	*992*	*17,868*	*920*
5	*of which SFTs(*)*	*2,738*	*55*	*3,314*	*152*
6	*of which Netting sets where cross-product netting has been approved*				
7	Segregated initial margin				
8	Non-segregated initial margin	12,212	252	13,348	290
9	Prefunded default fund contributions	5,320	957	5,046	1,170
10	Unfunded default fund contributions	10,555		9,753	
11	**Exposures to non-eligible CCPs**		**192**		**8**
12	Exposures for trades at non-CCPs (excluding initial margin and default fund contributions);	1	1		
13	*of which OTC derivatives*				
14	*of which Exchange-traded derivatives*				
15	*of which SFTs(*)*	*1*	*1*		
16	*of which Netting sets where cross-product netting has been approved*				
17	Segregated initial margin				
18	Non-segregated initial margin	67	67	8	8
19	Prefunded default fund contributions	4	47		
20	Unfunded default fund contributions	6	77		

(*) Securities Financing Transactions.

CVA RISK

The CVA risk measures the risk of losses caused by changes in the credit valuation adjustments resulting from credit spread changes associated with the counterparties to whom the Group is exposed (see paragraph *Credit Valuation Adjustments (CVA)*).

Using the standardised approach, the capital requirement for credit valuation adjustment risk (CVA) is calculated according to the supervisory formula.

Using the IRB approach, the CVA risk capital charge is the sum of two elements:

- CVA VaR charge, which represents the own funds requirement measured from a VaR computation on CVA sensitivities to credit spreads;
- CVA SVaR charge, which represents the own funds requirement measured from a stressed VaR computation on CVA sensitivities to credit spreads.

TABLE 78: CVA RISK CAPITAL CHARGE (EU CCR2)

		a	b	a	b
		31 December 2022		31 December 2021	
	In millions of euros	EAD	RWAs	EAD	RWAs
1	**Advanced approach[(*)]**	**45,446**	**6,137**	**49,054**	**3,460**
2	CVA VaR charge		1,295		361
3	CVA SVaR charge		4,842		3,098
4	**Standardised approach**	**530**	**327**	**692**	**448**
5	**TOTAL**	**45,976**	**6,464**	**49,746**	**3,908**

(*) The EAD in advanced approach has been adjusted on the previous closing date on a specific counterparty. This change has no impact on the associated RWA.

CVA RISK MANAGEMENT

CVA sensitivities to credit spreads are partially offset by the recognition of hedges. These hedges correspond to credit derivatives on certain identified counterparties or indices composed of identifiable counterparties.

Instruments authorised as hedges in the calculation of the capital requirements for credit valuation adjustment risk form a sub-set of the credit derivatives used as hedges by the Global Markets business in the management of its CVA.

COUNTERPARTY CREDIT RISK MANAGEMENT

CREDIT RISK MITIGATION TECHNIQUES

In the context of liquidity management and counterparty credit risk management, the BNP Paribas Group systematically monitors the collateral guarantees received and given, for both the portion hedging the contracts' market value (variation margin) and the risk of an adverse change in these market values in the event of a counterparty default (initial margin). The collateral given and received used in derivative contracts is mainly comprised of cash, and to a lesser extent, debt securities. The impact of the collateral received in clearing contracts is shown in the financial statements in note 4.q *Offsetting of financial assets and liabilities*.

As a general rule, when EAD is modelled in EEPE and weighted according to the IRB approach, the LGD (Loss Given Default) is not adjusted according to the collateral received since it is already taken into account in the "Effective Expected Positive Exposure" computation (see section *Bilateral counterparty risk*).

Collateral guarantees used in the standardised approach to reduce the EAD totalled EUR 490 million at 31 December 2022, compared with EUR 591 million at 31 December 2021.

The table below shows the breakdown of the collateral posted and received in respect of initial margins, margin calls as well as amounts in cash and in securities of repurchase agreements and securities lending and borrowing.

TABLE 79: COMPOSITION OF COLLATERAL GIVEN AND RECEIVED (EU CCR5)

	a	b	c	d	e	f	g	h
								31 December 2022
	Collateral used in derivative transactions				**Collateral used in SFTs(*)**			
	Fair value of collateral received		**Fair value of posted collateral**		**Fair value of collateral received**		**Fair value of posted collateral**	
In millions of euros	**Segregated**	**Unsegre-gated**	**Segregated**	**Unsegre-gated**	**Segregated**	**Unsegre-gated**	**Segregated**	**Unsegre-gated**
1 Cash – domestic currency		47,462	2,552	86,212		156,026	2,821	154,694
2 Cash – other currencies		58,613	848	30,652		97,635		146,290
3 Domestic sovereign debt-euro	402	17,485	12,779	5,742		202,959	1,382	187,290
4 Other sovereign debt	6,094	6,128	1,174	3,776	2	229,008	294	167,096
5 Government agency debt		619				3,807		2,421
6 Corporate bonds	17,735	5,482	15,409	125	216	70,744		46,772
7 Equity securities	642	25				96,322		66,879
8 Other collateral		14				3,231		110
9 TOTAL	**24,874**	**135,827**	**32,762**	**126,507**	**218**	**859,732**	**4,497**	**771,552**

(*) Securities Financing Transactions.

	a	b	c	d	e	f	g	h
								31 December 2021
	Collateral used in derivative transactions				**Collateral used in SFTs(*)**			
	Fair value of collateral received		**Fair value of posted collateral**		**Fair value of collateral received**		**Fair value of posted collateral**	
In millions of euros	**Segregated**	**Unsegre-gated**	**Segregated**	**Unsegre-gated**	**Segregated**	**Unsegre-gated**	**Segregated**	**Unsegre-gated**
1 Cash – domestic currency		39,060	7,367	51,303		159,717	2,237	169,681
2 Cash – other currencies		49,808	1,612	21,339		285,834		255,921
3 Domestic sovereign debt-euro	6,423	6,936	11,050	2,887		223,596	1,069	199,418
4 Other sovereign debt	4,436	3,496	7,276	4,737		283,668	276	275,234
5 Government agency debt	53	550	619			4,430		3,445
6 Corporate bonds	6,151	1,795	3,262	387		68,423		70,932
7 Equity securities	608	3				120,869		116,486
8 Other collateral		9				166		541
9 TOTAL	**17,671**	**101,656**	**31,187**	**80,654**	**-**	**1,146,703**	**3,582**	**1,091,657**

(*) Securities Financing Transactions.

CREDIT DERIVATIVE EXPOSURES

The following table summarises all the notional amounts and market values of the trading portfolio credit derivatives.

TABLE 80: CREDIT DERIVATIVES EXPOSURES (EU CCR6)

		a	b	a	b
		31 December 2022		**31 December 2021**	
In millions of euros		**Protection bought**	**Protection sold**	**Protection bought**	**Protection sold**
6	**Notionals**	**548,220**	**441,858**	**520,738**	**419,740**
1	Single-name credit default swaps	211,302	168,367	198,676	160,439
2	Index credit default swaps	291,586	238,239	247,707	189,482
3	Total return swaps	10,919	3,654	5,958	3,347
4	Credit options	33,749	31,598	67,752	66,473
5	Other credit derivatives	665		644	
	Fair values	**(2,730)**	**2,292**	**(6,963)**	**6,884**
7	Positive fair value (asset)	2,593	4,774	861	7,639
8	Negative fair value (liability)	(5,324)	(2,482)	(7,824)	(755)

CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

TABLE 81: COUNTERPARTY CREDIT RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

	RWAs			**Capital requirements**		
In millions of euros	**31 December 2022**	**31 December 2021**	**Variation**	**31 December 2022**	**31 December 2021**	**Variation**
Bilateral counterparty credit risk	32,280	33,867	(1,587)	2,582	2,709	(127)
Exposure to CCP related to clearing activities(*)	2,541	2,654	(113)	203	212	(9)
CVA charge	6,464	3,908	2,556	517	313	204
Others (general method based on financial collateral)	1,035	8	1,027	83	1	82
TOTAL	**42,320**	**40,437**	**1,883**	**3,386**	**3,235**	**151**

(*) Counterparty credit risk related to clearing activities.

TABLE 82: COUNTERPARTY CREDIT RWA MOVEMENTS BY KEY DRIVER (EU CCR7)

1st quarter 2023

		a			
		RWAs		**Capital Requirements**	
	In millions of euros	**Total**	**of which internal model method (IMM)(*)**	**Total**	**of which internal model method (IMM)(*)**
1	**31 December 2022**	**42,320**	**31,072**	**3,386**	**2,486**
2	Asset size	931	925	75	74
3	Asset quality	854	704	68	56
4	Model update	159	(500)	13	(40)
5	Methodology and policy	-		-	
6	Acquisitions and disposals	(163)		(13)	
7	Currency	(10)		(1)	
8	Other	(2,010)	(2,027)	(161)	(162)
9	**31 March 2023**	**42,081**	**30,174**	**3,366**	**2,414**

(*) *Internal model method related to bilateral counterparty model (excluded CCP clearing).*

5.7 Market risk

Market risk is the risk of incurring a loss of value due to adverse trends in market prices or parameters, whether directly observable or not.

Observable market parameters include, but are not limited to, exchange rates, prices of securities and commodities (whether listed or obtained by reference to a similar asset), prices of derivatives, and other parameters that can be directly inferred from them, such as interest rates, credit spreads, volatilities and implied correlations or other similar parameters.

Non-observable factors are those based on working assumptions such as parameters contained in models or based on statistical or economic analyses, non-ascertainable in the market.

In fixed-income trading books, credit instruments are valued on the basis of bond yields and credit spreads, which represent market parameters in the same way as interest rates or foreign exchange rates. The credit risk arising on the issuer of the debt instrument is therefore a component of market risk known as issuer risk.

Liquidity is an important component of market risk. In times of limited or no liquidity, instruments or goods may not be tradable or may not be tradable at their estimated value. This may arise, for example, due to low transaction volumes, legal restrictions or a strong imbalance between demand and supply for certain assets.

The market risk related to banking activities encompasses the interest rate and foreign exchange risks stemming from banking intermediation activities.

Market risk is presented in this section in two parts:

- market risk linked to trading activities and corresponding to trading instruments and derivative contracts;
- market risk linked to banking activities encompassing the interest rate and foreign exchange risks stemming from banking intermediation activities.

TABLE 83: MARKET RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS

	RWAs			Capital requirements		
In millions of euros	31 December 2022	31 December 2021	Variation	31 December 2022	31 December 2021	Variation
Internal model approach	18,921	22,472	(3,551)	1,514	1,798	(284)
Standardised approach	5,851	918	4,933	468	73	395
Trading book securitisation positions	771	1,450	(679)	62	116	(54)
TOTAL	**25,543**	**24,839**	**704**	**2,043**	**1,987**	**56**

Within the BNP Paribas Group, market risk is primarily handled using the internal model approach.

At 31 December 2022, market risk-weighted assets increased mainly due to the implementation of the EBA recommendation (EBA/GL/2020/09) of 1 July 2020 on the exemption of structural foreign exchange risk, for which the effect is offset by a significant decrease in the SVaR.

TABLE 84: MARKET RISK UNDER THE INTERNAL MODEL APPROACH (EU MR2-A)

		a	b	a	b
		31 December 2022		31 December 2021	
	In millions of euros	RWAs	Capital requirements	RWAs	Capital requirements
1	**VaR(*) (higher of values 1.a and 1.b)**	**5,635**	**451**	**4,541**	**363**
1.a	Previous day's VaR (VaRt-1)		119		102
1.b	Average of the daily VaR on each of the preceding 60 business days x multiplication factor		451		363
2	**SVaR(*) (higher of values 2.a and 2.b)**	**9,936**	**795**	**14,434**	**1,155**
2.a	Latest SVaR		256		328
2.b	Average of the daily SVaR during the preceding 60 business days x multiplication factor		795		1,155
3	**IRC(*)(**) (higher of values 3.a and 3.b)**	**2,731**	**219**	**2,778**	**222**
3.a	Last measure		203		186
3.b	Average of the IRC number over the preceding 12 weeks		219		222
4	**CRM(***) (higher of values 4.a, 4.b and 4.c)**	**618**	**49**	**719**	**57**
4.a	Last measure		19		45
4.b	Average of the CRM over the preceding 12 weeks		42		57
4.c	8% of the capital requirement in the standardised approach on the most recent CRM for the correlation trading portfolio		49		41
6	**TOTAL**	**18,921**	**1,514**	**22,472**	**1,797**

(*) *VaR, SVaR and IRC include all the components taken into account in the calculation of RWA.*
(**) *Incremental Risk Charge.*
(***) *Comprehensive Risk Measure.*

The market risk calculated using the standardised approach covers the market risk of some entities of the Group that are not covered by internal models. The standardised approach is used to calculate foreign exchange risk and the risks related to raw materials for the banking book (See section 5.7 *Market risk related to banking activities*).

TABLE 85: MARKET RISK UNDER THE STANDARDISED APPROACH (EU MR1)

		a		a	
		31 December 2022		**31 December 2021**	
	In millions of euros	**RWAs**	**Capital requirements**	**RWAs**	**Capital requirements**
	Outright products				
1	Interest rate risk (general and specific)	344	28	350	28
2	Equity risk (general and specific)	59	5	0	0
3	Foreign exchange risk(*)	5,434	435	552	44
4	Commodity risk	0	0	0	0
	Options				
5	Simplified approach				
6	Delta-plus approach				
7	Scenario approach	13	1	16	1
8	**Securitisation (specific risk)**	**771**	**62**	**1,450**	**116**
9	**TOTAL**	**6,622**	**530**	**2,367**	**189**

(*) *Since 1 January 2022, the Group implemented the EBA recommendation (EBA/GL/2020/09) of 1 July 2020 on the structural foreign exchange risk exemption (article 352(2) of Regulation (EU) No. 575/2013).*

TABLE 86: MARKET RISK-WEIGHTED ASSETS MOVEMENTS BY KEY DRIVER (EU MR2-B)

1st quarter 2023

		a	b	c	d	e	f	g
	In millions of euros	**VaR**	**SVaR**	**IRC(*)**	**CRM(**)**	**Standardised approach**	**Total RWAs**	**Total capital requirements**
1	**31 December 2022**	**5,635**	**9,936**	**2,731**	**618**	**6,622**	**25,543**	**2,043**
2.a	Asset size	(46)	1,779	31	(108)	(328)	1,327	106
2.b	Asset quality	15	9	110	79		213	17
3	Model update	(607)	(1,075)				(1,682)	(135)
4	Methodology and policy						-	-
5	Acquisitions and disposals					(16)	(16)	(1)
6	Currency						-	-
7	Other			3		1,209	1,212	97
8	**31 March 2023**	**4,996**	**10,650**	**2,874**	**590**	**7,487**	**26,597**	**2,128**

(*) Incremental Risk Charge.

(**) Comprehensive Risk Measure.

MARKET RISK RELATED TO TRADING ACTIVITIES

INTRODUCTION

Market risk arises mainly from trading activities carried out within Corporate and Institutional Banking (CIB), mainly within Global Markets and encompasses different risk factors defined as follows:

- interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates;
- foreign exchange risk is the risk that the value of an instrument will fluctuate due to changes in foreign exchange rates;
- equity risk arises from changes in the market prices and volatilities of equity shares and/or equity indices;
- commodities risk arises from changes in the market prices and volatilities of commodities and/or commodity indices;
- credit spread risk arises from the change in the credit quality of an issuer and is reflected in changes in the cost of purchasing protection on that issuer;
- option products carry by nature volatility and correlation risks, for which risk parameters can be derived from option market prices observed in an active market.

Trading activities at BNP Paribas are directly related to economic relations with business line customers, or indirectly as part of market-making activities.

MARKET RISK MANAGEMENT ORGANISATION

The market risk management system aims to track and control market risks as well as control financial instrument valuation whilst ensuring that the control functions remain totally independent from the business lines.

Within RISK, three departments are responsible for monitoring market risk:

- Global Markets RISK (RISK GM) covers Global Markets activities;
- RISK ALM-T covers ALM-Treasury activities;
- International Retail Banking RISK (RISK IRB) covers International Retail Banking activities.

This mission consists of defining, measuring and analysing risk factors and sensitivities, as well as measuring and controlling Value at Risk (VaR), the global indicator of potential losses. RISK ensures that all business activity complies with the limits approved by the various committees and approves new activities and major transactions, reviews and approves position valuation models and conducts a monthly review of market parameters (MAP review) in association with the Valuation and Risk Control Department (V&RC).

Market Risk and financial instrument valuation monitoring is structured around several formal committees:

- the Financial Market Risk Committee (FMRC) is the main committee governing the risks related to capital market activities. It is responsible for addressing, in a coherent manner, the issues related to market and counterparty risk. The FMRC follows the evolution of the main exposures and stress risk and sets the high level trading limits. The Committee meets approximately monthly. It is chaired by either the Group Chief Executive Officer or by a Bank’s Deputy Chief Operating Officer;
- the Product and Financial Control Committee (PFC) is the arbitration and pricing decision-making committee regarding financial instrument valuation matters. The Committee meets quarterly and discusses the conclusions of the Group Financial Controls – Valuation Risk and Governance (VRG) and their work to enhance control effectiveness and the reliability of the measurement and recognition of the results of market transactions. It is chaired by the Group Chief Financial Officer and brings together the Directors of Finance & Strategy – Accounting, Corporate & Institutional Banking and RISK;
- at business line level, the Valuation Review Committee (VRC) meets monthly to examine and approve the results of Market parameters review (MAP review) and any changes in reserves. The Valuation Review Committee also acts as the referee in any disagreements between trading and control functions. The Committee is chaired by the Senior Trader and other members include representatives from trading, RISK, the CIB Valuation and Risk Control Group (V&RC) team, and Finance & Strategy (VRG). Any disagreement is escalated to the PFC;
- the Valuation Methodology Committee (VMC) meets quarterly per business line to monitor model approvals and reviews, follow up relevant recommendations and present model governance improvements. This committee is chaired by RISK GM and includes representatives from trading, research, and the valuation and risk control (V&RC) team of CIB and Finance & Strategy (VRG). Any disagreement can be escalated to the PFC, which can make an arbitration decision.

As part of BCBS 239 Principles for effective risk data aggregation and risk reporting by the Basel Committee, a quarterly reconciliation process ensures that the entire trading portfolio of Front Office systems is correctly represented in the Group's RISK and Finance & Strategy systems, and in particular:

- that the dividing line between trading activities and banking activities is observed;
- that the internal market risk model is exhaustive: each portfolio and entity generating market risk relating to trading activities corresponds to a capital requirement.

This quarterly process is structured around the Effective Coverage of Portfolios Committee (EC) which validates the reconciliation results and any corrective and prevention actions undertaken subsequent to any discrepancies observed.

VALUATION CONTROL

Financial instruments in the prudential trading book are valued and reported at market or model value through P&L, in compliance with applicable accounting standards. Such can also be the case of financial instruments classified in the banking book.

Portfolio valuation control is described in the Charter of Responsibility for Valuation, which sets out the division of responsibilities. These governance policies and practices also apply to all ALM Treasury activities.

In addition to the charter, the relevant valuation controls are detailed in specific policies. The main processes that together form the valuation control governance mechanism are set out below.

Transaction accounting control

This control is under the responsibility of middle-office teams. However, the most complex transactions are controlled by RISK.

Market Parameter (MAP) review – Independent Price Verification

Price verification is managed jointly by Valuation and Risk Control (V&RC) and RISK. Daily controls are performed on the most liquid parameters and a comprehensive and formal review of all the market parameters is performed at month end. The types of parameters controlled by V&RC are listed precisely; these are essentially the parameters for which an automatic control against external sources can be implemented (security prices, vanilla parameters); this may include the use of consensus price services. RISK is in charge of controlling valuation methodologies as well as the most complex parameters that are very dependent on the choice of models.

The general principles of the Market Parameter review are described in the Charter of Responsibility for Valuation as well as specialised global policies such as the Global Marking and Independent Price Verification Policy and MAP Review Principles. The specific methodologies are described in documents known as the MAP Books organised by product lines and regularly updated. The responsibilities of RISK and V&RC are defined for each point in time and the conclusions of the Market Parameter reviews are documented in the MAP review finding documents.

The outcome of the Market parameter review is the estimation of valuation adjustments communicated to the middle-office, which enters it in the accounting records. The results are communicated to the Trading management during the Valuation Review Committees. The opinion of the control functions prevails, however, significant and persistent disagreement can be escalated to the PFC.

Model Approval and Reviews

The governance of model controls is described in the Valuation Methodology Control Policy (VMCP).

Front office quantitative analysts design and propose the methodologies used to value the product and measure the risks that are used to take trading decisions. The research team and IT are responsible for the implementation of these models in the systems.

The independent control of the valuation models falls under the responsibility of RISK and includes:

- model validation, by which a formal decision to approve or reject a model is taken, including following any modification of the valuation methodology called a "Valuation Model Event". In all cases, the approval decisions are taken by a senior RISK analyst during a specific VMC. The review required by the validation process can be fast track or comprehensive; in the latter case, the reasons and conditions for approval are detailed in a model approval document;
- the review of models can be conducted at inception (linked to approval) or during the life of a model (re-calibration); it consists of an examination of the suitability of the model used to value certain products in the context of a given market environment;
- the control of the use and implementation of models, consists of continuous control of the correct parameterisation and configuration of the models as well as their suitability for the relevant products.

Reserve and other valuation adjustments

RISK defines and calculates "reserves". These are adjustments to the market or model value affecting both the accounting valuation and regulatory capital. They can be considered either as the exit cost of a position or as a premium for risks that cannot be diversified or hedged, as appropriate.

The reserves primarily cover:

- the bid-offer spreads and liquidity risk;
- the model or market parameters uncertainties;
- the reduction of non-hedgeable risks (smoothing digital or barrier pay-offs).

A general valuation adjustment policy exists. Reserve methodologies are documented by RISK for each product line and these documentations are updated regularly. The analysis of reserve variations is reported at the monthly VRC.

Reserve methodologies are improved regularly and any change is a Valuation Model Event. Reserve improvements are generally motivated by the conclusion of a model review or by the calibration to market information during the Market parameter review process.

Additional Valuation Adjustments (AVA) are calculated in accordance with the Commission delegated Regulation (EU) No. 2016/101.

This delegated regulation supplements the requirements of article 105 of the CRR with regard to regulatory technical standards for prudent valuation of financial instruments in the trading portfolio. It specifies that the scope of application of these requirements covers all instruments measured according to article 34 of the CRR, based on the proportion of the accounting valuation change that impacts Tier 1 capital.

The regulatory technical standards set out the definitions and a framework for measurement and control for the elements of valuation uncertainty that must be considered when determining a prudent valuation under article 105. The standard also sets a target level of valuation certainty: the Bank must be 90% confident that it could liquidate the instrument at a better price than the prudent valuation.

To apply these requirements, the first step is to define Prudent Valuation Adjustments (PVA). These adjustments correspond to the different types of risks and costs that could lead to exit costs, relative to the mid-market value (or the expected value). The main categories are the liquidation cost, the risk related to uncertainties regarding market prices, concentration risk and valuation model risk. PVAs are calculated for each exposure on a granular level.

Based on these PVAs and for each exposure and risk type, BNP Paribas calculates the AVA (Additional Valuation Adjustments) that may be necessary, in addition to the reserves already taken into account in the valuation for the same exposure and risk type, to achieve the target valuation certainty level.

For some types of risk, the calculation of AVAs includes a diversification effect. This reflects the fact that the amount of the additional adjustments that are necessary with respect to all positions are less than the sum of the additional adjustments that may be required for the positions or risks taken individually.

The AVA amounts are deducted from Common Equity Tier 1 capital.

Day One profit or loss

Some transactions are valued with non-observable parameters. Accounting norms require the recognition of any Day One P&L where these parameters are used. The deferred net margin on reserves is recognised through profit or loss in proportion to the anticipated duration of the transaction or the period for which the inputs will be non-observable.

RISK works with Finance, middle-offices, and business lines on the process of identifying and handling these profit and loss items, in order to determine whether a type of parameter or transaction is observable or not in accordance with the observability rules, which are moreover duly documented and approved in the Valuation Methodology Committee.

The P&L impact of the P&L deferral is calculated by the middle-office or the Finance teams, according to the scope.

The accounting treatment of the deferred margin is explained in note 1.e.10 to the financial statements.

MARKET RISK EXPOSURE

Market risk is first analysed by systematically measuring portfolio sensitivity to various market parameters. The results of these sensitivity analyses are compiled at various aggregate position levels and compared with market limits.

Risk monitoring set up and limit setting

The Group uses an integrated system to follow the trading positions on a daily basis and manage VaR calculations. This system not only tracks the VaR, but also detailed positions and sensitivities to market parameters based on various criteria (such as by currency, product, counterparty). This system is also configured to include trading limits, reserves and stress tests.

Responsibility for limit setting and monitoring is delegated at three levels, which are, in order of decreasing importance: FMRC, followed by the Head of the business line and finally the manager of a trading portfolio. Limits may be changed either temporarily or permanently, in accordance with the level of delegation and the prevailing procedures. Appropriate escalation mechanisms are in place to ensure that the independent view from the RISK Function on the level of limits is heard.

Core risk analysis and reporting to Executive Management

RISK reports, through various risk analyses and dashboards, to Executive Management and business lines' Senior Management on its risk analysis work (limit, VaR monitoring, core risk analysis, *etc.*). The reporting and diffusion of the main summary reports on risk are carried out by the MCL PAC (Market, Counterparty and Liquidity Portfolio Analysis and Capital) team within RISK.

The following reports are generated on a regular basis:

- weekly "Main Position" reports for each business line (equity derivatives, commodities, credit G10 rates and FX & Local Markets), summarising all positions and highlighting items needing particular attention; these reports are mainly intended for business line managers;
- monthly local "bottom up" stress testing reports for Executive Management identifying key risk concentrations around the globe;
- supporting documentation for the FMRC comprising markets and risk event summaries, global counterparty exposure summary, VaR/Stressed VaR evolution, market and counterparty risk stress testing and capital evolution summaries, market and counterparty risk backtesting;
- geographical and global risk dashboards;
- reports on valuation adjustments in the trading book, in particular regarding market and CVA sensitivities.

VaR (Value at Risk)

The VaR is a statistical measure indicating the worst loss expected for a given portfolio over a given time horizon and within a given confidence interval under normal market movements. It is not a maximum loss and it can potentially be exceeded in some cases, for example in the event of abnormal market conditions.

The BNP Paribas VaR calculation uses an internal model which has been approved by the banking supervisor. The BNP Paribas VaR methodology aims to accurately compute a one-day Value at Risk at the 99% confidence level.

The VaR calculation is based on a Monte-Carlo approach, which not only performs normal or log-normal simulations but also accounts for the non-normality often observed in financial markets as well as correlation between risk factors. An equally weighted one-year rolling window of historical market data (updated fortnightly) is used to calibrate the Monte-Carlo simulation.

The principal groups of simulated factors includes: interest rates, credit spreads, exchange rates, equity prices, commodities prices, and associated volatilities. Changes in risk factors are proportional (share prices, volatility, CDS spreads) or absolute (rates excluding OIS, spreads, repo rates, correlations).

The valuation method used varies depending not upon the product but upon the type of risk we are capturing. To generalise, the methods used are either sensitivity based or full revaluation based on grid interpolation to incorporate both linear and, especially for derivatives, non-linear effects. In both cases, BNP Paribas calculates the general and specific risk as a whole, taking into account the diversification effect by correlating market parameters.

The algorithms, methodologies and sets of indicators are reviewed and improved regularly to take into account the capital market evolution.

The scope of the BNP Paribas internal model covers the majority of capital market activities (Global Markets, ALM Treasury). As an indication, market risk based on the standardised approach (excluding securitisation positions in the trading book) represented less than 5% of the total market risk capital requirement at 31 December 2022, including foreign exchange risk.

VaR is a statistical measure that does not take into account losses outside a given confidence interval, and does not apply to losses related to intraday market movements. Other risk measures, such as Stressed VaR (SVaR), IRC and CRM, complement the BNP Paribas Group's market risk monitoring and management system.

Evolution of the VaR (1-day, 99%)

The VaR set out below are calculated from an internal model, which uses parameters that comply with regulations in place. They correspond to measurements taken into account within the framework of monitoring market limits. They are based on a one-day time horizon and a 99% confidence interval.

In 2022, total average VaR for BNP Paribas was EUR 34 million (with a minimum of EUR 24 million and a maximum of EUR 52 million), after taking into account the -EUR 40 million netting effect between the different types of risks. These amounts break down as follows:

TABLE 87: VALUE AT RISK (1-DAY, 99%) [Audited]

In millions of euros	Exercise 2022				Exercise 2021	
	Minimum(**)	Average	Maximum(**)	Last measure	Average	Last measure
Interest rate risk	16	24	44	27	25	18
Credit risk	6	11	20	10	14	7
Foreign exchange risk	2	7	16	9	9	5
Equity price risk	10	15	37	12	21	16
Commodity price risk	7	17	40	7	11	10
Netting effect(*)		*(40)*		*(36)*	*(42)*	*(29)*
TOTAL VALUE AT RISK	**24**	**34**	**52**	**30**	**38**	**27**

(*) Note that the minimum and maximum figures shown above for the various risk types are computed on a standalone basis (i.e. independently from each other as well as the total VaR). While the minimum or maximum for each risk type may not necessarily be observed on the same date, minimum/maximum Netting Effects are not considered relevant.

(**) For minima and maxima, total VaR cannot be read as the sum of VaR by risk type.

The VaR (1-day, 99%) stood at a low level throughout 2022 thanks to prudent management.

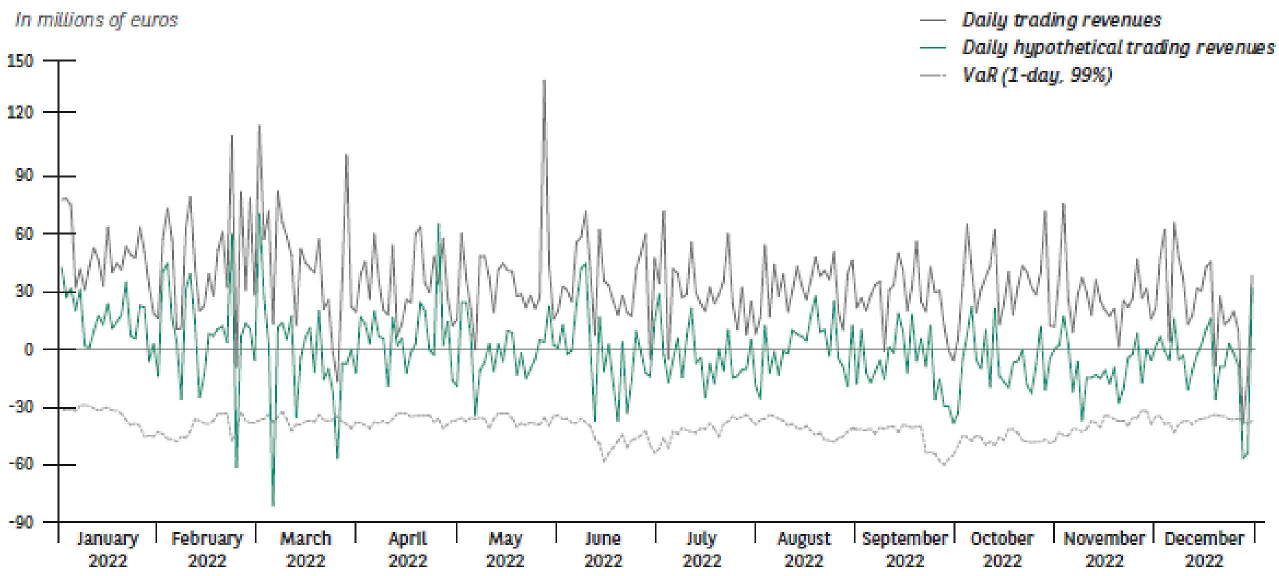
Backtesting the VaR

RISK continuously tests the accuracy of its internal model through a variety of techniques, including in particular a regular comparison over a long-term horizon between actual daily losses on capital market transactions and one-day VaR.

This backtesting consists of making a comparison between the daily global trading book VaR and the actual result except fees and commissions. In accordance with the regulation, BNP Paribas supplements this “actual backtesting” method with a comparison between the daily VaR and the hypothetical result generated by the trading book, which is also known as “hypothetical backtesting”. The hypothetical result includes all components of the actual result, calculated on the previous day’s positions, only incorporating changes in market parameters. A backtesting event is declared when a real or hypothetical loss exceeds the daily VaR amount. The confidence interval selected for calculating daily VaR is 99%, which in theory means the observation of two to three events per year.

The number of events is calculated at least quarterly and is equal to the highest of the number of excesses for the hypothetical and actual variations in the portfolio value.

FIGURE 7: COMPARISON BETWEEN VAR (1-DAY, 99%) AND DAILY TRADING REVENUE (EU MR4)

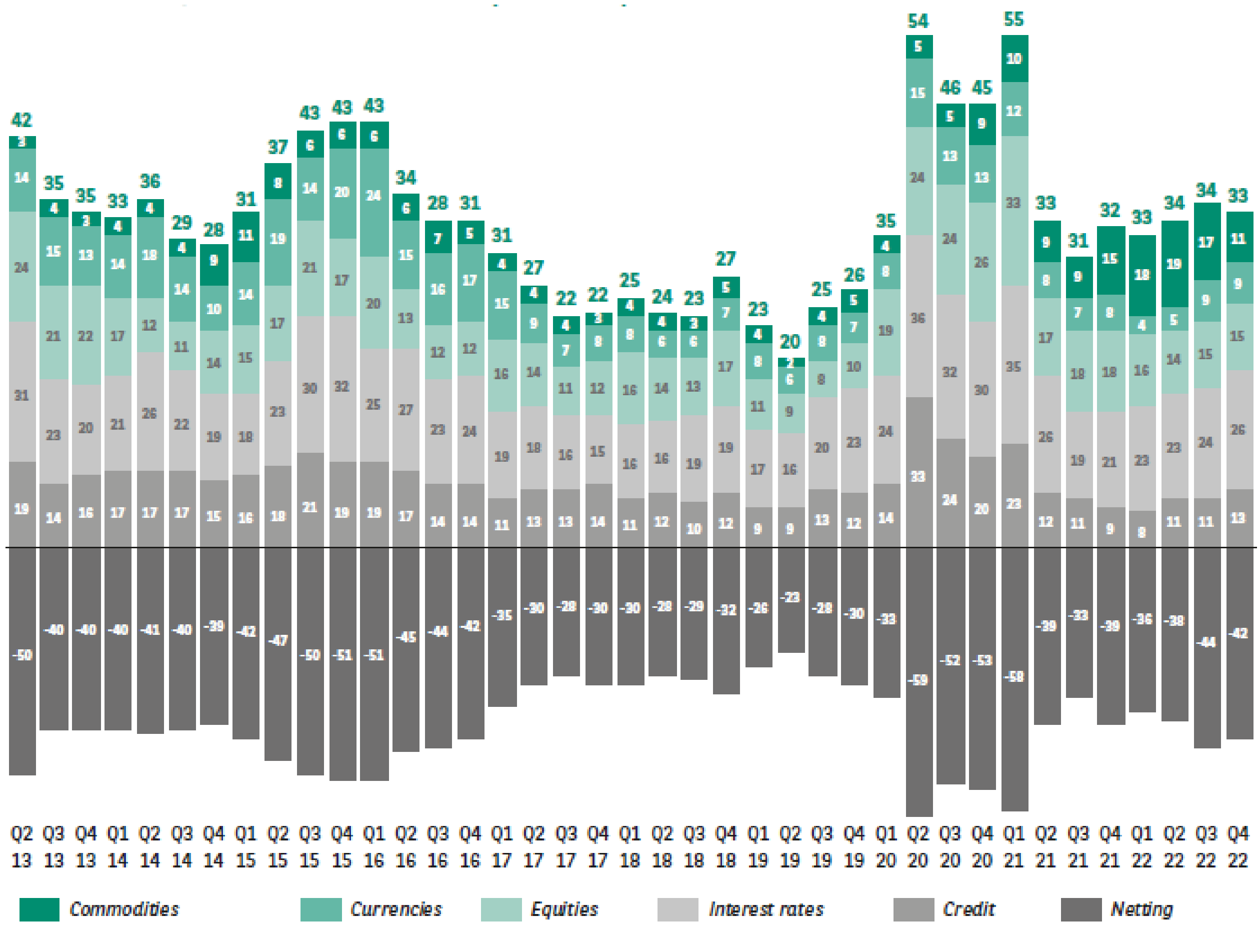


In 2022, five hypothetical Group-level backtesting events were observed (one actual backtesting event was observed):

- 24 February 2022: this hypothetical loss was due to a market rally on 25 February, the day after the invasion of Ukraine with an extreme drop in volatility and credit spreads and a rise in equity indices;
- 8 March 2022: this hypothetical loss is also the result of a market rally on 9 March, when the fall in equity prices and the rise in commodities over the previous three days were partially offset;
- 28 March 2022: this hypothetical loss occurred in a context of market volatility with sharply lower interest rates and credit spreads easing;
- 28 and 29 December 2022: these hypothetical losses resulted from the combined effect of market movements which led to cumulative losses within different business lines of the Bank. The actual backtesting event occurred on 28 December.

Quarterly change in VaR

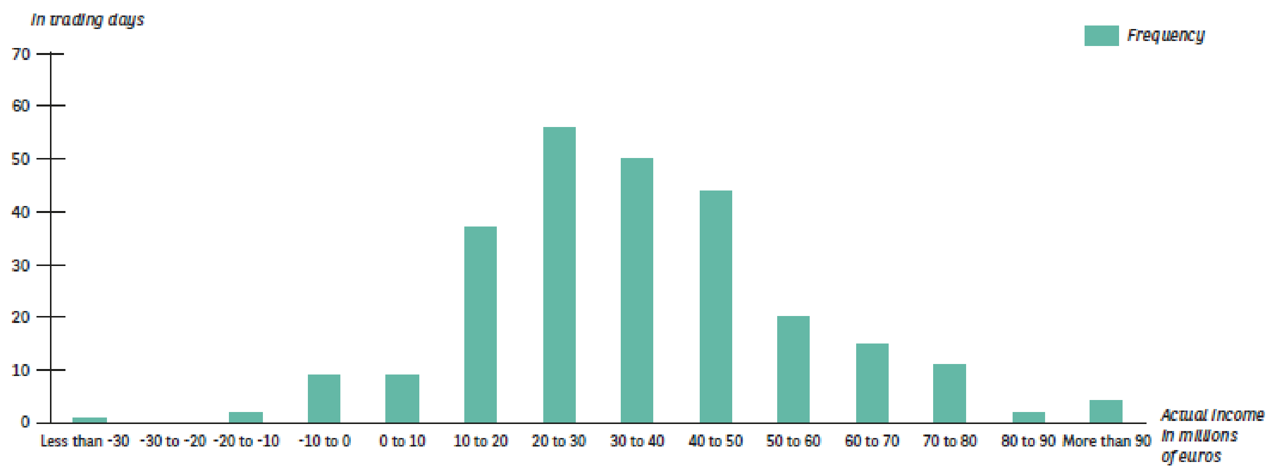
FIGURE 8: QUARTERLY CHANGE IN VAR (1-DAY, 99%)



Distribution of daily revenue

The following histogram presents the distribution of the actual daily trading revenue of BNP Paribas, including intra-day revenues, fees and commissions. It indicates the numbers of trading days during which the revenue reached each of the levels marked on the x axis, in millions of euros.

FIGURE 9: DISTRIBUTION OF ACTUAL DAILY TRADING REVENUE



Trading activities generated an actual positive result for 95% of the trading days in 2022 (*versus* 97% in 2021).

Evolution of the VaR (10-day, 99%)

The VaR set out below are calculated from an internal model, which uses parameters that comply with the method recommended by the Basel Committee for determining estimated Value at Risk. They correspond to measurements taken into account within the framework of monitoring market limits. These are based on a ten-day time horizon and a 99% confidence interval, extrapolated from 1-day VaR amounts with the same confidence interval, by multiplying by a factor equal to the square root of ten.

In 2022, total average VaR (10-day, 99%) for BNP Paribas is EUR 106 million (with a minimum of EUR 77 million and a maximum of EUR 164 million), after taking into account the -EUR 125 million netting effect between the different types of risks. These amounts break down as follows:

TABLE 88: VALUE AT RISK (10-DAY, 99%) [Audited]

				Exercise 2022		Exercise 2021
In millions of euros	**Minimum(**)**	**Average**	**Maximum(**)**	**Last measure**	**Average**	**Last measure**
Interest rate risk	52	76	140	86	79	57
Credit risk	21	34	63	32	43	22
Foreign exchange risk	7	22	51	28	28	17
Equity price risk	33	48	116	39	67	50
Commodity price risk	21	53	127	22	35	31
Netting effect(*)		(125)		(113)	(132)	(92)
TOTAL VALUE AT RISK	**77**	**106**	**164**	**95**	**119**	**85**

(*) Note that the minimum and maximum figures shown above for the various risk types are computed on a standalone basis (i.e. independently from each other as well as the total VaR). While the minimum or maximum for each risk type may not necessarily be observed on the same date, minimum/maximum Netting Effects are not considered relevant.

(**) For minima and maxima, total VaR cannot be read as the sum of VaR by risk type.

Stressed VaR

Stressed VaR is calibrated over a specified full twelve-month period, including a crisis period. This period applies across the Group, which must have comprehensive market data to calculate the risk measurements and remain relevant when applied to the current trading book. An expert committee reviews the period on a quarterly basis in accordance with a quantitatively informed approach among the three scenarios that generate the maximum stressed risk measures.

The current reference period for calibrating stressed VaR is from 2 July 2008 to 30 June 2009.

BNP Paribas uses the same calculation method as for calculating VaR, with market parameters determined based on this reference period.

The SVaRs presented below are based on a one-day time horizon and a 99% confidence interval and correspond to measurements taken into account within the framework of monitoring market limits.

The SVaR (1-day, 99%) continued a downward trend throughout 2022 given, on the one hand, a constant decline related to emerging markets activity and, on the other hand, a stable level of risk on other activities.

TABLE 89: STRESSED VALUE AT RISK (1-DAY, 99%)

				Exercise 2022		Exercise 2021
In millions of euros	**Minimum**	**Average**	**Maximum**	**Last measure**	**Average**	**Last measure**
Stressed Value at Risk	51	75	114	70	100	91

Incremental Risk Charge (IRC)

The IRC approach measures losses due to default and ratings migration at the 99.9% confidence interval (*i.e.* the maximum loss incurred after eliminating the 0.1% worst events) over a capital of one year, assuming a constant level of risk. The scope to which IRC applies mainly includes plain vanilla credit products (bonds and CDS, excluding securitised products) from the trading book.

The calculation of IRC is based on the assumption of a constant level of risk over the one-year capital horizon, implying that the trading positions or sets of positions must be rebalanced during the one-year horizon in a manner that maintains the initial risk level. Positions that have reached maturity or are in default are thus rolled over at the beginning of the liquidity horizon.

The model, developed internally, is built around a rating-based simulation for each obligor, which captures both the risk of the default as well as the risk of rating migration. The dependency between debtors is integrated into a multi-factor asset return model, resulting in the rating migration, potential default and changes in credit spreads. The performance of each debtor depends on four factors:

- a specific factor;
- three systemic factors including one global factor, one geographical factor among three regions and one sector factor among twelve, one of which is dedicated to sovereign entities.

The model is calibrated quarterly over the period from 1 February 2010 to the end of the quarter preceding the calculation date based on the CDS spread data series, and the price of corporate and institutional shares.

The simulated returns are used to calculate the probability of change in rating – which is assigned to a credit rating scenario, then a credit spread – and to define a price variation grid associated with each debtor within a credit rating scenario. Positions that can be broken down by debtor are thus valued in the various simulated scenarios. Non-linear products such as credit index options are revalued directly.

IRC was up, with an average of EUR 256 million in 2022. This increase occurred in the first half of the year following the change in the dependency model between debtors. This correlation model was not adopted for CRM until the beginning of the second half of the year and this lag led to a lower efficiency of the overall hedging strategy.

Comprehensive Risk Measure (CRM) for credit correlation portfolio

CRM is an additional capital charge to the IRC which applies to the credit correlation portfolio (excluding securitisation products) from the trading book. It measures potential losses from a variety of specific price change risks (spread, correlation, recovery, credit migration, *etc.*) at the 99.9% confidence interval (*i.e.* the maximum loss incurred after eliminating the 0.1% worst events) over a capital and liquidity horizon or rebalancing frequency of one year, assuming a constant level of risk over this horizon.

The corporate correlation activity is an activity that consists of trading and risk managing mainly bespoke corporate CDOs and their hedges using single name CDS, CDS indices and index tranches. This activity falls under the structured credit activity trading within the Global Credit business line of Global Markets.

The valuation framework uses both market observable prices (particularly used for CDS, index and index tranches) and data established based on models for the implicit correlations and recovery rates, the same model of returns and dependency between debtors, similar to that used for the IRC. The calibration is carried out on an annual basis. The correlation portfolio comprises of complex non-linear products. Each product is revalued directly in the various simulated scenarios.

Summary of measures taken into account within the framework of monitoring market limits

TABLE 90: IMA VALUES FOR TRADING PORTFOLIOS (EU MR3)

		a	a
	In millions of euros	**31 December 2022**	**31 December 2021**
	VaR (10-days, 99%)		
1	Maximum value	164	214
2	Average value	106	119
3	Minimum value	77	79
4	Period end	95	85
	SVaR (10-days, 99%)		
5	Maximum value	359	447
6	Average value	238	318
7	Minimum value	162	237
8	Period end	220	288
	IRC(*) (99.9%)		
9	Maximum value	439	289
10	Average value	256	200
11	Minimum value	136	148
12	Period end	184	161
	CRM(**) (99.9%)		
13	Maximum value	140	81
14	Average value	79	49
15	Minimum value	9	20
16	Period end	19	45

(*) Incremental Risk Charge.
(**) Comprehensive Risk Measure.

Securitisation positions in trading book outside correlation portfolio

For securitisation positions treated as financial assets at fair value for accounting purposes, changes in market value, except accrued interest on fixed-income securities, are recognised in the profit and loss account under “Net gain/loss on financial instruments at fair value through profit or loss”.

For ABS positions outside the correlation book, the standardised capital charge applies (as per the standard method for banking books). The capital requirements are determined on the basis of the asset’s external rating. The capital calculation is based on the second-worst rating of the three rating agencies.

TABLE 91: BREAKDOWN OF TRADING BOOK SECURITISATION POSITIONS OUTSIDE CORRELATION BOOK BY ASSET TYPE (EU SEC2)

		i	j	k			
							31 December 2022
							Investor
				EAD			RWA
		Traditional			Traditional		
In millions of euros		STS	Non-STS	Synthetic	STS	Non-STS	Synthetic
2	**Retail**	**42**	**174**		**68**	**179**	
3	*Residential mortgages*	*1*	*47*			*49*	
4	*Credit card receivables*	*16*	*16*		*2*	*5*	
5	*Other retail exposures*	*24*	*111*		*66*	*126*	
6	*Re-securitisation*						
7	**Corporates**		**470**			**524**	
8	*Loans to corporates*	*0*	*387*			*507*	
9	*Commercial mortgage*	*0*	*10*			*2*	
10	*Finance lease and trade receivables*	*0*	*71*			*14*	
11	*Other assets*	*0*	*1*			*1*	
12	*Re-securitisation*						
1	**TOTAL**	**42**	**644**	**-**	**68**	**703**	**-**

		i	j	k			
							31 December 2021
							Investor
				EAD			RWA
		Traditional			Traditional		
In millions of euros		STS	Non-STS	Synthetic	STS	Non-STS	Synthetic
2	**Retail**	**80**	**66**	**4**	**187**	**52**	**2**
3	*Residential mortgages*	*3*	*41*	*4*	*2*	*46*	*2*
4	*Credit card receivables*		*13*			*3*	
5	*Other retail exposures*	*77*	*12*		*185*	*2*	
6	*Re-securitisation*						
7	**Corporates**	**16**	**697**		**2**	**1,206**	
8	*Loans to corporates*		*436*			*1,005*	
9	*Commercial mortgage*						
10	*Finance lease and trade receivables*	*14*	*243*		*2*	*165*	

11	*Other assets*	*1*	*18*			*36*	
12	*Re-securitisation*						
1	**TOTAL**	**96**	**763**	**4**	**189**	**1,258**	**2**

TABLE 92: BREAKDOWN OF TRADING BOOK SECURITISATION POSITIONS AND CAPITAL REQUIREMENTS OUTSIDE CORRELATION BOOK BY RISK WEIGHT

In millions of euros | **31 December 2022**

	Securitisation positions						Capital requirements		
	Short positions			**Long positions**					
Risk weight	**Securitisation**	**Re-securitisation**	**Total**	**Securitisation**	**Re-securitisation**	**Total**	**Short positions**	**Long positions**	**Total**
7% - 10%			-	11		11			
12% - 18%				167		167		2	2
20% - 35%			-	301		301		8	8
40% - 75%			-			-			-
100%			-	135		135		17	17
250%			-	19		19		5	5
425%			-	7		7		3	3
650%			-	36		36		26	26
Deduction(*)			-	9		9			
TOTAL	**0**	**0**	**0**	**686**	**0**	**686**	**0**	**62**	**62**

(*) The Group opted for the deduction of CET1 capital instead of the 1,250% weighting.

In millions of euros | **31 December 2021**

	Securitisation positions						Capital requirements		
	Short positions			**Long positions**					
Risk weight	**Securitisation**	**Re-securitisation**	**Total**	**Securitisation**	**Re-securitisation**	**Total**	**Short positions**	**Long positions**	**Total**
7% - 10%			-	42		42			
12% - 18%			-	255		255		4	4
20% - 35%				248		248		8	8
40% - 75%			-	-		-			-
100%			-	118		118		17	17
250%			-	65		65		20	20
425%			-	23		23		11	11
650%				75		75		57	57
Deduction(*)	2		2	35		35			

TOTAL	**2**	**0**	**2**	**861**	**0**	**861**	**0**	**116**	**116**

(*) The Group opted for the deduction of CET1 capital instead of the 1,250% weighting.

MARKET RISK STRESS TESTING FRAMEWORK

A range of stress tests are performed to simulate the impact of extreme market conditions on the value on the global trading books. Stress tests cover all market activities applying a range of stressed market conditions.

Scenarios

The fundamental approach of the current trading book stress testing framework combines "bottom up" and "top down" stress testing:

- Macro Level Scenarios (top down) comprise the evaluation of a set of global level stress test. These scenarios assess the impact of severe market moves on BNP Paribas trading positions related to large global or major regional market shock events. They can be based on historical events or forward-looking hypothetical scenarios. Scenarios include events such as an emerging markets crisis, credit crunch and a stock market crash, and some are based on past crises.

  The official macro stress tests scenarios currently comprise a range of eight different stress tests. The results of these scenarios are reviewed at each Financial Markets Risk Committee (FMRC). The scenarios are:

  - scenario 1: unexpected rate hike, driving short-term rates higher with a flattening of the interest rate curve,
  - scenario 2: stock market crash, with a flight to quality assets leading to a drop and a steepening of the interest rate curve,
  - scenario 3: generic emerging market crisis designed to test global risk of these markets,
  - scenario 4: credit crunch, leading to a general risk aversion,
  - scenario 5: euro crisis, low GDP expectations, potential threat of a country leaving the euro and a significant weakening of the currency,
  - scenario 6: energy crisis driven by severe geopolitical turmoil with serious consequences on energy markets,
  - scenario 7: crisis in the United States, mostly based on a structural crisis spreading round the globe,
  - scenario 8: risk-on scenario: rally in equity and emerging markets, low realised volatility and drop in implied volatility in all markets (effectively a return to risky assets);
- Micro Level Scenarios (bottom up): instead of looking at the effect on the global portfolio, these types of scenarios aim to highlight risk exposures on specific trading desks, regions or risk concentrations. This bottom-up approach enables the use of more complex stress scenarios and hence allows the detection of areas of potential losses which may not be easily achieved under the global macro scenarios (such as complex market dislocations or idiosyncratic risk). This bottom-up process also facilitates the classification of risk areas into those where there may be less liquidity or where the risk may be more structural in nature.

Process

It is the analysis of the above scenarios that enables the adverse scenario for the trading books to be constructed. The official stress scenario is presented at each Capital Markets Risk Committee along with the adverse global stress scenarios and any bottom-up stress test yielding significant results.

The results of all stress tests are reviewed regularly by Executive Management and sent to the Board of directors.

The scenarios take market liquidity into account by simulating the drying up of certain assets or product liquidity as the stress event unfolds. To understand this process, it can be simplified by considering an approach where the time horizon for the stress shock can vary between different instruments/assets (hence more advanced scenarios can take certain idiosyncratic factors into account). Moreover, it may sometimes be required to quantify the impact of a stress event occurring with re-hedging assumptions factored into part of the exposure under stress.

Stress testing is governed by the Capital Markets Stress Testing Steering Committee (STSC). The committee meets monthly and sets the direction of all internal risk departmental stress scenario developments, infrastructure, analysis and reporting. The STSC governs all internal stress testing matters relating to both market and counterparty risk and decides upon the detailed definition of the FMRC Stress Tests.

Stress testing is the core element of the tail risk analysis, which is also captured through the stressed Value at Risk, the Incremental Risk Charge and the Comprehensive Risk Measure. Furthermore, the risk of a rare event used in the form of the "average loss in addition to VaR" (Expected Shortfall) in allocating capital in respect of market risk between business lines is an additional element allowing tail risk in the management and monitoring of market risk to be taken into account.

MARKET RISK RELATED TO BANKING ACTIVITIES

Interest rate and foreign exchange risks related to banking intermediation activities and investments are managed by the cross-functional ALM Treasury Department. At Group level, the ALM-Treasury Department is directly overseen by the Group Senior Executive Advisor. BNP Paribas SA's ALM Treasury Department exercises functional authority over the ALM Treasury teams of each entity or group of entities covering the entire Group perimeter. Strategic decisions are made by the Asset and Liability Committee (ALCo), which oversees ALM Treasury's activities. These committees have been set up at Group, entity or group of entities level.

The foreign exchange risk gives rise to a weighted assets calculation under Pillar 1. The interest rate risk falls under Pillar 2.

FOREIGN EXCHANGE RISK

Calculation of risk-weighted assets

Foreign exchange risk relates to all transactions part of the banking book.

Group entities calculate their net position in each currency, including the euro. The net position is equal to the sum of all asset items less all liability items plus off-balance sheet items (including the net forward currency position and the net delta-based equivalent of the currency option book), less structural, non-current assets (long-term equity interests, property, plant and equipment, and intangible assets) subject to exemption. These positions are converted into euros at the exchange rate prevailing on the reporting date and aggregated to give the Group's overall net open position in each currency. The net position in a given currency is long when assets exceed liabilities and short when liabilities exceed assets. For each Group entity, the net currency position is balanced in the relevant currency (*i.e.* its reporting currency) such that the sum of long positions equals the sum of short positions.

The rules for calculating the capital requirement for foreign exchange risk are as follows:

- matched positions in currencies of Member States participating in the European Monetary System are subject to a capital requirement of 1.6% of the value of the matched positions;
- CFA and CFP francs are matched with the euro, and are not subject to a capital requirement;
- positions in closely correlated currencies are subject to a capital requirement of 4% of the matched amount;
- other positions, including the balance of unmatched positions in the currencies mentioned above, are subject to a capital requirement of 8% of their amount.

The amounts involved are set out in Table 85 *Market risk under the standardised approach (EU MR1)*.

Foreign exchange risk and hedging of net income generated in foreign currencies [Audited]

So-called "operating" foreign exchange risk exposure relates to net earnings generated by activities conducted in currencies other than the functional currency of the entity concerned. The Group's policy is to hedge the variability of its net income due to currency movements. To this end, earnings generated in a currency other than the functional currency of a given entity of the Group are hedged locally.

Foreign exchange risk and hedging of net investments in foreign operations [Audited]

The so-called "structural" foreign exchange position of an entity relates to investments in currencies other than the functional currency. This position mainly results from the capital endowment of the branches and equity investments in foreign currencies financed by buying the investment currency. This structural foreign exchange position, adjusted for any intangibles, constitutes patrimonial exposure.

The Group's policy is to hedge portfolio exposure to liquid currencies, while at the same time maintaining the solvency ratio's limited sensitivity to exchange rate fluctuations. For this, borrowings in the same currency as the investment are used as an alternative to financing by purchasing the currency in question. Borrowings are recognised as hedges of investments.

INTEREST RATE RISK [Audited]

Interest rate risk in the banking book, or global interest rate risk, is the risk of variability in results as a result of mismatches in interest rates, maturities and nature between assets and liabilities in the banking book. This risk arises in non-trading book portfolios.

Organisation of the Group interest risk management

The Board of directors assigns responsibility to the Chief Executive Officer for management of interest rate risk in the banking book. The Board of directors is informed quarterly on the principles governing interest rate policy and the Group's position through the Internal Control, Risk and Compliance Committee (CCIRC).

The Chief Executive Officer delegates management responsibility to the Group ALM Treasury Committee (Asset and Liability Management Committee). The permanent members of the Group ALM Treasury Committee are the Group Senior Executive Advisor (Chairman), the Delegate Deputy Chief Operating Officers, the Group Chief Risk Officer, the Group Chief Financial Officer, the Group ALM Treasury Head. The Head of General Inspection and the Head of Compliance are also invited. This committee is responsible for tracking interest rate risk monitoring indicators, proposing the Group's interest rate risk profile and assigning limits.

ALM Treasury is responsible for the analysis of the management proposals and operational implementation of decisions related to managing the interest rate risk of the banking book as part of its delegated management.

The RISK Function participates in the Group ALM Treasury Committee and the local ALM Treasury Committees (ALCo) and oversees implementation by ALM Treasury of the relevant decisions made by these committees. It also provides second-line control by reviewing the models and risk indicators, monitoring the level of risk indicators and ensuring compliance with the limits assigned.

The banking book consists of the Group's total bank balance sheet, excluding trading book transactions. This includes intermediation transactions (deposits, loans, *etc.*), non-commercial balance sheet items (equity, fixed assets, *etc.*) and banking book risk management activities, including derivatives used for the management of interest rate risk on the banking book (notably when they are ineligible for hedge accounting under IFRS).

Banking book interest rate risk in each BNP Paribas entity is systematically transferred to ALM Treasury, through internal analytic contracts or lending/borrowing transactions. For the Group as a whole, ALM Treasury is responsible for managing the interest rate risk transferred in this way.

Decisions concerning the management of interest rate risk are made and monitored during monthly or quarterly committee meetings by entity or group of entities, attended by representatives of local ALM Treasury, Group ALM Treasury, Finance & Strategy and RISK Functions and senior management of the entities and/or businesses.

Measurement of interest rate risk

Rate positions are measured taking into account the specific features of the risks managed. Hence, the Group has defined the concepts of standard rate risks and structural rate risks. The standard rate risk corresponds to the general case, namely when it is possible to define uniquely the most appropriate hedging strategy for a given transaction. The structural rate risk is the interest rate risk for equity and non-interest-bearing current accounts: these balance sheet items generate regular revenues but are sensitive to interest rate levels. However, it is not possible to define a single hedging strategy to fully neutralise this sensitivity. In this case, the Group included all the possible so-called "neutral" management strategies in terms of interest rate risk.

Interest rate risks are analysed in terms of interest rate gaps that measure, for each future period, the potential rate characteristic mismatches between assets and liabilities (fixed rate and indexation type). In the interest rate gaps, the optional effects, in particular linked to behavioural options, are embedded and translated into their delta equivalent. Value indicators are also used.

The maturity split is determined on the basis of the contractual terms of the transactions and observations of customer behaviour. For Retail Banking products, behavioural models are based on historical or forward data and econometric studies. These possible management strategies notably relate to early redemption and savings accounts. Moreover, the maturities of non-interest-bearing current accounts and of equity are calculated according to a more conventional approach defining a range of investments taking into account the objective of stabilising results and stability of deposits. For current accounts, average maturities are less than five years and the proportion invested beyond 10 years is negligible.

Incorporating dynamic changes in balance sheet items, the interest rate risk is measured through indicators of the sensitivity of revenues to interest rate changes on a going concern basis. This enables the partial or zero correlation between customer interest rates and market interest rates to be taken into account on the one hand, and the volume sensitivities to interest rates on the other hand, which create a risk to future revenues.

The choice of indicators and risk modelling are reviewed by RISK. The results and the adjustments following these reviews are presented and monitored to the committees on a regular basis.

The interest rate risk measurement indicators are consistently presented to the ALCos and serve as the basis for operating risk management decisions.

Risk limits

Interest rate risk indicators span the entire banking book as at 31 December 2022.

The interest rate gaps are subject to interest rate risk limits across all time horizons. These limits are calibrated based on the nature of the risks (standard or structural) at Group and entity level. They are reviewed annually.

The Group's revenue sensitivity indicator is subject to limits and a warning threshold relative to the overall sensitivity level, also broken down by division and the main entities. Moreover, the Group regularly monitors the impact of stress scenarios on its revenues.

Economic hedges transactions that do not qualify for hedge accounting under IFRS are subject to specific limits.

Sensitivity of revenues to global interest rate risk

Net interest income sensitivities are calculated on the total banking book, over one-, two- and three-year rolling timeframes, for a parallel, instantaneous and definitive increase and decrease in market rates on all currencies over all the terms of ± 50 basis points (+0.5%). These sensitivities are measured as deviations from the NII projection for the central rate scenario corresponding to future interest rates expected by the markets at estimation date (*e.g.* forward rates seen as of the end of December 2022 for sensitivities as of at the end 2022).

They include the direct impacts of market rates and business trends. Indirect effects on commercial activity linked to changes in outstandings and customer rates, are also taken into account. Thus, for the sake of prudence, increases in sight non-interest-bearing current account balances, observed during the period of low or negative interest rates, are considered as situational to the low interest rates environment, and are assumed to decrease gradually when short-term rates return to sufficiently positive levels.

TABLE 93: SENSITIVITY OF REVENUES TO GLOBAL INTEREST RATE RISK BASED ON A 50 BASIS POINTS INCREASE OR DECREASE IN THE INTEREST RATES (EU IRRBB1A) [Audited]

	31 December 2021	
In millions of euros	For +50 bps shock	For -50 bps shock
Year 1	127	(187)
Year 2	537	(511)
Year 3	694	(823)

Since the end of December 2021, interest rate increases have been materialised beyond the parallel shocks of +50 pbs presented in the table at the end of December 2021, leading to an increase of the projections of net interest margins for the coming years.

As the favourable effects of interest rates increases are reflected in the projected net interest margins of the coming years, the potential for additional gains linked to potential further rate increases is gradually diminishing, as illustrated by the estimated decline of the sensitivity based on end-December 2022 interest rates level presented below.

TABLE 93: SENSITIVITY OF REVENUES TO GLOBAL INTEREST RATE RISK BASED ON A 50 BASIS POINTS INCREASE OR DECREASE IN THE INTEREST RATES (EU IRRBB1A) [Audited]

	31 December 2022	
In millions of euros	For +50 bps shock	For -50 bps shock
Year 1	(22)	20
Year 2	(20)	(92)
Year 3	125	(264)

These forecasting sensitivities do not take into account, since December 2021, the specific monetary policy instruments of the European Central Bank (ECB) that are temporary or that can be modified at the discretion of the ECB. This allows us to present sensibilities more related to the recurring activity of the businesses

Sensitivity of the value of the net assets of the banking intermediation activity

As the assets and liabilities of the Group's banking intermediation business are not intended to be sold, they are not recognised or managed on the basis of their theoretical economic value measured by discounting future cash flows. Similarly, the theoretical economic value of the net assets does not affect the Group's capital.

However, pursuant to the regulatory requirements and calculation methods laid down by the European Banking Authority (EBA), the ratios of sensitivity of the theoretical economic value of the net assets of the intermediation business in relation to Tier 1 capital are regularly calculated through six interest rate scenarios defined by the EBA (*i.e.* parallel up/down, steepening/flattening, short rates up/down). Moreover, the EBA defines thresholds for risk-free rates by maturity (interpolated yield curve between -1% for the overnight rate and 0% for the 20-year yields). These ratios are compared to the 15% threshold used by the supervisor to identify situations where the interest rate risk in the banking book could be material.

As of 31 December 2022, the Group sensitivity ratios are far below the regulatory materiality threshold of -15%. In case of parallel up, the ratio decreases compared to the previous year and stands at -6.8%.

TABLE 94: SENSITIVITY OF TIER 1 CAPITAL ECONOMIC VALUE TO THE 6 REGULATORY STRESS TEST SCENARIOS (EU IRRBB1B) [Audited]

		Interest rates shock(*)		31 December 2022
In millions of euros		Overnight rate	10-year rate	Change of the economic value of equity (Tier 1)
1	Parallel up	2.00%	2.00%	-6.8%
2	Parallel down	-2.00%	-2.00%	+1.2%
3	Steepener (decrease in short term rates, increase in long term rates)	-1.60%	+0.70%	+0.9%
4	Flattener (increase in short term rates, decrease in long term rates)	2.00%	-0.40%	-2.6%
5	Short rates up	2.50%	+0.20%	-4.6%
6	Short rates down	-2.50%	-0.20%	+2.4%

(*) Change in interest rate level (OIS swaps) applied for each scenario and application of floor rates (for the EUR).

		Interest rates shock(*)		31 December 2021
In millions of euros		Overnight rate	10-year rate	Change of the economic value of equity (Tier 1)
1	Parallel up	2.00%	2.00%	-8.7%
2	Parallel down	-0.50%	-0.70%	-1.1%
3	Steepener (decrease in short term rates, increase in long term rates)	-0.50%	+0.70%	+0.2%
4	Flattener (increase in short term rates, decrease in long term rates)	2.00%	-0.40%	-2.7%
5	Short rates up	2.50%	+0.20%	-3.9%
6	Short rates down	-0.50%	-0.20%	+0.9%

(*) Change in interest rate level (OIS swaps) applied for each scenario and application of floor rates (for the EUR).

HEDGING OF INTEREST RATE AND FOREIGN EXCHANGE RISKS

Hedges initiated by the Group consist mainly of interest rate or currency hedges using derivative financial instruments (swaps, options and forwards).

Depending on the hedging objective, derivative financial instruments used for hedging purposes are qualified either as fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Each hedging relationship is formally documented at inception. The documentation describes the hedging strategy, identifies the hedged item and the hedging instrument, and the nature of the hedged risk; and describes the methodology used to test the expected (prospective) and actual (retrospective) effectiveness of the hedge.

Global interest rate risk

The Bank's strategy for managing global interest rate risk is mainly based on closely monitoring the sensitivity of the Bank's net income to changes in interest rates, factoring in all interest rate risks. The aim is to ensure the stability and regularity of the interest margin. This monitoring is based on an extremely accurate assessment of the risks incurred so that the Bank can determine the hedging strategy, after taking into account the effects of netting the different types of risk. These hedging strategies are defined and implemented by entity and by currency.

The hedges can comprise swaps and options and are typically accounted for as fair value hedges or cash flow hedges. They may also take the form of government securities and are classified on an accounting basis as “Financial assets at amortised cost” or “Financial assets at fair value through equity”.

In the context of health crisis end, invasion of Ukraine and its consequences, in particular, on the rise of energy prices, 2022 was marked by the return of the inflation indices to high and sustainable levels. In the eurozone, inflation reached over 10% with a core inflation above 5%.

To counter the rise of inflation rate, Central Banks resolutely implemented significant interest rate increases: +425 basis points for the Federal Reserve, +325 basis points for the Bank of England and +250 basis points for the European Central Bank, thus ending the period of negative interest rates, while the Bank of Japan began to relax its control of the interest rate yield curve. The 10-year German government bond (Bund) ended 2022 at its highest rate since 2011, at 2.57%, while the 10-year French government bond (OAT) ended the year at 3.12%. The 10-year US Treasury yield reached 3.90%, its highest level since 2008.

Structural foreign exchange risk [Audited]

Currency hedges are contracted by the ALM Treasury in relation to the Group’s investments in foreign currencies and its future foreign currency revenues. Each hedging relationship is formally documented at inception. The documentation describes the hedging strategy, identifies the hedged item and the hedging instrument, and the nature of the hedged risk and describes the methodology used to test the expected (prospective) and actual (retrospective) effectiveness of the hedge.

A hedging relationship is applied and documented for investments in subsidiaries and branches financed by foreign currency loans so as to record movements in exchange rates symmetrically and avoid impacts on the profit and loss account. In this context, these instruments are designated as net investment hedges. The amount of these loans stood at EUR 23 billion at 31 December 2022, compared with EUR 16 billion at 31 December 2021. The changes in value related to exchange differences recognised directly in equity with respect to these hedges was -EUR 303 million in 2022, compared with -EUR 639 million in 2021.

During the 2022 financial year, no net investment hedging relationships were disqualified.

The amount recorded in the profit and loss account for 2022 with respect to the ineffective portion of hedges of net investments is immaterial.

Hedging of financial instruments recognised in the balance sheet (Fair Value Hedge)

Fair value hedges of interest rate risks relate either to identified fixed-rate assets or liabilities, or to portfolios of fixed-rate assets or liabilities. Derivatives are contracted to reduce the exposure of the fair value of these instruments to changes in interest rates.

Individual assets hedging consists mainly of securities classified as “Financial assets at amortised cost” or “Financial assets at fair value through equity”; individual liabilities hedging consists mainly of fixed-income securities issued by the Group.

Hedges of portfolios of financial assets and liabilities, constructed by currency, relate to:

- fixed-rate loans (property loans, equipment loans, consumer credit and export loans);
- fixed-rate deposits (mainly demand deposits and funds deposited under home savings contracts).

To identify the hedged amount, the residual balance of the hedged item is split into maturity bands, and a separate amount is designated for each band. The maturity split is determined on the basis of the contractual terms of the transactions and historical observations of customer behaviour (early redemption assumptions and estimated default rates).

Demand deposits, which do not bear interest at contractual rates, are qualified as fixed-rate medium-term financial liabilities. Consequently, the value of these liabilities is sensitive to changes in interest rates. Estimates of future cash outflows are based on historical analyses.

For each hedging relationship, expected hedge effectiveness is measured by ensuring that for each maturity band, the fair value of the hedged items is greater than the fair value of the designated hedging instruments.

Actual effectiveness is assessed on an *ex-post* basis by ensuring that the monthly change in the fair value of hedged items since the start of the month does not indicate any over-hedging.

Cash Flow Hedge

In terms of interest rate risk, the Group uses derivative instruments to hedge fluctuations in income and expenses arising on floating-rate assets and liabilities. Highly probable forecast transactions are also hedged. Hedged items are split into maturity bands by currency and benchmark interest rate. After factoring in early redemption assumptions and estimated default rates, the Group uses derivatives to hedge some or all of the risk exposure generated by these floating-rate instruments.

In terms of foreign exchange risk, the Group hedges against variability in components of consolidated net income. In particular, the Group may hedge future revenue flows (especially interest income and fees) derived from operations carried out by its main subsidiaries and/or branches in a currency other than their functional currencies. As in the case of interest rate hedges, the effectiveness of these hedging relationships is documented and assessed on the basis of forecast maturity bands.

The table below concerns the scope of BNP Paribas SA’s medium- and long-term transactions and shows the amount of hedged future cash flows (split by forecast date of realisation), which constitute the majority of the Group’s hedging transactions.

TABLE 95: HEDGED CASH FLOWS [Audited]

	31 December 2022				31 December 2021			
Period to realisation *In millions of euros*	**Less than 1 year**	**1 to 5 years**	**More than 5 years**	**Total**	**Less than 1 year**	**1 to 5 years**	**More than 5 years**	**Total**
Hedged cash flows	1,769	4,090	739	6,598	318	811	264	1,393

In 2022, no cash flow hedges were declassified on the grounds that achieving these future earnings would no longer be highly probable.

5.8 Liquidity risk

Liquidity risk is the risk that the Bank will not be able to honour its commitments or unwind or settle a position due to the market environment or idiosyncratic factors (*i.e.* specific to BNP Paribas), within a given timeframe and at a reasonable cost.

Liquidity risk reflects the risk of the Group being unable to fulfil current or future foreseen or unforeseen cash or collateral requirements, across all time horizons, from the short to the long term.

This risk may stem from the reduction in funding sources, drawdown of funding commitments, a reduction in the liquidity of certain assets, or an increase in cash or collateral margin calls. It may be related to the bank itself (reputation risk) or to external factors (risks in some markets).

The Group's liquidity risk is managed under a global liquidity policy approved by the Group's ALM Treasury Committee. This policy is based on management principles designed to apply both in normal conditions and in a liquidity crisis. The Group's liquidity position is assessed on the basis of internal indicators and regulatory ratios.

LIQUIDITY RISK MANAGEMENT POLICY [Audited]

OBJECTIVES

The objectives of the Group's liquidity management policy are to secure a balanced financing structure for the development of BNP Paribas business activities, and to ensure it is sufficiently robust to cope with crisis situations.

The liquidity risk management framework relies on:

- management indicators:
  - by volume, to ensure that businesses or activities comply with their liquidity targets set in line with the Group's funding capacity,
  - by price, *via* internal liquidity pricing;
- the definition of monitoring indicators which enable assessment of the Group's liquidity position under normal conditions and in crisis situations, the efficiency of actions undertaken and compliance with regulatory ratios;
- the implementation of liquidity risk management strategies based on diversification of funding sources with maturities in line with needs, and the constitution of liquidity reserves.

The Group's liquidity policy defines the management principles that apply across all Group entities and businesses and across all time horizons.

GOVERNANCE

As for all risks, the Group Chief Executive Officer is granted authority by the Board of directors to manage the Group's liquidity risk. The Chief Executive Officer delegates this responsibility to the Group ALM Treasury Committee.

The Internal Control, Risk and Compliance Committee (CCIRC) reports quarterly to the Board of directors on liquidity policy principles and the Group's liquidity position.

The Group ALM Treasury Committee is responsible for:

- proposing the Group's liquidity risk profile at the CCIRC and the Board of directors, for review and decision;

- monitoring compliance with regulatory liquidity ratios;
- defining and monitoring management indicators and calibrating the quantitative thresholds set for the Bank's businesses;
- defining and monitoring liquidity risk indicators and associating quantitative thresholds to them if necessary;
- defining and overseeing implementation of liquidity risk management strategies, including monitoring of business lines, under normal and stressed conditions.

In particular, the Group ALM Treasury Committee is informed about funding programmes and programmes to build up liquidity reserves, simulations in crisis conditions (stress tests), and about all events that may arise in crisis situations.

The Group ALM Treasury Committee is tasked with defining the management approach in periods of crisis (emergency plan). This framework is based on:

- supervision of the emergence of a crisis by monitoring the market position and complying with thresholds set for a series of indicators;
- governance of the activation of crisis management mode and the associated responsibilities;
- identification of possible actions for managing a crisis.

The Group ALM Treasury Committee meets every month under normal conditions and more often in stressed conditions or to deal with specific issues.

The permanent members of the Group ALM Treasury Committee are the Group Senior Executive Advisor (Chairman), the Delegate Deputy Chief Operating Officers, the Chief Risk Officer, the Group Chief Financial Officer and the Group ALM Treasury Head. Other members represent the RISK Function, Finance & Strategy Function and ALM Treasury. The Head of General Inspection and the Head of Compliance are also invited.

Across the Group, ALM Treasury is responsible for the operational implementation of the Group ALM Treasury Committee's liquidity management decisions. The ALM Treasury Committees in entities or groups of entities are responsible for local implementation of the strategy decided by the Group ALM Treasury Committee to manage the Bank's liquidity risk.

ALM Treasury is responsible for managing liquidity for the entire Group across all maturities. In particular, it is responsible for funding and short-term issuance (certificates of deposit, commercial paper, *etc.*), for senior and subordinated debt issuance (MTNs, bonds, medium/long-term deposits, covered bonds, *etc.*), preferred share issuance, and loan securitisation programmes for the Group. ALM Treasury is tasked with providing internal funding to the Group's divisions, operational entities and business lines, and investing their surplus cash. It is also responsible for building up and managing liquidity reserves, which comprise assets that can be easily sold in the event of a liquidity squeeze.

RISK participates in the Group and local ALM Treasury Committees and oversees implementation by ALM Treasury of the relevant decisions made by these committees. It provides second-line control by reviewing the models and risk indicators (including liquidity stress tests), monitoring risk indicators and ensuring compliance with the limits assigned.

The Finance & Strategy function is responsible for producing the regulatory liquidity indicators, as well as the internal monitoring indicators. Finance oversees the consistency of the internal monitoring indicators with the objectives defined by the Group ALM Treasury Committee. The Finance & Strategy function takes also part in the Group and local ALM Committees.

LIQUIDITY RISK MANAGEMENT AND SUPERVISION

Internal liquidity risk management and internal monitoring are based on a large range of indicators at various maturities. These indicators are measured on a regular basis by currency and maturity, both at Group level and entity level.

BUSINESS LINES' INTERNAL MONITORING INDICATORS [Audited]

The monitoring indicators relate to the funding needs of the Group's businesses under both normal and stressed conditions. These monitoring indicators are part of the Group's budget planning exercise with set objectives that are routinely monitored (monthly).

Funding needs of the Group's businesses

The funding needs associated with the activity of the Group's businesses are managed in particular by measuring the difference between commercial funding needs (customer loans and overdrafts, trading assets, *etc.*) and commercial funding resources (customer deposits, sale of the Group's debt securities to customers, trading liabilities, *etc.*). This indicator makes it possible to measure the business lines' liquidity consumption under a normal business scenario.

It is supplemented by indicators to measure the funding needs of the business lines in one month and one year depending on the assumptions defined by European regulations in force (Liquidity Coverage Ratio) or anticipated (Net Stable Funding Ratio).

In addition to this commercial funding need indicators, the Group closely monitors the liquidity reserves and the refinancing provided by ALM Treasury, as well as the Group's structural resources (*i.e.* net own funds).

The overall management of the business funding needs, the Group's structural resources, funding and liquidity reserves made by the ALM Treasury allows the Group to achieve a structurally robust liquidity situation able to resist severe market stresses.

Business lines' consumption of liquidity is thus integrated in the Group's budget process, wherein each business line estimates its future liquidity needs, in keeping with its profitability targets and capital consumption objectives. During the iterative budget process, liquidity consumption objectives are allotted to the business lines, taking into account the funding provided by ALM Treasury and structural resources, in line with the Group's overall target. This process is regularly renewed, monitored and adjusted as appropriate throughout the year by the Group ALM Treasury Committee.

Internal liquidity pricing

All of the Group's assets and liabilities are subject to internal liquidity pricing, the principles of which are decided by the Group ALM Treasury Committee and aim to take account of trends in the cost of market liquidity and the balance between assets and liabilities within the Group's development strategy.

Change of the liquidity position

In 2022, business lines' consumption of liquidity decreased as a result of the growth in deposits, which exceeded credit growth, particularly for Global Banking.

At end-2022, the businesses had a net liquidity surplus. Group's net equity is added to this surplus leading to an overall liquidity surplus.

In this context, the funding provided by ALM Treasury is used to finance the liquidity reserve, while also correcting the term structural differences between assets and liabilities and covering TLAC (Total Loss-Absorbing Capacity) requirements, as well as future Minimum Requirement for own funds and Eligible Liabilities (MREL).

The Group maintains a large surplus in liquidity,

WHOLESALE FUNDING AND LIQUIDITY RESERVE MONITORING INDICATORS [Audited]

Sources of wholesale funding

The Group adopted a broad definition of wholesale funding, covering all funds excluding those provided by:

- retail customers, professionals and corporates;
- institutional clients for their operating needs (*e.g.* portion needed for custody management);
- monetary policy and funding secured by market assets.

This definition is broader than market funding. For example, it includes medium- to long-term debt placed in funds for individuals and, in the short-term portion, non-operating deposits in the Securities Services business.

The Group has a conservative policy for the management of its wholesale funding by ensuring that it does not depend on very short-term funding and diversifying its funding sources.

Thus, wholesale funding with an original maturity of less than one month, so-called very short-term wholesale funding, is systematically "sterilised" by being placed in immediately-available deposits in central banks so that they are not used to fund the Bank's business.

The Group ensures that short-term wholesale funding (with original maturity of between one month and one year) is diversified in terms of counterparty, industry and residual maturity. Any excess concentration on one of these criteria is systematically "sterilised" and placed in central bank deposits.

Medium- to long-term wholesale market funding (with original maturity over one year) is diversified in terms of investor type, distribution network, funding programme (secured or unsecured), and by geographical area to ensure diversification. Furthermore, the Group aims to optimise the term structure of its funding operations.

At end-2022, sterilised very short-term wholesale funding totalled EUR 88.9 billion (leading to the sterilisation of an equivalent amount in the Group's liquidity reserve), diversified short-term wholesale funding totalled EUR 134.6 billion and diversified medium-to long-term wholesale funding totalled EUR 180.5 billion.

TABLE 96: BREAKDOWN OF THE WHOLESALE FUNDING BY CURRENCY [Audited]

The breakdown of funding by currency corresponds to the Group's needs and to a diversification objective.

				31 December 2022
In millions of euros	**EUR**	**USD**	**Other**	**Total**
Sterilised very short-term wholesale funding	49,067	23,948	15,893	88,908
Short-term wholesale funding	48,376	53,690	32,567	134,632

Medium- to long-term wholesale funding	88,954	64,591	26,976	180,521
TOTAL WHOLESALE	**186,397**	**142,228**	**75,436**	**404,062**

	31 December 2021			
In millions of euros	**EUR**	**USD**	**Other**	**Total**
Sterilised very short-term wholesale funding	53,271	28,346	14,988	96,606
Short-term wholesale funding	44,047	39,702	24,299	108,048
Medium- to long-term wholesale funding	99,086	60,257	30,133	189,476
TOTAL WHOLESALE	**196,405**	**128,305**	**69,420**	**394,130**

TABLE 97: BREAKDOWN OF THE GROUP'S MEDIUM- TO LONG-TERM (MLT) WHOLESALE FUNDING

The instruments are shown at their net carrying amount (including in particular accrued unpaid interest and the revaluation of the hedged portion).

	31 December 2022						
			Unsecured senior debt				
In millions of euros	**Tier 1 hybrid debt(*)**	**Tier 2 subordinated debt**	**Non-preferred**	**Preferred**	**Secured MLT funding**	**Monetary policy funding**	**TOTAL**
Total MLT funding	**12,459**	**22,405**	**72,227**	**73,608**	**12,993**	**67,087**	**260,779**
MLT debt placed with clients				(12,904)	(268)		(13,172)
Monetary policy						(67,087)	(67,087)
WHOLESALE MLT FUNDING	**12,459**	**22,405**	**72,227**	**60,704**	**12,726**	**-**	**180,521**

(*) Including CASHES issued by BNP Paribas Fortis which are not recognised in own funds since 1 January 2022.

	31 December 2021						
			Unsecured senior debt				
In millions of euros	**Tier 1 hybrid debt**	**Tier 2 subordinated debt**	**Non-preferred**	**Preferred**	**Secured MLT funding**	**Monetary policy funding**	**TOTAL**
Total MLT funding	**10,114**	**22,989**	**70,086**	**82,492**	**16,901**	**120,087**	**322,668**
MLT debt placed with clients			(59)	(13,046)			(13,105)
Monetary policy						(120,087)	(120,087)
WHOLESALE MLT FUNDING	**10,114**	**22,989**	**70,027**	**69,445**	**16,901**	**-**	**189,476**

TABLE 98: TRENDS IN GROUP MEDIUM AND LONG TERM WHOLESALE FUNDING [Audited]

In millions of euros	**31 December 2021**	**New origination**	**Redemptions**	**Buy-backs**	**Exercise of calls**	**Perimeter effect and other**	**31 December 2022**
Total MLT funding	**322,668**	**53,767**	**(30,704)**	**(54,495)**	**(7,739)**	**(22,719)**	**260,779**
MLT debt placed with clients	(13,105)	(1,905)	740	407	350	342	(13,172)
Monetary policy	(120,087)		3,000	50,000			(67,087)
WHOLESALE MLT FUNDING	**189,476**	**51,862**	**(26,964)**	**(4,088)**	**(7,389)**	**(22,376)**	**180,521**

Total medium- to long-term wholesale funding outstandings stood at EUR 180.5 billion at 31 December 2022 against EUR 189.5 billion at 31 December 2021. After adjusting for exchange rate movements due to effects of debt micro-hedge accounting, the long-term wholesale funding outstandings rose by EUR 11 billion compared to 2021.

Wholesale funding raised by the Group in the markets with an initial maturity of over 1 year reached EUR 51.9 billion in 2022, compared to EUR 55.9 billion in 2021.

Wholesale funding trends based on regulatory changes

In addition to the Group's liquidity management targets, use of wholesale funding also satisfies regulatory requirements relating to recovery and resolution, with the application of the TLAC ratio minimum requirement (see paragraph *Recovery and resolution* in *Capital adequacy and capital planning* in section 5.2).

In order to comply with the regulatory TLAC ratio requirements of 22.17% at 31 December 2022, BNP Paribas issued EUR 81.1 billion (outstanding principal amount) or EUR 72.2 billion (carrying amount, including in particular accrued unpaid interest and revaluation of the hedged portion) of non-preferred senior debt between 2017 and 2022 (including EUR 75.2 billion in TLAC-eligible debt at 31 December 2022), with different maturity dates and in various currencies, in the form of public issuances and private placements.

To meet the TLAC and MREL ratio requirements, the Group plans to issue EUR 15 billion of senior debt (senior preferred and senior non-preferred) in 2023, subject to market conditions. The Group had completed 36% of its issue programme for this category of debt as at 26 January 2023.

As a reminder, the main characteristics of these debt instruments are:

- issuance under EMTN and US MTN programmes;
- non-preferred senior notes (pursuant to article L.613-30-3-I-4 of the French Monetary and Financial Code);
- non-structured debt[1];
- initial maturity of more than one year;
- subject to conversion or impairment before senior preferred debt but after subordinated debt;
- documentation mandatorily stating that this debt belongs to the new statutory category.

MLT secured wholesale funding

MLT secured wholesale funding is measured by separating out assets representing securities and loans. Funding obtained from central banks is not included in the table below.

TABLE 99: MEDIUM AND LONG TERM SECURED WHOLESALE FUNDING

	31 December 2022		**31 December 2021**	
In millions of euros	**Collateral used(*)**	**Funding raised(**)**	**Collateral used(*)**	**Funding raised(**)**
Loans and receivables	14,662	12,685	19,389	16,873
Securities	43	40	31	29

1 *Decree No. 2018-710 of 3 August 2018 specifies the conditions in which a security, a receivable, an instrument or a right is considered as non-structured under article 613-30-3 I-4° of the French Monetary and Financial Code.*

TOTAL	**14,706**	**12,726**	**19,419**	**16,901**

(*) Amounts gross of haircuts.
(**) Amounts net of haircuts.

MLT secured wholesale funding (outside of monetary policy) represents 7.0% of total MLT wholesale funding in 2022 (8.9% in 2021). The Bank carefully manages its proportion of secured funding and the associated overcollateralisation in order to protect creditors holding unsecured debt.

Covered bonds and securitisation programmes are the main sources of the Group's secured financing. On average, covered bonds are overcollateralised by 116% and securitisation programmes by 110%.

Medium- to long-term liquidity position

The medium-to long-term liquidity positions are measured regularly at Group level by entity and by currency to evaluate the medium-to long-term resources and uses. To this end, each balance sheet item is given a maturity in an economic approach using models and conventions offered by ALM Treasury and reviewed by the RISK Function, or a regulatory approach by applying standardised weightings of the Net Stable Funding Ratio (NSFR) that entered into force in mid-2021. For example, despite their immediate availability, the current accounts of retail customers and those linked with corporates' cash management activities always remain highly stable, even through the most severe financial crises, thus constituting stable medium- to long-term funding sources in both an economic and a regulatory approach.

Stress tests and liquidity reserve

Liquidity stress tests are performed regularly on various maturities (one day to twelve months) based on market factors and/or factors specific to the Group and using different scenarios: idiosyncratic (*i.e.* specific to BNP Paribas), systemic crisis (affecting financial institutions), and combined crisis scenarios.

For each crisis scenario considered, borrowings and liabilities are expected to only partially renew, while loan amortisations are expected to be replaced by new loans to protect the commercial franchise, off-balance sheet financing commitments are expected to be used, and market assets are expected to lose their market liquidity. Commitment renewal and utilisation are differentiated in intensity and in time, based on client type (individuals, small and medium enterprises, corporates, financial institutions, *etc.*) and/or the type of underlying for secured borrowings and loans (repos/reverse repos). Stress scenarios also cover calls for additional collateral (*e.g.* increased margin calls for collateralised derivatives, impact of "rating trigger" clauses).

The liquidity reserve consists of Group assets held by ALM Treasury and the capital market businesses. The liquidity reserve comprises:

- deposits with central banks;
- available assets that can be immediately sold on the market or through repurchase agreements (bonds or shares);
- available securities and receivables that can be refinanced with central banks (*e.g.* through securitisation, transforming less liquid assets into liquid or available assets) (see section 5.5 *Proprietary Securitisation (originator)*).

The global liquidity reserve (counterbalancing capacity) is calculated net of the payment systems' intraday needs and in keeping with prudential rules, in particular US rules, under which certain liquid assets are only recognised as available after a certain time period. Transferability restrictions are also taken into consideration in the calculation of the Group's liquidity reserve. These restrictions may stem from local regulations which limit transfers between entities of a group, non-convertible currencies or jurisdictions with foreign exchange control.

The table below shows its trends.

TABLE 100: BREAKDOWN OF GLOBAL LIQUIDITY RESERVE (COUNTERBALANCING CAPACITY)

In millions of euros	Average 2022	31 December 2022	31 December 2021
Total eligible assets	646,987	591,242	638,159
Utilisations	(177,095)	(124,649)	(175,109)
Transferability	(7,360)	(5,943)	(11,066)
GLOBAL LIQUIDITY RESERVE	**462,532**	**460,651**	**451,985**
of which liquid assets meeting prudential regulation requirements (HQLA)	*454,812*	*418,900*	*446,200*
of which other liquid assets	*7,720*	*41,751*	*5,784*

The Group's liquidity reserve stood at EUR 460.7 billion at end-2022, of which EUR 88.9 billion sterilising very short-term wholesale funding.

The Group's liquidity reserve at 31 December 2022 increased by EUR 8 billion compared to end-2021.

REGULATORY LIQUIDITY RATIOS

Scope of application

The prudential liquidity scope defined by the BNP Paribas Group for monitoring and overseeing liquidity ratios on a consolidated basis is the one defined for its capital ratio adequacy, with the exception of jointly controlled entities which are consolidated under the equity method in the prudential liquidity scope (see *Scope of application* in section 5.2 *Capital management and capital adequacy*).

Liquidity Coverage Ratio – LCR

The 30-day Liquidity Coverage Ratio (LCR) came into force on 1 October 2015 setting the minimum coverage ratio for net cash outflows over a one-month time horizon, in a crisis situation, at 100% from 1 January 2018. The Group measures its liquidity requirements in accordance with the requirements of the Delegated Act adopted by the European Commission in January 2015, and has adapted its management process in keeping with this regulation. The management indicators for the businesses' funding needs and the internal pricing terms therefore reflect the standardised assumptions set by the LCR and allow the Group to monitor compliance with the requirement.

The Group's LCR for the period ending 31 December 2022 stood at 129%, *versus* 143% at 31 December 2021.

In accordance with Commission Implementing Regulation (EU) No. 2021/637, the Group's LCR is calculated as the rolling average of the twelve latest month-end measures.

TABLE 101: SHORT-TERM LIQUIDITY RATIO (LCR)(*) – ITEMISED (EU LIQ1)

		a	b	c	d	e	f	g	h
				Unweighted value					**Weighted value**
	In millions of euros	**31 March 2023**	**31 December 2022**	**30 September 2022**	**30 June 2022**	**31 March 2023**	**31 December 2022**	**30 September 2022**	**30 June 2022**
	Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
	HIGH QUALITY LIQUID ASSETS (HQLA)								
1	**TOTAL HIGH QUALITY LIQUID ASSETS (HQLA)**					**446,763**	**454,812**	**463,895**	**468,653**
	CASH OUTFLOWS								
2	Retail deposits (including small businesses)	446,460	449,679	442,782	435,255	33,553	33,907	33,354	32,724
3	*Of which stable deposits*	*264,816*	*267,574*	*264,557*	*260,439*	*13,241*	*13,379*	*13,228*	*13,022*
4	*Of which less stable deposits*	*171,086*	*172,289*	*168,812*	*165,364*	*20,056*	*20,209*	*19,770*	*19,325*
5	Unsecured non-retail funding	563,639	580,770	583,359	576,277	264,473	276,564	280,332	280,443
6	*Of which operational deposits*	*179,881*	*183,500*	*182,260*	*175,903*	*44,218*	*45,092*	*44,798*	*43,223*
7	*Of which non-operational deposits*	*368,820*	*381,294*	*384,523*	*382,766*	*205,317*	*215,497*	*218,958*	*219,612*
8	*Of which unsecured debt*	*14,938*	*15,976*	*16,576*	*17,608*	*14,938*	*15,976*	*16,576*	*17,608*
9	Secured non-retail funding (of which repos)					90,243	93,594	94,413	92,587
10	Additional requirements	391,373	386,823	377,289	370,018	98,688	95,246	91,004	89,986
11	*Of which outflows related to derivative exposures and other collateral requirements*	*42,661*	*41,927*	*40,516*	*42,563*	*42,370*	*41,835*	*40,377*	*42,300*

		a	b	c	d	e	f	g	h
				Unweighted value					**Weighted value**
In millions of euros		**31 March 2023**	**31 December 2022**	**30 September 2022**	**30 June 2022**	**31 March 2023**	**31 December 2022**	**30 September 2022**	**30 June 2022**
12	*Of which outflows on secured debt*	*6,351*	*4,069*	*2,248*	*316*	*6,351*	*4,069*	*2,248*	*316*
13	*Of which credit and liquidity facilities*	*342,361*	*340,827*	*334,525*	*327,139*	*49,967*	*49,342*	*48,378*	*47,370*
14	Other contractual funding obligations	62,495	60,124	59,860	59,023	62,495	60,124	59,860	59,023
15	Other contingent funding obligations	139,806	137,612	148,030	155,151	7,686	7,528	6,318	5,357
16	**TOTAL CASH OUTFLOWS**					**557,137**	**566,963**	**565,281**	**560,119**
	CASH INFLOWS								
17	Secured lending (of which reverse repos)	453,494	471,715	484,281	474,153	96,941	98,884	98,525	91,993
18	Inflows from fully performing exposures	97,236	99,136	94,070	90,516	75,733	77,223	72,452	69,439
19	Other cash inflows	57,623	57,284	58,625	61,880	47,395	46,947	48,242	52,335
20	**TOTAL CASH INFLOWS**	**608,354**	**628,136**	**636,976**	**626,549**	**220,069**	**223,055**	**219,219**	**213,766**
20c	Inflows subject to 75% cap	432,262	443,412	448,696	444,740	220,069	223,055	219,219	213,766
21	**LIQUIDITY BUFFER**					**446,763**	**454,812**	**463,895**	**468,653**
22	**TOTAL NET CASH OUTFLOWS**					**337,068**	**343,909**	**346,062**	**346,353**
23	**LIQUIDITY COVERAGE RATIO (%)**					**132.63%**	**132.26%**	**134.13%**	**135.39%**

(*) The data presented in this table are calculated as the rolling average over the twelve latest month-end values.

Qualitative information on LCR (EU LIQ-B)

The Group's rolling month-end average LCR over the last 12 months stands at 133%, which corresponds to a liquidity surplus of EUR 110 billion compared with the regulatory requirement. The Group ratio averaged between 132% and 135%.

At 31 March 2023, LCR end of period stands at 139% (129% at 31 December 2022).

After application of the regulatory haircuts (weighted values), the Group's rolling month-end average liquid assets over the last 12 months amount to EUR 447 billion, and mainly consist of central bank deposits (75% at the end of March) and government and sovereign bonds (25%).

Rolling month-end average cash outflows over the last 12 months under the thirty-day liquidity stress scenario amount to EUR 337 billion, a large part of which corresponds to thirty-day deposit outflow assumptions of EUR 298 billion. Reciprocally, cash inflows on loans under the thirty-day liquidity regulatory stress scenario amount to EUR 76 billion.

Cash flows on financing transactions and collateralised loans, representing repurchase agreements and securities exchanges, record net rolling month-end average inflows over the last 12 months of EUR 7 billion, given the regulatory haircuts applied to collaterals. Flows linked to derivative instruments and regulatory stress tests record net outflows of EUR 16 billion after netting of cash outflows (EUR 42 billion) and inflows (EUR 26 billion).

Lastly, the rolling month-end average drawdown assumptions on financing commitments over the last 12 months amount to EUR 50 billion.

There is no excessive imbalance on any significant currency.

TABLE 102: NET STABLE FUNDING RATIO (EU LIQ2)

		a	b	c	d	e
						31 December 2022
		Unweighted value by residual maturity				
	In millions of euros	**No maturity**	**< 6 months**	**6 months to < 1 year**	**≥ 1 year**	**Weighted value**
	Available stable funding (ASF) Items					
1	Capital items and instruments	117,703			20,692	138,395
2	*Own funds*	*117,703*			*20,692*	*138,395*
3	*Other capital instruments*					
4	Retail deposits		442,881	2,548	4,284	418,566
5	*Stable deposits*		*266,922*	*983*	*1,318*	*255,828*
6	*Less stable deposits*		*175,959*	*1,565*	*2,966*	*162,738*
7	Wholesale funding		1,061,592	48,662	154,116	454,843
8	*Operational deposits*		*177,614*	*26*	*672*	*89,492*
9	*Other wholesale funding*		*883,978*	*48,636*	*153,444*	*365,351*
10	Interdependent liabilities		15,157		50,663	
11	Other liabilities	68,599	173,335	1,273	30,845	31,481
12	*NSFR derivative liabilities*	*68,599*				
13	*All other liabilities and capital instruments not included in the above categories*		*173,335*	*1,273*	*30,845*	*31,481*
14	**TOTAL AVAILABLE STABLE FUNDING (ASF)**					**1,043,285**
	Required stable funding (RSF) Items					
15	Total high-quality liquid assets (HQLA)					24,749
15a	Assets encumbered for a residual maturity of one year or more in a cover pool		165	163	6,564	5,859
16	Deposits held at other financial institutions for operational purposes		1	1	1	2
17	Performing loans and securities:		458,227	90,795	701,469	715,424
18	*Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut*		*96,139*	*4,787*	*4,125*	*10,157*
19	*Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions*		*156,806*	*14,320*	*6,329*	*25,403*
20	*Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which*		*141,518*	*57,200*	*433,552*	*472,528*
21	*With a risk weight of less than or equal to 35% under the Basel II Standardised Approach for credit risk*					
22	*Performing residential mortgages, of which*		*5,728*	*5,560*	*177,717*	*123,034*
23	*With a risk weight of less than or equal to 35% under the Standardised Approach for credit risk*		*5,728*	*5,560*	*177,717*	*123,034*
24	*Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products*		*58,035*	*8,928*	*79,746*	*84,301*
25	Interdependent assets		15,157		50,663	
26	Other assets					
27	*Physical traded commodities*				*11,755*	*9,992*

		a	b	c	d	e
						31 December 2022
		Unweighted value by residual maturity				
In millions of euros		**No maturity**	**< 6 months**	**6 months to < 1 year**	**≥ 1 year**	**Weighted value**
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*			*27,440*		*23,324*
29	*NSFR derivative assets*					
30	*NSFR derivative liabilities before deduction of variation margin posted*			*113,092*		*5,655*
31	*All other assets not included in the above categories*		*37,017*	*4,756*	*87,667*	*97,867*
32	Off-balance sheet items		397,340	12,542	28,511	23,951
33	**TOTAL REQUIRED STABLE FUNDING (RSF)**					**906,821**
34	**NET STABLE FUNDING RATIO** *(%)*					**115.05%**

		a	b	c	d	e
		31 December 2021				
		Unweighted value by residual maturity				
	In millions of euros	**No maturity**	**< 6 months**	**6 months to < 1 year**	**≥ 1 year**	**Weighted value**
	Available stable funding (ASF) Items					
1	Capital items and instruments	110,040	20		20,785	130,825
2	*Own funds*	*110,040*	*20*		*20,785*	*130,825*
3	*Other capital instruments*					
4	Retail deposits		419,484	1,556	4,428	396,104
5	*Stable deposits*		*254,068*	*738*	*1,597*	*243,662*
6	*Less stable deposits*		*165,416*	*818*	*2,831*	*152,442*
7	Wholesale funding		1,036,121	44,091	258,224	540,259
8	*Operational deposits*		*171,117*	*21*	*441*	*86,010*
9	*Other wholesale funding*		*865,004*	*44,070*	*257,783*	*454,248*
10	Interdependent liabilities		13,400		42,986	
11	Other liabilities	54,242	196,402	1,541	26,772	27,542
12	*NSFR derivative liabilities*	*54,242*				
13	*All other liabilities and capital instruments not included in the above categories*		*196,402*	*1,541*	*26,772*	*27,542*
14	**TOTAL AVAILABLE STABLE FUNDING (ASF)**					**1,094,731**
	Required stable funding (RSF) Items					
15	Total high-quality liquid assets (HQLA)					23,266
15a	Assets encumbered for a residual maturity of one year or more in a cover pool		248	245	8,131	7,331
16	Deposits held at other financial institutions for operational purposes		469			234
17	Performing loans and securities:		515,517	96,697	646,229	703,738
18	*Performing securities financing transactions with financial customers collateralised by Level 1 HQLA subject to 0% haircut*		*134,639*	*12,901*	*3,044*	*13,766*
19	*Performing securities financing transactions with financial customer collateralised by other assets and loans and advances to financial institutions*		*187,725*	*14,751*	*4,700*	*25,049*
20	*Performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, and PSEs, of which*		*135,627*	*56,513*	*376,275*	*430,971*
21	*With a risk weight of less than or equal to 35% under the Basel Standardised Approach for credit risk*					
22	*Performing residential mortgages, of which*		*5,450*	*5,659*	*186,496*	*153,562*
23	*With a risk weight of less than or equal to 35% under the Basel Standardised Approach for credit risk*		*5,450*	*5,659*	*186,496*	*153,562*
24	*Other loans and securities that are not in default and do not qualify as HQLA, including exchange-traded equities and trade finance on-balance sheet products*		*52,077*	*6,874*	*75,713*	*80,391*
25	Interdependent assets		13,400		42,986	
26	Other assets					
27	*Physical traded commodities*				*10,596*	*9,007*
28	*Assets posted as initial margin for derivative contracts and contributions*			*25,833*		*21,958*

	to default funds of CCPs				
29	*NSFR derivative assets*		*16,447*		*16,447*
30	*NSFR derivative liabilities before deduction of variation margin posted*		*88,318*		*4,416*
31	*All other assets not included in the above categories*	*42,118*	*3,619*	*74,725*	*91,978*
32	Off-balance sheet items	371,860	10,414	23,306	22,028
33	**TOTAL REQUIRED STABLE FUNDING (RSF)**				**900,403**
34	**NET STABLE FUNDING RATIO** *(%)*				**121.58%**

SCHEDULE OF THE BANK'S PRUDENTIAL BALANCE SHEET

This schedule presents cash flows according to contractual payment dates within the prudential scope (see Scope of application in section 5.2 *Capital management and capital adequacy*) in line with the rules defined for the liquidity ratio.

The securities in the trading book listed at fair value through profit or loss are presented with "not determined" maturities, as the securities' contractual maturity is not representative of the Group's planned holding period. Likewise, derivative financial instruments listed at fair value through profit or loss, derivatives used for hedging purposes and remeasurement adjustments on interest-rate risk hedged portfolios are presented with "not determined" maturities.

In the following table and in the event of an early repayment option, the rules applied are the most conservative:

- if the option is at the hands of both parties, the repayment date is the next contractual date for the exercise of the option;
- if the option is at the hands of the counterparty, the date for the repayment of assets is the date of final maturity while that used for liabilities is the next contractual date for the exercise of the option;
- if the option is at the hands of the Group, the repayment date is the next contractual date for the exercise of the option, for both assets and liabilities;
- in the case of subordinated debt, the redemption date used is the final maturity date.

TABLE 103: CONTRACTUAL MATURITIES OF THE PRUDENTIAL BALANCE SHEET (EU CR1-A) [Audited]

								31 December 2022
In millions of euros	Not determined	Overnight or demand	Up to 1 month (excl. Overnight)	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	TOTAL
ASSETS								
Cash and amounts due from central banks		318,569						318,569
Financial instruments at fair value through profit and loss								
Securities	166,946							166,946
Loans and repurchase agreements		64,994	57,714	29,441	24,085	9,961	5,828	192,024
Derivative financial instruments	328,358							328,358
Derivatives used for hedging purposes	25,681							25,681
Financial assets at fair value through equity								
Debt securities	59		3,890	797	3,787	12,120	17,916	38,570
Equity securities	2,188							2,188
Financial assets at amortised cost								
Loans and advances to credit institutions		9,987	13,023	5,055	2,463	649	1,297	32,474
Loans and advances to customers		13,851	56,802	78,893	134,620	345,125	258,376	887,667
Debt securities	154	92	3,503	4,100	14,908	47,213	43,741	113,711
Remeasurement adjustment on interest rate risk hedged portfolios	(7,477)							(7,477)
Financial assets	**515,910**	**407,494**	**134,931**	**118,287**	**179,864**	**415,067**	**327,158**	**2,098,711**
Other assets	187,930	21,181	6,832	9,241	1,835	1,977	8,727	237,722
Assets held for sale				86,839				86,839
TOTAL ASSETS	**703,839**	**428,674**	**141,764**	**214,366**	**181,699**	**417,045**	**335,885**	**2,423,272**
of which Loans and advances	-	*88,832*	*127,538*	*113,389*	*161,168*	*355,735*	*265,501*	*1,112,165*
of which Debt securities	*135,238*	*92*	*7,393*	*4,898*	*18,696*	*59,333*	*61,656*	*287,306*
LIABILITIES								
Deposit from central banks		3,054						3,054
Financial instruments at fair value through profit and loss								-
Securities	99,155							99,155
Deposits and repurchase agreements		48,048	125,131	39,086	14,922	5,923	965	234,076
Issued debt securities		7	3,672	4,662	12,442	27,376	17,250	65,409
Derivative financial instruments	300,936							300,936

31 December 2022

In millions of euros	Not determined	Overnight or demand	Up to 1 month (excl. Overnight)	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	TOTAL
Derivatives used for hedging purposes	40,002							40,002
Financial liabilities at amortised cost								-
Deposits from credit institutions		14,768	5,518	25,331	49,365	20,950	780	116,714
Deposits from customers		780,457	124,371	63,839	37,088	5,924	2,888	1,014,567
Debt securities		5	9,731	31,847	34,884	42,770	32,952	152,190
Subordinated debt			8		270	8,599	13,511	22,388
Remeasurement adjustment on interest rate risk hedged portfolios	(20,201)							(20,201)
Financial liabilities	**419,893**	**846,339**	**268,431**	**164,765**	**148,972**	**111,543**	**68,347**	**2,028,290**
Other liabilities	257,789	13,059	14,228	10,092	2,318	1,818	18,675	317,980
Liabilities associated with assets held for sale				77,002				77,002
TOTAL LIABILITIES AND EQUITY	**677,682**	**859,398**	**282,659**	**251,860**	**151,290**	**113,361**	**87,022**	**2,423,272**

31 December 2021

In millions of euros	Not determined	Overnight or demand	Up to 1 month (excl. Overnight)	1 to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	TOTAL
ASSETS								
Cash and amounts due from central banks		348,519						348,519
Financial instruments at fair value through profit and loss								
Securities	192,520							192,520
Loans and repurchase agreements		68,459	114,332	31,876	25,972	8,044	3,820	252,503
Derivative financial instruments	240,940							240,940
Derivatives used for hedging purposes	8,619							8,619
Financial assets at fair value through equity								
Debt securities	157		382	1,074	3,413	16,398	20,173	41,597
Equity securities	2,558							2,558
Financial assets at amortised cost								
Loans and advances to credit institutions		8,150	5,270	3,260	3,351	992	912	21,934
Loans and advances to customers		15,431	58,233	77,210	132,998	328,815	233,961	846,649

								31 December 2021
In millions of euros	**Not determined**	**Overnight or demand**	**Up to 1 month (excl. Overnight)**	**1 to 3 months**	**3 months to 1 year**	**1 to 5 years**	**More than 5 years**	**TOTAL**
Debt securities	131	392	3,530	5,404	12,146	43,535	44,241	109,379
Remeasurement adjustment on interest rate risk hedged portfolios	3,049							3,049
Financial assets	**447,974**	**440,951**	**181,748**	**118,824**	**177,879**	**397,784**	**303,108**	**2,068,267**
Other assets	164,476	19,357	7,568	6,258	6,065	1,490	4,897	210,111
Assets held for sale					91,267			91,267
TOTAL ASSETS	**612,450**	**460,308**	**189,315**	**125,082**	**275,211**	**399,274**	**308,005**	**2,369,645**
of which Loans and advances	*-*	*92,040*	*177,835*	*112,346*	*162,320*	*337,851*	*238,693*	*1,121,086*
of which Debt securities	*135,313*	*392*	*3,913*	*6,478*	*15,559*	*59,933*	*64,414*	*286,001*
LIABILITIES								
Deposit from central banks		1,244						1,244
Financial instruments at fair value through profit and loss								-
Securities	112,338							112,338
Deposits and repurchase agreements		113,644	119,041	34,792	23,301	1,383	1,296	293,456
Issued debt securities		20	2,563	4,012	12,231	26,319	18,798	63,944
Derivative financial instruments	237,779							237,779
Derivatives used for hedging purposes	10,211							10,211
Financial liabilities at amortised cost								-
Deposits from credit institutions		11,688	3,746	18,624	6,665	118,140	506	159,368
Deposits from customers		822,784	71,073	48,335	13,995	8,170	2,606	966,963
Debt securities		3	7,837	26,214	29,816	48,126	39,393	151,388
Subordinated debt			363		317	6,394	15,875	22,949
Remeasurement adjustment on interest rate risk hedged portfolios	1,367							1,367
Financial liabilities	**361,695**	**949,383**	**204,623**	**131,977**	**86,324**	**208,531**	**78,474**	**2,021,007**
Other non-financial liabilities	230,280	6,862	15,750	6,606	2,840	1,203	10,731	274,272
Liabilities associated with assets held for sale					74,366			74,366
TOTAL LIABILITIES AND EQUITY	**591,975**	**956,245**	**220,373**	**138,583**	**163,530**	**209,734**	**89,205**	**2,369,645**

At 31 December 2022, BancWest's contribution to the Group's balance sheet, under the line "Assets held for sale / Liabilities associated with assets held for sale" (see note 7.d *Discontinued activities* to the consolidated financial statements), amounts to:

- assets of EUR 3 billion from cash and amounts due from central banks, EUR 17 billion in debt securities at amortised cost, with a maturity mostly over five years, and EUR 56 billion in loans and advances to customers, including EUR 46 billion over one year;
- liabilities of EUR 71 billion in deposits from customers.

At 31 December 2021, BancWest's contribution to the Group's balance sheet is as follows:

- assets of EUR 15 billion from cash and amounts due from central banks, EUR 16 billion in debt securities at amortised cost, with a maturity mostly over five years, and EUR 50 billion in loans and advances to customers, including EUR 41 billion over one year;
- liabilities of EUR 73 billion in deposits from customers.

For the management of liquidity risk, the above schedule is supplemented with economic analyses taking into consideration customer behaviour and the market liquidity of certain assets (such as securities), under normal conditions and stress situations.

To this effect, the Group uses a set of tools to anticipate and manage its financial liquidity, in particular as previously indicated:

- medium- to long-term liquidity status;
- stress tests and liquidity reserve;
- monitoring compliance with regulatory liquidity ratios.

The following table shows details of Table 103 *Contractual maturities of the prudential balance sheet across the scope of the Group's capital instruments and medium- and long-term debt securities*, without taking into account early redemption options.

TABLE 104: CONTRACTUAL MATURITIES OF CAPITAL INSTRUMENTS AND MEDIUM- AND LONG-TERM DEBT SECURITIES IN THE PRUDENTIAL SCOPE

In millions of euros	TOTAL 31 December 2022	2023	2024	2025	2026	2027	2028-2032	Beyond 2032	Perpetual
Amount(*) of liabilities eligible to Additionnal Tier 1	**11,800**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**11,800**
Subordinated debt	**-**								
Preferred shares and Undated Super Subordinated Notes	**11,800**								**11,800**
Amount(*) of debt eligible to Tier 2	**22,269**	**279**	**899**	**2,606**	**2,517**	**2,520**	**7,351**	**5,361**	**737**
Subordinated debt	**22,269**	**279**	**899**	**2,606**	**2,517**	**2,520**	**7,351**	**5,361**	**737**
of which subordinated debt at amortised cost	*22,253*	*277*	*899*	*2,606*	*2,517*	*2,520*	*7,351*	*5,346*	*737*
of which subordinated debt at fair value through profit and loss	*17*	*2*						*15*	
Amount(*) of debt not eligible to prudential own funds	**793**	**-**	**-**	**58**	**-**	**-**	**77**	**-**	**658**
Unsecured Senior debt	**131,126**	**19,679**	**15,099**	**19,410**	**12,819**	**16,492**	**38,031**	**9,596**	**-**
Non-preferred senior debt	**72,227**	**6,361**	**5,656**	**9,701**	**6,241**	**10,708**	**27,585**	**5,975**	
of which non-preferred senior debt at amortised cost	*68,100*	*6,341*	*5,656*	*9,701*	*6,241*	*10,708*	*27,449*	*2,004*	
of which non-preferred senior debt at fair value through profit and loss	*4,127*	*20*					*136*	*3,972*	
Preferred senior debt	**58,899**	**13,318**	**9,443**	**9,709**	**6,578**	**5,784**	**10,446**	**3,621**	
of which preferred senior debt at amortised cost	*14,633*	*9,097*	*719*	*1,674*	*1,220*	*693*	*1,230*		
of which preferred senior debt at fair value through profit and loss	*44,266*	*4,221*	*8,724*	*8,035*	*5,358*	*5,091*	*9,216*	*3,621*	
Secured Senior debt	**12,512**	**3,565**	**3,159**	**2,223**	**620**	**419**	**1,102**	**1,425**	**-**

(*) Accounting value before any prudential adjustments.

Tables providing details of instruments recognised as the capital (CET1, AT1 and Tier 2), as well as debt instruments eligible for TLAC ratio (non-preferred senior debt), as required (EU CCA) by implementing Regulation (EU) No. 1423/2013, are available in the *BNP Paribas Debt* section of the Investor Relations website: https://invest.bnpparibas/en/search/debt/documents.

Some debt instruments shown above have an early redemption ("call") option exercisable by the Group (Issuer). The following table shows the maturity schedule for debt and other subordinated liabilities by considering, where appropriate, the next date on which the option may be exercised ("call date"). Calls may only be exercised after authorisation from the regulator. The maturity dates shown hereafter are purely contractual and do not foresee the Group's call policy.

TABLE 105: ECONOMIC(*) MATURITIES OF EQUITY INSTRUMENTS (PRUDENTIAL PERIMETER)

In millions of euros	TOTAL 31 December 2022	2023	2024	2025	2026	2027	2028-2031	Beyond 2031	Perpetual
Amount(**) of liabilities eligible to Additional Tier 1	**11,800**	**-**	**1,326**	**1,534**	**-**	**2,688**	**6,252**	**-**	**-**
Subordinated debt	**-**								
Preferred shares and Undated Super Subordinated Notes	**11,800**		**1,326**	**1,534**		**2,688**	**6,252**		
Amount(**) of debt eligible to Tier 2	**22,269**	**1,039**	**899**	**3,253**	**4,268**	**5,303**	**4,144**	**2,896**	**467**
Subordinated debt	**22,269**	**1,039**	**899**	**3,253**	**4,268**	**5,303**	**4,144**	**2,896**	**467**
of which subordinated debt at amortised cost	*22,253*	*1,037*	*899*	*3,253*	*4,268*	*5,303*	*4,144*	*2,881*	*467*
of which subordinated debt at fair value through profit and loss	*17*	*2*						*15*	
Amount(**) of debt not eligible to prudential own funds	**793**	**-**	**-**	**58**	**-**	**11**	**66**	**-**	**658**

(*) The economic maturity is defined as either the contractual maturity or the next call date when the instrument have an early redemption option.
(**) Accounting value before any prudential adjustments.

ENCUMBRANCE OF GROUP ASSETS AND ASSETS RECEIVED BY THE GROUP

Assets on the balance sheet and financial instruments received in guarantee used as pledges, guarantees or enhancement of a Group transaction and which cannot be freely withdrawn are considered to be encumbered.

The encumbrance of assets is central to the Group's businesses and has two aims:

- to trade in derivatives or repurchase agreements, including the payment of margin calls to secure transactions (see paragraphs on *Bilateral initial margin exchange* and *Counterparty credit risk management* in section 5.6 *Counterparty credit risk*);
- to obtain funding, by issuing secured debt, in particular asset-backed securities (see *Proprietary securitisation (originator)* in section 5.5 *Securitisation in the banking book*), covered bonds (see paragraph on *MLT secured wholesale funding* in this section) or by participating in monetary policy, thus diversifying and optimising its funding structure.

Thus, the encumbrance of assets can be distinguished from the transfer of assets shown in note 4.r to the consolidated financial statements insofar as it only comprises the following transactions:

- securities recognised in the Bank's balance sheet, which have been sold or loaned, on a temporary basis, by the Bank under repurchase agreements (repos and securities lending) but which are not derecognised in the Bank's balance sheet once the transaction is complete;
- assets securitised by the Bank (within efficient and inefficient programmes), which continue to be recognised in the Bank's balance sheet under the applicable consolidation rules contained in the accounting standard, to hedge the issue of asset-backed securities.

Based on the definitions above, guarantees given to clearing houses or central banks in the context of monetary policy, along with asset portfolios hedging the issue of secured bonds, fall within the scope of the encumbrance of assets but do not fall within the scope of asset transfers. The same applies to repurchase agreements (repos) and loans in the case of securities that are not recognised in the Bank's balance sheet (because they were previously received under reverse repos and securities borrowing) and to securities received under repurchase agreements (reverse repos) and securities borrowings.

ENCUMBRANCE OF ASSETS AND COLLATERAL RECEIVED

The monitoring of encumbered assets and assets received is carried out within the prudential scope defined in the section *Scope of application* in section 5.2 *Capital management and capital adequacy*.

The amounts of encumbered and unencumbered assets and collateral received are shown in the following table according to the provisions of Commission Implementing Regulation (EU) No. 2021/637. Thus, all data presented in the table are calculated as the median of the four quarter ends of the corresponding year. Each total line is thus calculated as the median of the four values of the total at each end of quarter, not as the sum of the median values for the year.

The median ratio of encumbered assets relative to Group balance sheet assets was 19.5% in 2022, compared to 20.1% in 2021.

TABLE 106: ENCUMBERED AND UNENCUMBERED ASSETS

Encumbered and unencumbered assets

		010	030	040	050	060	080	090	100
		Four end of quarter median values in 2022							
		Carrying amount of encumbered assets		**Fair value of encumbered assets**		**Carrying amount of unencumbered assets**		**Fair value of unencumbered assets**	
In millions of euros			**of which HQLA and EHQLA(*)**		**of which HQLA and EHQLA(*)**		**of which HQLA and EHQLA(*)**		**of which HQLA and EHQLA(*)**
010	**ASSETS**	**508,631**	**146,763**			**2,096,309**	**496,901**		
030	Equity instruments	37,218	22,377			29,941	7,471		
040	Debt securities	155,037	123,822	155,037	123,822	146,761	135,134	146,761	135,134
050	*of which covered bonds*	3,230	2,564	3,230	2,564	1,933	1,393	1,933	1,393
060	*of which asset-backed securities*	1,209	673	1,209	673	5,847		5,847	
070	*of which issued by general governments*	114,059	113,724	114,059	113,724	110,250	106,340	110,250	106,340
080	*of which issued by financial corporations*	28,133	4,624	28,133	4,624	22,091	4,767	22,091	4,767
090	*of which issued by non-financial corporations*	13,070	1,718	13,070	1,718	4,498	531	4,498	531
120	Other assets	286,731	2,887			1,942,768	358,506		
121	*of which: Loans on demand*					360,595	351,181		
122	*of which: Loans and advances other than loans on demand*	163,784				1,029,183			
123	*of which: Other assets(**)*	135,134	2,887			552,117	8,326		

(*) Assets of extremely high liquidity and credit quality.

(**) The encumbered assets of the BancWest business are presented under "Other assets" following the application of IFRS 5 relating to groups of assets and liabilities held for sale, in accordance with prudential balance sheet presentation conventions. At 31 December 2022, EUR 15 billion in loans and credits were encumbered out of a total of EUR 56 billion, and EUR 6 billion in fixed-income securities were encumbered out of a total of EUR 21 billion.

		010	030	040	050	060	080	090	100
		Four end of quarter median values in 2021							
		Carrying amount of encumbered assets		**Fair value of encumbered assets**		**Carrying amount of unencumbered assets**		**Fair value of unencumbered assets**	
In millions of euros			**of which HQLA and EHQLA(*)**		**of which HQLA and EHQLA(*)**		**of which HQLA and EHQLA(*)**		**of which HQLA and EHQLA(*)**
010	**ASSETS**	**483,070**	**188,738**			**1,920,667**	**422,835**		
030	Equity instruments	55,830	29,741			31,629			
040	Debt securities	184,177	155,753	184,177	155,753	158,569	140,801	158,569	140,801
050	*of which covered bonds*	*3,671*	*3,006*	*3,671*	*3,006*	*2,273*	*1,674*	*2,273*	*1,674*
060	*of which asset-backed securities*	*1,541*	*1,020*	*1,541*	*1,020*	*7,173*		*7,173*	
070	*of which issued by general governments*	*145,838*	*145,838*	*145,838*	*146,688*	*121,518*	*121,518*	*121,518*	*127,448*
080	*of which issued by financial corporations*	*26,738*	*5,841*	*26,738*	*5,841*	*20,888*	*3,751*	*20,888*	*3,751*
090	*of which issued by non-financial corporations*	*13,135*	*2,022*	*13,135*	*2,022*	*8,850*	*537*	*8,850*	*537*
120	Other assets	*240,766*				*1,744,785*	*348,602*		
121	*of which: Loans on demand*					371,474	347,277		
122	*of which: Loans and advances other than loans on demand*	171,696				*1,002,120*			
123	*of which: Other assets*	*69,070*				*371,674*			

(*) Assets of extremely high liquidity and credit quality.

(**) The encumbered assets of the BancWest business are presented under “Other assets” following the application of IFRS 5 relating to groups of assets and liabilities held for sale, in accordance with prudential balance sheet presentation conventions. At 31 December 2021, EUR 3 billion in loans and credits were encumbered out of a total of EUR 50 billion, and EUR 7 billion in fixed-income securities were encumbered out of a total of EUR 21 billion.

The other encumbered assets mainly comprised loans and advances (often used when issuing asset-backed securities issues or guaranteed bonds) and amount to EUR 164 billion. The balance, grouped under line 123 “of which other assets”, comprises guarantee deposits and bank guarantees paid in respect of derivatives (recognised in the Accrued income and other assets category) amounting to EUR 135 billion.

The unencumbered other assets stand at EUR 552 billion. They mainly include intangible assets, goodwill, current and deferred tax assets, and assets ineligible for financing programmes under normal business conditions.

Encumbered and unencumbered collateral received

		010	030	040	060	010	030	040	060
		Four end of quarter median values in 2022				**Four end of quarter median values in 2021**			
		Fair value of encumbered collateral received or own(*) debt securities issued		**Fair value of collateral received or own(*) debt securities issued available for encumbrance**		**Fair value of encumbered collateral received or own(*) debt securities issued**		**Fair value of collateral received or own(*) debt securities issued available for encumbrance**	
In millions of euros			**of which HQLA and EHQLA(**)**		**of which HQLA and EHQLA(**)**		**of which HQLA and EHQLA(**)**		**of which HQLA and EHQLA(**)**
130	**COLLATERAL RECEIVED**	**530,400**	**440,989**	**108,852**	**59,441**	**467,631**	**391,875**	**98,009**	**57,891**
140	Loans on demand								
150	Equity instruments	112,102	75,298	26,494	17,675	75,242	45,655	10,452	4,436
160	Debt instruments	421,322	365,691	79,236	38,767	389,179	346,220	83,716	55,962
170	*of which covered bonds*	*2,764*	*2,456*	*403*		*1,844*	*1,690*	*1,028*	*86*
180	*of which asset-backed securities*	*4,343*		*3,807*	*523*	*3,438*		*2,469*	*549*
190	*of which issued by general governments*	*360,183*	*357,787*	*37,060*	*37,060*	*341,987*	*339,936*	*45,498*	*45,498*
200	*of which issued by financial corporations*	*28,661*	*3,226*	*35,169*		*19,923*	*2,684*	*35,341*	*1,050*
210	*of which issued by non-financial corporations*	*28,903*	*4,403*	*5,571*	*1,958*	*26,741*	*3,575*		
220	Loans and advances other than loans on demand								
230	Other collateral received								
240	**OWN(**) DEBT SECURITIES ISSUED OTHER THAN OWN COVERED BONDS OR ASSET-BACKED SECURITIES**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
241	**OWN(**) COVERED BONDS AND ASSET- BACKED SECURITIES AND NOT YET PLEDGED**			**10,456**	**-**			**13,885**	**-**
250	**TOTAL ASSETS, COLLATERAL PLEDGED AND OWN(**) DEBT SECURITIES ISSUED**	**1,055,791**	**592,502**			**947,492**	**580,613**		

(*) Financial assets issued by a Group entity and underwritten by the Group.
(**) Assets of extremely high liquidity and credit quality.

In 2022, the amount of unencumbered own collateralised bonds and asset-backed securities (ABS and covered bonds) amounted to EUR 14.5 billion (EUR 10.4 billion available and EUR 4.1 billion not available), for an outstanding of underlying assets of EUR 18.8 billion.

Encumbered assets/collateral received and associated liabilities

		010	030	010	030
		Four end of quarter median values in 2022		**Four end of quarter median values in 2021**	
In millions of euros		**Matching liabilities, contingent liabilities or securities lent**	**Assets, collateral received and own debt securities issued(*)**	**Matching liabilities, contingent liabilities or securities lent**	**Assets, collateral received and own debt securities issued(*)**
010	**CARRYING AMOUNT OF SELECTED FINANCIAL LIABILITIES**	**852,991**	**1,055,791**	**823,129**	**947,492**
011	*of which: Derivatives*	332,012	342,546	356,999	364,307
012	*of which: Repurchase agreements*	194,063	227,587	172,113	200,778
013	*of which: Collateralised deposits other than repurchase agreements*	30,443	32,159	29,455	32,146
014	*of which: Debt securities issued*	296,113	439,003	271,042	355,620

(*) Other than encumbered secured bonds and securities backed by encumbered assets.

Encumbered assets, collateral received and own fixed-income securities are mainly issued by general government entities, raising EUR 482 billion and make it possible to obtain EUR 427 billion of financing.

In median data as at 31 December 2022, Fixed-Income Credit and Commodities and Prime Solutions & Financing businesses as well as Securities Services represent 60% of the Group's encumbered assets (EUR 294 billion) and 100% of the collateral received (EUR 529 billion), *i.e.* 80% of the encumbrance (EUR 840 billion). These are mainly repos and derivatives activities. The other encumbered assets are mainly held through financing activities of ALM and Treasury.

Encumbered assets and received and encumbered collateral are denominated mainly in euros or dollars (for a median amount of 44% and 39%, respectively, over the year).

5.9 Operational risk

Operational risk is the risk of incurring a loss due to inadequate or failed internal processes, or due to external events, whether deliberate, accidental or natural occurrences. Management of operational risk is based on an analysis of the "cause-event-consequences" chain.

Internal processes giving rise to operational risk may involve employees and/or IT systems. External events include, but are not limited to floods, fire, earthquakes and terrorist attacks. Credit or market events such as default or fluctuations in value do not fall within the scope of operational risk.

Operational risk encompasses fraud, Human Resources risks, legal risks, non-compliance risks, tax risks, information system risks, conduct risks (risks related to the provision of inappropriate financial services), risk related to failures in operating processes, including loan procedures or model risks, as well as any potential financial implications resulting from the management of reputation risk.

REGULATORY FRAMEWORK

Operational and compliance risks come under a specific regulatory framework:

- Directive 36/2013/EU (CRD 4) and Regulation (EU) No. 575/2013 (CRR) governing prudential supervision and the methods for calculating the amount of capital requirements to cover the operational risk;
- French Ministry of Finance Decree of 3 November 2014, which defines the roles and responsibilities of the RISK Function (covering all types of risks) and an internal control system which ensures the efficiency and quality of the Bank's internal

operations, the reliability of internal and external information, the security of transactions, as well as compliance with applicable laws, regulations and internal policies.

Banking regulation divides operational loss events into seven categories: (i) internal fraud, (ii) external fraud, (iii) employment practices and workplace safety (such as an anomaly arising from recruitment management), (iv) clients, products and business practices (such as product defects, mis-selling, professional misconduct, *etc.*), (v) damage to physical assets, (vi) business disruption and system failures, (vii) execution, delivery and process management (data entry error, error in documentation, *etc.*).

Effective management of compliance risk aims to ensure compliance with applicable laws, regulations, rules of ethics and instructions, protect the Group's reputation, that of its investors and that of its customers, ensure ethical professional behaviour, prevent conflicts of interest, protect customers' interests and market integrity, fight against money laundering, corruption and the financing of terrorist activities, as well as ensure compliance with financial embargoes.

ORGANISATION AND OVERSIGHT MECHANISM

KEY PLAYERS AND GOVERNANCE

The general internal control system at BNP Paribas underpins management of operational, compliance and reputation risks as part of its dual-level system to ensure periodic and permanent control.

Within BNP Paribas, the control functions providing the second line of defence are Compliance, RISK and LEGAL. General Inspection provides a third line of defence responsible for periodic controls. These four Group oversight and control functions are organised according to a hierarchical reporting principle by all their teams worldwide, guaranteeing their independence and resource autonomy.

The governance of the Group's internal control system is described in the section *Internal control* in chapter 2 *Corporate Governance and internal control*.

Within the RISK Function, the second line of defence in terms of operational, technological and information protection risks (cybersecurity) is provided by Operational Risk Officers in the operational entities in accordance with the operational risk management system defined and supervised by RISK Operational Risk Management (RISK ORM).

The operational risk management and control system for the Group as a whole is structured around a dual-level system with the following participants:

- on the first level of defence: operational staff, notably the Heads of operational entities, business lines and functions, who are on the front-line of risk management and implementation of systems to manage these risks;
- on the second line of defence: the functions exercising second-level control that are responsible for the organisation and proper functioning of the risk management system and its compliance with laws and regulations for their area of expertise as defined in their Responsibility Charter. These teams are, in particular, responsible for:
  - coordinating, throughout the areas within their remit, the definition and implementation of the permanent control and operational risk identification and management system, its standards and methodologies, reporting and related tools;
  - acting as a second pair of eyes, independently of the Heads of operational entities, to scrutinise operational risk factors and the functioning of the operational risk and permanent control system, and issuing warnings, where appropriate.

Issues relating to operational risk, permanent operational control and the emergency plan to ensure business continuity in those situations specified in the regulatory standards are regularly submitted to the Group's Executive Committee. The Group's operational entities and subsidiaries implement this governance structure within their organisations, with the participation of Executive Management.

For its part, Compliance is in charge of supervising the compliance and reputation risk control system (see section 5.3).

OBJECTIVES AND PRINCIPLES

To meet this dual requirement of the management and control of operational risk, BNP Paribas has developed a permanent iterative risk management process based on the following elements:

- identifying and assessing operational risks;
- formalisation, implementing and monitoring of the risk mitigation system, including procedures, checks and all organisational elements designed to help to control risk, such as segregation of tasks, management of access rights, *etc.*;
- producing measurements of known and potential risks and calculating the capital requirement for operational risk;
- reporting and analysing oversight information relating to operational risk and the permanent control system;
- managing the system through a governance framework that involves members of management, preparing and monitoring action plans.

This system rests on two major pillars:

- the identification and assessment of risk and of the control system based on the libraries of risks and controls defined by the Group's business lines and functions, which each entity must take into consideration and enhance, if necessary, for their own underlying and residual risk mapping and for the standardised impact assessment grid applicable across the Group;
- the risk management system is underpinned by procedures, standards and generic control plans consistent with the above-mentioned risk libraries, and which each entity must apply unless an exception is authorised, and enhance according to their own characteristics.

SCOPE AND NATURE OF RISK REPORTING AND MEASUREMENT

Group Executive Committees, and those of operational entities (business lines, functions and subsidiaries), are tasked with monitoring the management of operational and non-compliance risk and permanent control in the areas falling within their remit, in accordance with the Group's operational risk framework. The committees validate the quality and consistency of reporting data, examine their risk profile in light of the tolerance levels they have set in keeping with the Group Risk Appetite Statement, and assess the quality of risk control procedures according to their objectives and the risks they incur. They monitor the implementation of risk mitigation techniques.

Operational risk management has developed a system of data collection of actual or potential incidents using an approach structured by organisational process and business unit (activities in a country and a single legal entity) focusing on the cause-and-effect chain behind events. This information is used as the basis for risk mitigation and prevention measures.

The most significant information is brought to the attention of staff at various levels of the organisation, up to and including executive managers and supervisory bodies, in line with a predefined information reporting process.

SPECIFIC COMPONENTS LINKED TO OPERATIONAL RISK

By its nature, operational risk covers numerous areas related with the Group's usual business activity and is linked to specific risks such as compliance, reputation, legal, fiscal and cyber security risks which are monitored in specific ways.

NON-COMPLIANCE AND REPUTATION RISK

Definitions

Compliance risk is defined in French regulations as the risk of legal, administrative or disciplinary sanctions, of significant financial loss or reputational damage that a bank may suffer as a result of failure to comply with national or European laws and regulations, codes of conduct and standards of good practice applicable to banking and financial activities, or instructions given by the Executive Officers, particularly in application of guidelines issued by the supervisory body.

The compliance risk is a sub-category of operational risk. Moreover, certain of its implications can involve more than a purely financial loss and may actually damage the institution's reputation.

Reputation risk is the risk of damaging the Group's image, the trust placed in the corporation by customers, counterparties, suppliers, employees, shareholders, supervisors and any other stakeholder whose trust is an essential condition for the corporation to carry out its day-to-day operations.

Reputation risk is primarily contingent on all the other risks borne by the Group, specifically the effective or potential materialisation of a credit, market, operational, non-compliance, environmental, social or legal risk as well as a violation of a law, a regulation, the Group's Code of conduct or any Group procedure.

Group organisation

Responsibility for controlling the risk of non-compliance lies primarily with the activities and business lines. In this context, and in accordance with international standards and French regulations, the Compliance Function manages the non-compliance risk monitoring framework for the scope of all of the Group's businesses in France and abroad.

The non-compliance risk monitoring framework is based on a permanent control system, structured around the following axes:

- general and specific procedures;
- processes for identifying and assessing risks, monitoring, reporting information and alerts, coordinated to ensure overall consistency and effectiveness;
- the deployment of risk prevention and detection tools (systems for combatting money laundering, the financing of terrorism and corruption, detection of market abuse, *etc.*);
- training and awareness-raising initiatives for all Group components.

Reputation risk management is based on the following elements:

- individual responsibility of employees: the Group's employees have an essential role in managing reputation risk. Any employee confronted with the actual or potential occurrence of a credit, market or operational risk (including in the area of IT and cyber security), a non-compliance, legal or social risk, and/or the violation of a law, a regulation, the Group's Code of conduct or any Group procedure that could lead to a reputation risk for the Group or one of its entities must communicate, immediately and without delay, his or her concern to his or her line manager or to a more senior manager. This individual responsibility is one of the key elements of the Group's Code of conduct, which is at the heart of every action and guides all employees in their decisions, at all levels of the organisation. The employee awareness programme also reiterates the responsibility of each individual and guides them, in particular through information on identifying, controlling and managing reputation risk, the Group's values and its ethics standards;

- permanent control: identifying and managing reputation risk are part of the objectives of the permanent control system. Implementation of the procedures and recommendations of the periodic control, the results of the controls and reports from the whistleblowing system are closely monitored. Reputation risk is also taken into account in the process for validating exceptional transactions, new businesses and new products. The Group has procedures for conflicts of interest; market integrity; adequacy and appropriateness of offers to clients; best execution of their orders; anti-money laundering, terrorist financing and corruption; compliance with international sanctions and embargoes; and social and environmental responsibility, which along with the Code of conduct, are conducive to effective management of reputation risk;
- corporate engagement: the Corporate Engagement Department is made up of the Corporate Social and Environmental Responsibility and Group Communication functions. It defines and implements the Group's strategy of engagement in the main sectors related to the future of our society, such as economic development, the environment and energy transition; social integration and regional development; diversity and respect for human rights. These areas are particularly relevant to the protection against risk to the Group's reputation. Furthermore, one of the major missions of Corporate Communication is to protect the reputation of the Group and its entities, as well as being a source of information for employees and the public, whose trust is essential for the Group.

Compliance Function is centrally responsible for coordinating initiatives related to reputation risk management.

The Group's reputation risk management framework, like the entire internal control system, is under the responsibility of the Group Supervisory and Control Committee (GSCC), which is chaired by the Chief Executive Officer (see chapter 2 *Corporate Governance and internal control*, section *Internal control*).

LEGAL RISK

The LEGAL Function is an independent function of the BNP Paribas Group and is hierarchically integrated with all the Group's legal teams. LEGAL is responsible for managing legal risks, for interpreting the laws and regulations applicable to the Group's activities and providing legal advice and guidance to the Group in a manner that meets the highest standards of excellence and integrity. The LEGAL Function provides Executive Officers and the Board of directors with reasonable assurance that legal risks are monitored, controlled and mitigated at the Group level. It is responsible for the management (including prevention) of legal risks within the Group through its advisory and control roles.

Legal risk refers to the potential loss to the BNP Paribas Group, whether financial or reputational, which impacts or could impact one or more entities of the BNP Paribas Group and/or its employees, business lines, operations, products and/or its services, and results from:

- non-compliance with a law or regulation or a change in law(s) or regulation(s) (including a change in the interpretation or application of a law or regulation by a court or competent authority and any requirement of any regulatory or supervisory authority);
- a dispute (including all forms of alternative/extrajudicial dispute resolution and court orders), an investigation or inquiry by a regulatory or supervisory authority (with implications for LEGAL);
- a contractual deficiency;
- a non-contractual matter.

The LEGAL Function is responsible for:

- every failure or deficiency in a legal process that may involve the risk of a penalty, reputational risk or financial loss in all areas;
- management of risk relating to a conflict with a counterparty, a customer, a third party or a regulatory body resulting from a deficiency or default that could be attributable to the Group in the course of its operations.

Strategic and preventive missions

In its strategic missions, LEGAL is responsible for:

- defining the Group's legal policy and overseeing its consistency;
- providing legal advice to the Executive Management, business lines and functions;
- contributing to the Bank's influence on regulatory, legislative or market initiatives.

In its prevention missions, LEGAL is responsible for ensuring:

- the Group's legal security in connection with its commercial activities or proprietary businesses;
- the protection of the Group's legal interests, including through the management of the Group's disputes and conflicts;
- the legal protection of the Group's managers or employees in the ordinary course of their business.

TAX RISK

In each country where it operates, BNP Paribas is bound by specific local tax regulations applicable to companies engaged, for example, in banking, insurance or financial services.

The tax mission is carried out by TAX, which has global powers in order to ensure, in particular, control of tax risk at the Group level. RISK, Compliance, Finance & Strategy are involved in monitoring the tax risk according to the domain concerned (transactions carried out by the Group, information on the tax situation of clients transmitted by the Group, tax returns made by the Group).

TAX is composed of the Group Tax Department (GTD) and the tax departments on which the GTD is based in certain businesses and in the main geographical areas where the Group operates (there are tax correspondents in the other geographical areas where the Group operates).

In ensuring the coherence of the Group's tax practices and the global tax risk monitoring, the Group Tax Department:

- has drawn up procedures covering all divisions, designed to ensure that tax risks are identified, addressed and controlled appropriately;
- has implemented a process of feedback aimed at contributing to the control of local tax risk;
- reports to Executive Management on tax risk developments;
- oversees tax-related operational risks and the internal audit recommendations falling within the Tax Function's scope of responsibility.

A Tax Coordination Committee, co-chaired by GTD and Finance Steering & Controls and Financial Management (Finance & Strategy), and, on an as-needed basis, Compliance and the businesses, is tasked with analysing the main tax issues with respect to the transactions performed or envisaged by the Group.

CYBER SECURITY AND TECHNOLOGY

The use and protection of data and technologies are determining factors for the Bank's activity and its transformation process.

While the Bank continues the roll-out of Digital Banking (for the Group's customers and partners) and Digital Working (for the Group's employees), it must incorporate new technology, innovative risk management practices and establish new working practices. This introduces new technology risks in the cyber security arena. In that context, the Group deploys significant resources to identify, measure and control these risks.

Technology management and information systems security is part of the Group's cyber security strategy. This strategy is focused on the preservation of the most sensitive data, regularly adapting both its internal processes and procedures, and its employee training and awareness to contend with increasingly sophisticated and varied threats.

To reinforce its technology and the protection of data, the Group has adopted a comprehensive approach in cyber security management through its three lines of defence:

- operational entities are the first line of defence. Since 2015, the Group has introduced across all of the entities a transformation programme based on the international standard NIST (National Institute of Standards and Technology). This programme is regularly updated taking into account new threats and recent incidents identified around the world;
- as a second line of defence, the team dedicated to managing cyber security and technological risk within RISK ORM and under the responsibility of the Group Chief Operational Risk Officer, is tasked with the following in relation to Operational Risk Officers:
  - presenting the Group's cyber security and technology risk position to the Group Executive Committee, the Board of directors, and the supervisory authorities,
  - monitoring the transformation programme across the entire Group,
  - integrating the cyber security and technology risk aspects into all major projects within the Group,
  - ensuring that policies, principles and major projects take aspects of cyber security and technology risk into consideration,
  - monitoring existing risks and identifying new threats likely to have a negative impact on the Group's business,
  - overseeing third-party information systems risks within a strengthened framework,
  - conducting independent assessment campaigns on priority objectives,
  - taking measures to assess and improve the Group's ability to respond to failings and incidents;
- as the third line of defence, the role of General Inspection is to:
  - assess the processes put in place to manage ICT risks (related to information and communication technologies), as well as associated controls and governance,
  - check for compliance with laws and regulations,
  - propose areas of improvement to support the mechanisms put in place.

The Group is responding to new technological and cyber security risks as follows:

- ICT risks related to availability and continuity:

  BNP Paribas relies heavily on communication and information systems across all its business activities. Any breach in the security of these systems could lead to failures or interruptions in the systems used to manage customer relations or to record transactions (deposits, services and loans) and could incur major costs to recover and verify compromised data. The Group regularly manages and revises its crisis management and recovery plans by testing its data recovery services and the robustness of its information systems, using various scheduled stress scenarios;
- security risks:

  The Bank is vulnerable to cyber security risk or risk caused by malicious and/or fraudulent acts committed with the intention of manipulating information (confidential, bank/insurance, technical or strategic data), processes and users, which may result in material losses for the Group's subsidiaries, employees, partners and customers. The Group continually reassesses the threats as they evolve and mitigates risks detected in a good time by means of taking effective countermeasures;
- change-related risks:

  The Group's information systems are changing rapidly in the light of digital transformation. These risks, identified during the systems' design or modification phases, are regularly assessed to ensure that the proposed solutions are consistent with the needs of the Group's business lines;
- data integrity risks:

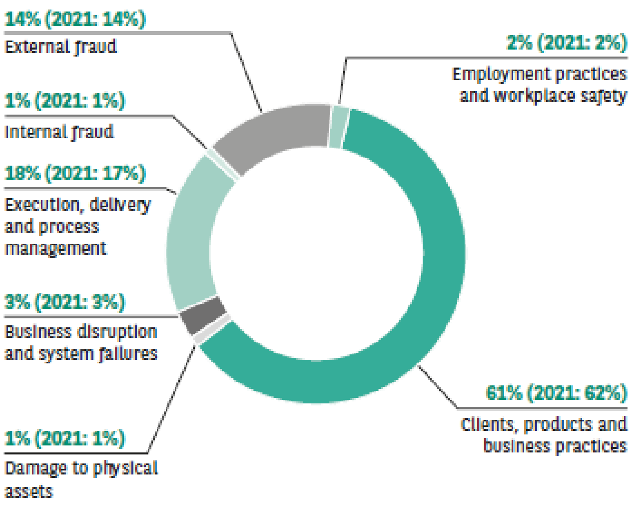
  Confidentiality of customer data and transaction integrity are areas covered by the same systems set up in response to Regulation (EU) No. 2016/679 of 27 April 2016 (General Data Protection Regulation – GDPR) intended to provide the Group's customers with a service that meets their expectations;
- third-party information systems risks:

  The Bank is exposed to risks of financial default, breaches or operational capacity constraints when it interacts with third parties, including customers, financial intermediaries and other market operators. The Group's three lines of defence constitute the management framework of these risks at every step of integration until the end of the relationship with such third parties.

OPERATIONAL RISK EXPOSURE

The chart below shows the losses linked to operational risk, according to the event classification defined in the current regulation.

FIGURE 10: OPERATIONAL LOSSES – BREAKDOWN BY EVENT TYPE (AVERAGE 2014-2022)(*)



(*) Percentages in brackets correspond to average loss by type of event for the 2013-2021 period.

In the period 2014-2022, the main type of operational risk falls within the category "Clients, products and business practices", representing on average more than half of the Group's financial impacts. The magnitude of this category is related to the financial terms of the comprehensive settlement concluded in June 2014 with the US authorities with respect to the review of certain US dollar transactions. Process failures, mainly including execution or transaction processing errors, and external fraud are the types of Group incidents with the second and third highest financial impact, respectively.

BNP Paribas Group pays the utmost attention to analysing its operational risk incidents in order to continuously improve its control system.

CAPITAL REQUIREMENT CALCULATION

Operational risk-weighted assets are calculated by multiplying the capital requirement by 12.5.

APPROACH ADOPTED

BNP Paribas uses a hybrid approach combining the Advanced Measurement Approach (AMA), standardised approach, and basic indicator approach.

In terms of net banking income, most legal entities within the Group's prudential scope of consolidation use the Advanced Measurement Approach. This includes most Commercial Banking activities in the domestic networks and Private Banking, as well as Corporate and Institutional Banking.

Advanced Measurement Approach (AMA)

Under the AMA for calculating capital requirements, the Bank uses an internal operational risk model based on the four components required by regulations, namely:

- internal historical loss data from operational risk;
- external loss data from operational risk;
- environmental and internal control factors;
- analysis of forward-looking scenarios, known as potential incidents in the BNP Paribas Group.

BNP Paribas' internal model in place since 2008 includes the following features:

- an aggregate annual loss distribution, meaning that the frequency and severity of losses from operational risks are modelled using an actuarial approach and according to distributions calibrated with available data;
- it uses historical data as well as prospective scenarios to calculate capital requirements, with a predominance for scenarios, because they can be shaped to reflect severe and less frequent operational risks;
- the model is faithful to its operational risk input data, so that its results can be used easily by each of the Group's business lines. Most of the assumptions are therefore included in the data themselves;
- it is prudent in its capital requirement calculations: the input data are thoroughly reviewed, and any supplemental risk data are added if needed to cover all relevant operational risks within the Group.

Regulatory AMA capital requirements are calculated as VaR (Value at Risk), or the maximum potential loss over one year, at a 99.9% confidence level to calculate regulatory capital requirements. Capital requirements are calculated at an aggregate level using risk data from all Group entities in the AMA perimeter, then allocated to business lines and individual legal entities.

Fixed-parameter approaches

BNP Paribas uses fixed-parameter approaches (basic or standardised) to calculate the capital requirements for entities in the Group's prudential consolidation scope that are not covered by the internal model:

- basic approach: the capital requirement is calculated as the average over the past three years of a financial aggregate based on net banking income (the exposure indicator) multiplied by a unique alpha parameter set by the regulator (15% weighting);
- standardised approach: the capital requirement is calculated as the average over the past three years of a financial aggregate based on net banking income multiplied by factors set by the regulator and corresponding to each business category. For the purposes of this calculation, all the Group's business lines are broken down into eight regulatory business categories.

RISK-WEIGHTED ASSETS AND CAPITAL REQUIREMENT

TABLE 107: OPERATIONAL RISK CAPITAL REQUIREMENT AND RISK-WEIGHTED ASSETS (EU OR1)

		a	b	c	d	e	
					31 December 2022		31 December 2021
		Relevant Indicators					
In millions of euros		Year-3	Year-2	Last year	RWAs	Capital requirements	RWAs
1	Basic indicator approach	2,094	2,228	2,526	4,280	342	4,141
2	Standardised approach	6,963	6,866	7,811	12,073	966	11,321
3	*of which subject to TSA*	*6,963*	*6,866*	*7,811*	*12,073*	*966*	*11,321*
4	*of which subject to ASA*						
5	Advanced Measurement Approach (AMA)	31,122	32,436	34,348	45,302	3,624	47,747
	TOTAL OPERATIONAL RISK	**40,179**	**41,530**	**44,685**	**61,656**	**4,932**	**63,209**

The -EUR 1.6 billion risk-weighted assets decrease for operational risk in 2022 is driven by the AMA decrease induced by the update of risk scenarios. It is partially compensated by higher risk-weighted assets calculated in basic and standardised approach. The increase of risk-weighted assets in the basic approach is in particular explained by scope effects. The increase in risk-weighted assets under the standardised approach is due to a higher average Relevant Indicator.

RISK MITIGATION TECHNIQUES AND INSURANCE POLICIES

BNP Paribas Group deals with its insurable risks with the triple aim of protecting its balance sheet, its profit and loss account and its staff. Its insurance set-up is based on risk identification and assessment, underpinned by risk mapping and by analysis of operational loss profile, both historical and forward-looking.

The Group purchases insurance from leaders in the insurance market, covering computer crime, fraud, theft, business disruption, liability and other risks for which it may be held responsible. In order to optimise costs whilst effectively managing its exposure, the Group retains some well-identified risks whose impact in terms of frequency and cost is known or can be adequately estimated.

In selecting insurers, the Group pays close attention to the credit rating and claims paying ability of the companies concerned. Detailed information on risks incurred by BNP Paribas as well as risk assessment visits enable insurers to assess the quality risk prevention within the Group, as well as the safeguard measures put in place and upgraded on a regular basis in light of new standards and regulations.

5.10 Insurance risks

BNP PARIBAS CARDIF GROUP RISK MANAGEMENT SYSTEM

Risk management is a process that allows identification, measurement, monitoring, management and reporting of both the risks arising from the external environment as well as intrinsic risks inherent to the BNP Paribas Cardif group. The objective is to guarantee the solvency, business continuity, and development of the BNP Paribas Cardif group, under satisfactory conditions of risk and profitability.

Within the framework of the provisions of article L.354-2 of the French Insurance Code, the BNP Paribas Cardif group conducts a forward-looking assessment of its solvency and risks every year under the Solvency II framework, in particular:

- the definition and evaluation of a capital requirement specific to the risk profile;

- the level of capital that the BNP Paribas Cardif group wishes to hold to cover this specific requirement;
- the forward-looking solvency ratios under the medium-term plan;
- the resilience of these ratios in stress test cases.

Depending on the observed solvency ratio levels and the forecasts made under ORSA (Own Risk and Solvency Assessment), remedial actions may be undertaken to adjust own capital.

The risk typology adopted by the BNP Paribas Cardif group is changing in pace with methodological work and regulatory requirements. It is presented according to the main categories as follows:

- underwriting risk: underwriting risk is the risk of a financial loss caused by a sudden, unexpected increase in insurance claims that may result from inadequate pricing and provisioning assumptions due to internal or external factors, including sustainability risks. Depending on the type of insurance business (life, non-life), this risk may be statistical, macroeconomic or behavioural, or may be related to public health issues or disasters;
- market risk: market risk is the risk of a financial loss arising from adverse movements of financial markets. These adverse movements are notably reflected in price fluctuations (foreign exchange rates, bonds, equities and commodities, derivatives, real estate, *etc.*) and derived from fluctuations in interest rates, credit spreads, volatilities and correlations;
- liquidity risk: liquidity risk is the risk of being unable to fulfil current or future foreseen or unforeseen cash requirements coming from insurance commitments to policyholders, because of an inability to sell assets in a timely manner and at an acceptable cost without having a significant impact on market prices; and/or get access to alternative financing instruments in a timely manner;
- credit risk: credit risk is the risk of loss or adverse change in the financial situation resulting from fluctuations in the credit standing of issuers of securities, counterparties, and any debtors to which the BNP Paribas Cardif group is exposed, in the form of counterparty risk. Among the debtors, risks related to financial instruments (including the banks in which the BNP Paribas Cardif group holds deposits) and risks related to receivables generated by the underwriting activities (premium collection, reinsurance recovering, *etc.*) are divided into two categories: assets credit risk and liabilities credit risk;
- operational risk: operational risk is the risk of loss resulting from inadequate or failed internal processes, IT failures or from external events, whether accidental or natural. It includes legal, tax and non-compliance risks, but excludes risks arising from strategic decisions and reputational risks.

The BNP Paribas Cardif group is exposed mainly to credit, underwriting, and market risks. The BNP Paribas Cardif group closely monitors its exposures, taking into account these various risks and the adequacy of its capital with regard to regulatory solvency requirements. It endeavours to contain potential losses in adverse scenarios at acceptable levels.

The risk strategy is implemented and monitored through an organisation tailored to the broad risk classes and supported by *ad hoc* governance structures. The governance and risk management systems are presented in sections B. *System of Governance* and C. *Risk profile* of the BNP Paribas Cardif group’s Solvency and Financial Condition Report (SFCR), available on the institutional website at https://www.bnpparibascardif.com/en.

The solvency requirements for the BNP Paribas Cardif group under Solvency II are shown in section 5.2 *Capital management and capital adequacy*.

MARKET RISK

Market risk arises mainly in the Savings business, where technical reserves represent most of the BNP Paribas Cardif group insurance subsidiaries liabilities.

Interest rate risk management for the general insurance funds and the asset diversification policy have driven investment in real estate assets, equities and fixed- or floating-income securities, including government bonds particularly in the eurozone countries.

Market risk falls into four categories:

- interest rate risk:

  Euro funds in underwritten life insurance policies are measured based on either a contractual fixed rate or a variable rate, with or without a minimum guaranteed return. All of these policies give rise to an interest rate and asset value risk, corresponding to the risk that the return on admissible assets is less than the contractual return payable to policyholders or return payable defined in consideration of the market expectations and the positioning of the market players. In France, the average rate guaranteed by Cardif Assurance Vie in 2022 is below 0.1%.

  In France, to cover future potential financial losses, estimated over the lifetime of the policies, a provision for financial assets’ insufficient yield reserve (*provision pour aléas financiers*) is booked when the total amount of technical interest plus the guaranteed return payable to policyholders through technical reserves is not covered by 80% of the return on the admissible assets. No provision was booked at 31 December 2022, 2021 or 2020 as the returns guaranteed by the insurance subsidiaries were low and the guarantees were for short periods, resulting in only limited exposure;

- liquidity risk:

  Liquidity risk with a 24-month horizon is managed by the Asset Management Department. Asset-liability matching analyses over the medium to long term are also carried out regularly by Asset-Liability Management in order to supplement the measurement of the financial risks incurred. They are based on medium and/or long-term profit and loss account and balance sheet projections prepared using a range of economic scenarios. The results of these reviews are analysed in order to determine any adjustments to required assets (through strategic allocation, diversification, use of derivatives, *etc.*);
- spread risk:

  Limits by issuer and rating type (Investment Grade, non-Investment Grade) are monitored regularly. Issuer credit quality is also reviewed frequently;
- change in the value of assets:

  The exposure to the risk of a fall in asset values (interest rate, spread, equities, real estate) is mitigated by the mechanism of the deferred participating benefit, attached to the insurance contracts with a participation benefit feature.

GROUP BNP PARIBAS CARDIF INVESTMENTS

The BNP Paribas Cardif group manages EUR 153.0 billion at net book value *i.e.* EUR 154.6 billion at market value, through its subsidiaries in France, mainly Cardif Assurance Vie, representing EUR 121.8 billion, its subsidiaries in Italy, mainly Cardif Vita, representing EUR 20.3 billion and its subsidiary in Luxembourg, Cardif Lux Vie (EUR 8.6 billion). BNP Paribas Cardif group investments break down as follows:

TABLE 108: BREAKDOWN OF BNP PARIBAS CARDIF GROUP INVESTMENTS (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS) [Audited]

	31 December 2022		31 December 2021	
In millions of euros	**Net book value**	**Market value**	**Net book value**	**Market value**
Equities and variable-income securities (including UCI)	39,522	39,522	45,671	45,671
Real estate	5,540	7,161	5,388	7,164
of which buildings	*2,944*	*4,565*	*2,965*	*4,741*
of which shares in real estate companies	*2,596*	*2,596*	*2,423*	*2,423*
Government bonds and similar	47,557	47,604	56,441	56,610
Other bonds	56,665	56,668	69,319	69,329
Derivative instruments and other	3,676	3,676	2,896	2,896
TOTAL	**152,961**	**154,631**	**179,715**	**181,670**

TABLE 109: BOND EXPOSURE BY ISSUER AND RATING (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS AND EUROCROISSANCE CONTRACTS) [Audited]

	31 December 2022			31 December 2021		
Exposure by rating	**Govies**	**Corporate**	**Total**	**Govies**	**Corporate**	**Total**
AAA	6.9%	3.8%	10.7%	4.0%	2.1%	6.1%
AA	22.0%	6.1%	28.0%	23.7%	6.2%	29.9%
A	5.4%	19.6%	25.0%	6.6%	21.4%	28.0%
BBB	10.9%	16.4%	27.3%	10.4%	16.9%	27.3%
< BBB(*)	0.3%	8.6%	8.9%	0.2%	8.4%	8.6%
TOTAL	**45.5%**	**54.5%**	**100.0%**	**44.9%**	**55.1%**	**100%**

(*) Including unrated bonds.

TABLE 110: EXPOSURE TO GOVERNMENT BOND AND SIMILAR BY COUNTRY (EXCLUDING INVESTMENTS IN UNIT-LINKED CONTRACTS AND EUROCROISSANCE CONTRACTS) [Audited]

Exposure by country *In millions of euros*	Rating	31 December 2022 Net book value	31 December 2021 Net book value
France	AA	17,211	23,599
Italy	BBB	10,991	12,636
Spain	A-	3,529	4,922
Belgium	AA-	2,668	3,377
Germany	AAA	1,213	1,378
Austria	AA+	850	1,056
Netherlands	AAA	622	1,067
Ireland	A+	1	699
Portugal	BBB	55	63
Other		10,042	7,528
TOTAL		**47,183**	**56,325**

The table below presents the gross book value of the BNP Paribas Cardif group's financial assets meeting the SPPI (Solely Payments of Principal and Interest) criterion, with the exception of the financial assets held for transaction purposes in accordance with IFRS 9 or whose management and performance assessment are based on fair value.

TABLE 111: FINANCIAL ASSETS MEETING THE SPPI CRITERION IN ACCORDANCE WITH IFRS 9 [Audited]

Rating *In millions of euros*	31 December 2022	31 December 2021
AAA	10,984	7,219
AA	28,553	36,931
A	22,093	29,693
BBB	26,666	30,770
< BBB(*)	2,852	2,861
TOTAL	**91,127**	**107,475**

(*) Including unrated bonds.

For the non-Investment Grade or unrated financial assets that meet the cash flow criterion, the table below shows the fair value and gross book value in accordance with IAS 39 (in the case of the financial assets valued at amortised cost, not taking into account any value adjustments for impairment).

TABLE 112: NON INVESTMENT GRADE FINANCIAL ASSETS MEETING THE SPPI CRITERION IN ACCORDANCE WITH IFRS 9 [Audited]

	31 December 2022		31 December 2021	
Rating *In millions of euros*	Gross book value	Market value	Gross book value	Market value
BB+	1,322	1,322	1,222	1,222

BB	108	108	74	74
BB-	173	173	158	158
B	9	9	18	18
Unrated	1,240	1,240	1,390	1,390
TOTAL	**2,852**	**2,852**	**2,861**	**2,861**

INSURANCE UNDERWRITING RISK

Underwriting risk arises mainly from the surrender the longevity and the mortality risk in the savings business line, and in creditor insurance contracts for the protection business.

There are three types of underwriting risk:

SAVINGS – SURRENDER RISK

Savings contracts include a surrender clause allowing policyholders to request reimbursement of all or part of their accumulated savings. The insurer is thus exposed to the risk of surrender volumes being higher than the forecasts used for ALM purposes, leading to potential capital losses on asset disposals needed to finance excess surrenders.

The surrender risk is limited, however, as:

- expected short-, medium- and long-term liability flows are regularly estimated and any liquidity gaps with expected asset flows are identified and controlled in order to reduce the risk of large-scale instant asset disposals. Changes in assets and liabilities are projected over periods of up to forty years, in order to identify treasury mismatches and over or under covered maturities giving rise to a liquidity risk. These analyses are then used to determine the choice of maturities for new investments and the assets to be sold;
- the guaranteed revaluation of policies is completed by a participating benefit feature, partly discretionary, that raises the total return to a level in line with market benchmarks and reduces the risk of an increase in surrenders. The policyholders' surplus reserve is the mechanism in France that enables the surplus actually paid out to be pooled and spread between generations of policyholders and to manage the performance of contracts over time;
- the return on financial assets may be protected through the use of hedging instruments.

TABLE 113: AVERAGE REDEMPTION RATES FOR BNP PARIBAS CARDIF GROUP GENERAL FUNDS(*) [Audited]

	Annual redemption rate	
	2022	**2021**
France	6.5%	5.4%
Italy	9.4%	8.3%
Luxembourg	22.5%	8.5%

(*) Individual savings.

SAVINGS – UNIT-LINKED CONTRACTS WITH A MINIMUM COVERAGE

The insurer's liabilities are covered by the assets held, which are used as a valuation reference. The consistency of this coverage is controlled at monthly intervals.

Certain unit-linked commitments provide for the payment of a death benefit at least equal to the cumulative premiums invested in the contract, whatever the conditions on the financial markets at the time of the insured's death. The risk on these contracts is both statistical (probability of a claim) and financial (market value of the units).

The capital guarantee is generally subject to certain limits. In France, for example, most contracts limit the guarantee to one year (renewable annually), an age limit of 80 to benefit from the guarantee and a maximum of EUR 1 million per person insured.

The minimum coverage reserve is (re)assessed every quarter and takes into account the probability of death, based on a deterministic scenario, and stochastic analyses of changing financial market prices. The reserve amounted to EUR 18.9 million at 31 December 2022 (*versus* EUR 7.2 million at 31 December 2021).

PROTECTION

These risks result mainly from the sale of creditor insurance, as well as activities as individual death and disability, extended warranty, theft, accidental damage, third party liability, annuity policies in France, and health, with geographic coverage in many countries.

Creditor insurance mainly covers death, disability, critical illness, work disability, loss of employment and financial loss risks for revolving credit, personal loans and mortgage loans. The insurance book comprises a very large number of policies representing low risks and low premiums. Margins depend on the size of the insurance book, effective pooling of risks and tight control of administrative costs. The term of these contracts is usually equal to the term of the underlying loan and the premium is either deducted once upon issuance of the policy (single premium) or deducted regularly throughout the term of the policy (regular or periodic premiums).

Other contracts (individual death and disability, extended warranty, theft, accidental damage, and annuity policies in France, civil liability, health) are either for personal risk (death, accidental death, hospitalisation, critical illness, healthcare expenses) or property & casualty risk and/or responsibilities (accidental damage, breakdown or theft of consumer goods or vehicles, civil liability, *etc.*). The individual sums insured under these contracts are generally low, whether they are indemnities or lump-sum payments.

Lastly, principally through its expanding entity, Cardif IARD in France, motor contracts (material damage, civil liability, car assistance) and comprehensive household coverage are also underwritten. This type of insurance coverage is also developing in the international market, namely in Latin America.

The governance set up to prevent and control actuarial risks in France and internationally is based on guidelines and tools that describe the principles, rules, methods and best practices to be followed by each actuary throughout the policies' life cycle, the tasks to be performed by the actuaries and their reporting obligations. It also sets out the practices that are excluded or that are allowed only if certain conditions are met.

Risks underwritten must comply with delegation limits set at various local and central levels depending on the estimated maximum acceptable losses, the estimated Solvency II capital requirements and the estimated margins on the policies concerned. The experience acquired in managing geographically diversified portfolios is used to regularly update risk pricing databases comprising a wide range of criteria such as loan type for creditor insurance, the type of guarantee and the insured population, *etc.* Each contract is priced by reference to the profitability and return-on-equity targets set by the Executive Management of the BNP Paribas Cardif group.

Reinsurance is a complementary element of the underwriting risk management system. Its objective is to protect the BNP Paribas Cardif group against three main risks:

- the so-called "peak" risk from exposure to an individual risk exceeding a certain threshold, called "retention". The peak risk can be managed by reinsurance which may take the form of surplus or excess of loss treaties;
- the so-called "claim accumulation" risk mainly the disaster risk associated with exposure to a single low occurrence event, but very strong financial impact (concentration risk). This risk can be reinsured in the form of a catastrophe excess of loss treaty;
- risk on new products, linked to insufficient mutualisation, wrong definition of the technical databases or uncertainty over the insured portfolio data. This risk can be reinsured in the form of quota share, stop loss or excess of loss treaties, depending on the level of risk identified.

Risk exposures are monitored periodically by the Executive Committee of the BNP Paribas Cardif group through the Commitment Monitoring Committees that are based on a two-pronged approach:

- quarterly monitoring of loss ratios at each accounting quarter end;
- supplemented by monitoring of the portfolio characteristics according to a schedule based on the type of product (monthly, quarterly or annually).

Contract pricing for annuity contracts is based on mortality tables applicable under insurance regulations, adjusted in some cases by portfolio-specific data which is certified by independent actuaries. The result is a low annuity risk.

Underwriting risks are covered by various technical reserves:

- the mathematical reserves in Life insurance;
- the unearned premiums reserves for Non-Life underwriting, generally calculated on an accruals basis, possibly supplemented by reserves for current risks;
- the reserves for increasing risk in certain cases (long-term policies with constant periodic premiums and increasing risk);
- the outstanding claims reserves, determined by reference to reported claims;
- the IBNR (claims incurred but not reported) reserves, determined on the basis of either observed settlements or the expected number of claims and the average cost per claim;
- the reserves for claims management, generally calculated *pro rata* to the claims reserves.

The level of prudence adopted for the overall assessment of claims incurred but not reported in IFRS corresponds to the 90% quantile.

5.11 Environmental, social and governance risk

Disclosures related to this section cover environmental, social and governance (ESG) risk factors that may indirectly affect credit institutions' balance sheets through the impacts on their customers.

Overall, the Group is progressing in further integrating the ESG-related risk factors into the Group's risk management framework, as potential driver of existing financial risks. Given the evolving nature of these methodologies, data and regulations related to ESG, the Group's set-up may also be gradually adapted, as relevant.

The tools currently being rolled out within the Group cover the three categories of the "E", "S", and "G" risk factors. The environmental ones, especially climate-related ones, are the most developed. This also reflects, among other things, supervisors' expectations towards banks to identify and manage climate and environmental-related risks, given their potential impacts on the banking sector.

BUSINESS STRATEGY AND PROCESSES

IMPACT OF ESG RISK FACTORS ON BUSINESS STRATEGY AND PROCESSES

As part of the launch of the 2022-2025 Strategic Plan, built around Growth, Technology and Sustainability, BNP Paribas is aiming for the deployment at scale of sustainable finance and ESG throughout the businesses and functions of the Bank. The strategic plan engages the Group not only to accompany all clients in their new uses of banking and -financial services, and in their development projects but also to direct -financial flows towards investments in the transition to a more sustainable economy. Three strategic pillars have been identified to accelerate the implementation of the Group's commitments in terms of sustainable development: firstly, the alignment of credit portfolios with the carbon neutrality commitment through sector objectives, including transitions of clients; secondly, supporting clients towards a sustainable and low-carbon economy, notably through the mobilisation of the Low-Carbon Transition Group and the Network of Experts in Sustainability Transitions (NEST), the network of internal experts; thirdly, the strengthening of steering tools to support the changing needs of stakeholders and employee training, with the creation in 2022 of the Sustainability Academy.

Since 2011, BNP Paribas has gradually deepened and broadened its framework to manage the ESG risks that may affect its activities. Initially focused on the most sensitive sectors from an ESG point of view (with the development of sectoral policies), the framework becomes more exhaustive, gradually covering all the sectors of the economy. At the same time, sectoral policies are regularly adapted to better take into account the new challenges of the sectors covered. The level of ambition is increased and the policies include strict requirements concerning the commitment of counterparties with regard to their strategies to mitigate and reduce environmental risks and socially harmful activities. These policies are notably composed of:

- sectoral policies which set ESG criteria governing the Group's financing and investment decisions in some ESG sensitive areas, in particular those related to coal-fired power generation, mining, oil & gas, nuclear energy, palm oil, wood pulp, agriculture, defence (https://group.bnpparibas/en/our-commitments/transitions/financing-and-investment-policies);
- the Global Credit Policy, supplemented by specific credit policies. The policy requires that client engagement be grounded on solid ESG assessment. The latter must be performed in accordance with the defined ESG framework which includes, for example the internal ESG Assessment (see appendix 5: *ESG Assessment (ESG-A)*) for large corporates, and based on the clients' reports and performance indicators, including sustainability reports, direct engagement with the client and other externally sourced data, as relevant.

In addition, the Group monitors the potential impact of these risk factors in the conduct of its business or in its investments on its own behalf or on behalf of third parties.

The Group gradually integrates and strengthens these risk factors into its risk management process, as and when the methodologies for measuring and analysing these factors and their impact on financial risks, especially those related to credit quality, are developed. ESG criteria are included in the credit decision process by relying, in particular, on the ESG Assessment. The Group works with clients to identify, assess, and manage the ESG risks and impacts linked with industrial and infrastructure projects.

Moreover, the Group has considerably strengthened its ESG training offering to support its further consideration in its risk management. It now covers a broad spectrum ranging from general awareness-raising on the ESG issues related to the energy transition, the protection of biodiversity and respect for human rights, training on ESG risk management setups and the offer of sustainable finance products and services (see section Commitment 2 *Ethic of the highest standards* in chapter 7).

OBJECTIVES, TARGETS AND LIMITS RELATED TO ESG RISKS AND OPPORTUNITIES

Developed in line with the United Nations Sustainable Development Goals (SDG), BNP Paribas has implemented a comprehensive ESG risk management approach. It reflects a commitment at the highest level of the Group, to combine performance, responsibility, ethics, and transparency. BNP Paribas' approach to corporate social responsibility (CSR) embeds environmental and social risks on a short, medium, and long-term scale as displayed in its CSR policy management dashboard in line with the Growth-Technology-Sustainability (GTS) 2025 Strategic Plan.

BNP Paribas' mission is to contribute to responsible and sustainable growth by financing the economy and advising clients according to the highest ethical standards. The Group ensures that ethics and all commitments to economic, social, civic and environmental responsibility are integrated into the business operations. BNP Paribas has set up a CSR policy management dashboard comprising 10 CSR indicators to steer its strategy. The monitoring is performed by the Group's Executive Committee and Board of directors on an annual basis. The CSR Dashboard includes three economic indicators, three social indicators, one civic indicator on financial inclusion and three environmental indicators, including biodiversity. The CSR dashboard has been redesigned in 2022 to set more ambitious targets in the same timeframe of 2022-2025 GTS Strategic Plan. These indicators are not exclusive of other measures which are integrated for example in the environmental policies updates like for oil and gas in 2022. They are not the only way to monitor the Group's impact in this area. Like all indicators, they have limits. They aim to reflect a quite comprehensive approach of the Group sustainable development objectives and responsibilities and their production processes and amounts are audited by an external and independent third party each year.

In particular, with the launch of the Growth Technology Sustainability (GTS) 2025 Strategic Plan, the Group aims for a sustainable finance and ESG deployment at scale by leveraging five priority themes: combat social exclusion, circular economy, sustainable savings, investments and financing, transition towards carbon neutrality and natural capital and biodiversity. In that regard the Group has defined indicators to monitor sustainable investment and financing opportunities. The 2025 objectives include EUR 150 billion of sustainable loans related to environmental, social and governance domains granted by BNP Paribas to its clients, EUR 200 billion in sustainable bonds issued for clients between 2022 and 2025, as well as EUR 300 billion in assets under management in SFDR article 8 and 9 funds in 2025. The Group also committed to achieve a target of EUR 40 billion in financing for the production of low-carbon, primarily renewable energies by 2030. These indicators will be complemented starting end of 2023, with the addition of data on the financed assets dedicated to activities aligned with the European Green Deal objectives, especially the EU Taxonomy and the Paris Agreement, once disclosure of the aligned activities will be available at least across Europe.

The Group strategy aims to contribute to directing capital flows towards the transition to a more sustainable economy through banking and financial services. In that regard, the Group also pays specific attention to actions and practices that facilitate the alignment of its loan portfolio with the Net-Zero in 2050 objective. In 2019, BNP Paribas first committed to implementing the PACTA (Paris Agreement Capital Transition Assessment) methodology alongside four other international banks and to measure the alignment of its loan portfolio with five sectors that emit the most greenhouse gases (GHG): fossil fuel extraction, electricity production, transport, steel and cement. In 2020, by signing the Collective Commitment to Climate Action (CCCA) under the aegis of the United Nations Environment Programme Finance Initiative (UNEP FI), the Group chose to share the tools to align the activities of banks with the objectives of the Paris Agreement with more banks. By joining the Net-Zero Banking Alliance (NZBA) in 2021, the Group has committed to extending the alignment scope to a greater number of sectors and to a higher ambition: to finance a carbon-neutral world by 2050, which corresponds to a limited increase in temperature of 1.5°C compared to the pre-industrial era. The commitments made under the CCCA are now fully reflected in those of the NZBA. Moreover, in May 2022, the Group published its first "Climate & Analytics Report". This report illustrates the Group's methodologies and progress with regard to its commitment starting by three sectors particularly emitting greenhouse gas: power generation, oil and gas, and automotive sectors. It sets interim targets for financed carbon emissions intensity reductions that the Group has committed to achieve by 2025. BNP Paribas committed to expanding the scope of application of the Net-Zero alignment goal to a higher number of sectors by 2024: agriculture, real estate, cement, steel, aluminium, aviation and shipping.

In addition, the objectives, targets and limits to assess and address social risks are developed in the strategy and in the Group's vigilance Plan. The Group's vigilance Plan is implemented to identify and prevent the risk of serious violations of human rights and fundamental freedoms, of harm to human health and safety, and to the environment throughout its business operations. The actions related to the Group's vigilance Plan are defined by the CSR Department, prepared jointly with the stakeholders in the main business lines and functions. These actions aim to cover all of the Group's business lines, functions and countries of operation. The Group is committed to promoting compliance with the principles and standards that underpin its operations, such as the United Nations Sustainable Development Goals (SDGs), the ten principles of the United Nations Global Compact, and the standards defined by the International Labour Organization (ILO). For more information, refer to section 7.7 *Duty of Care and Modern Slavery and Human Trafficking Statement* in chapter 7.

GOVERNANCE

MANAGEMENT BODY SETTING ESG RISKS AND OPPORTUNITIES FRAMEWORK

The Board of directors validates the Group's strategy on energy and climate-related matters, with the support of two specialised Committees (as described in the Governance section at 5.3 *Risk Management*):

- the Corporate Governance, Ethics, Nominations and CSR Committee (CGEN);
- the Internal Control, Risk Management and Compliance Committee (CCIRC).

For environmental-related risks and opportunities in all fields, the Chief Executive Officer and the Chief Operating Officer submit a strategy proposal to the Board of directors, then subsequently oversee the management of the Group and its performance.

The Chief Executive Officer is responsible for the climate strategy, for which the definition and implementation through the Group's commitments is managed by the Head of Company Engagement, a member of the Group Executive Committee, in its role as CSR supervisor. The Company Engagement Department, the CSR Department (which is part of the Company Engagement Department), the operational entities and functions are responsible for the implementation of the Group's climate strategy.

Social risk management is managed at the Group's highest level:

- the Group applies internationally recognised human rights standards as defined in the Bill of Human Rights. This commitment is expressed at the highest level in the BNP Paribas Declaration on Human Rights, signed by the Group's Chief Executive Officer and promoting the respect of these rights within BNP Paribas' sphere of influence;
- the Chairman of the Board of directors and the Group Chief Executive Officer co-sign the statement on modern slavery and human trafficking that BNP Paribas publishes annually;
- the Group supports the United Nations Guiding Principles on Business and Human Rights and the OECD's Guiding Principles for Multinational Enterprises, in accordance with the "Protect, Respect and Remedy" framework. It has chosen to follow the recommendations of the United Nations Guiding Principles reporting framework;
- the Group also monitors social matters pertaining to health, safety and impact on communities and consumers as part of its ESG assessment process.

In addition, since 2021, the Group's ESG governance system has been extended to cover all aspects of the Company, and restructured to better incorporate environmental and climate-related issues in the definition of the strategy, its oversight and management of the associated risks. This framework is based on well-defined governance, with responsibilities shared between the Group and operational entities in order to facilitate operational integration of the ESG policies, targets and risk framework. This governance is led by:

- the Sustainable Finance Strategic Committee, which aims to validate the Group's climate strategy and the implementation of the policy of aligning the loan portfolio with the Paris Agreement. The main associated indicators are discussed at regular meetings chaired by the Chief Executive Officer within the framework of this Strategic Committee. The topics related to sustainable financing discussed by the members of the Committee are then transmitted to the business lines and functions through their representatives;
- the Sustainable Finance Infrastructure Committee aims at industrialising ESG processes, data and reporting. Its mission is to meet the growing needs of customers, regulators and investors. Around the Deputy Chief Executive Officer, it brings together key contributors from different business lines and functions;
- the ESG Regulatory Committee at Executive Management level was set up to assess the operational consequences of the main new regulations.

ESG RISK CONTROLLING AND REPORTING SYSTEM

The Group General Management has settled an internal control framework which main objective is to ensure the global risk management and to give a reasonable assurance that related objectives are achieved. (see section 2.4 *Internal Control* in chapter 2). The BNP Paribas Group's internal control monitors all types of risks to which the Group may be exposed, including those resulting from ESG factors. It is applied at the Group level and at the level of directly or indirectly controlled entities.

Environmental and social risk factors are progressively being integrated into the usual reporting processes, considering progress on internal analyses related to ESG issues as well as regulatory developments. At the Board of directors level, the CCIRC reviews the Risk Appetite Statement (RAS), which contains metrics resulting from targets set within the NZBA commitments.

Finally, environmental and social risk-related objectives are considered in the remuneration policy (see section 1. *Corporate Governance* in chapter 2). The Remuneration Committee considers environmental and social risk-related objectives and more precisely:

- a three-year retention plan for more than 8,400 key Group employees maturing in June 2024. This retention plan, known as the Group Sustainability and Incentive Scheme (GSIS) is partly indexed on the Group's CSR performance objectives. The achievement of the latter accounts for 20% of the award conditions while the rest is indexed to the Group's operational performance.

- the remuneration and benefits awarded as annual variable compensation to the Executive Management include a portion of 15% linked to the Group's CSR performance. The allocation of this portion of the annual variable compensation is based on multi-criteria measurement resulting from a holistic approach of actions undertaken by the BNP Paribas Group with respect to social, societal, and environmental issues. This compensation structure includes three weighted criteria, each at 5%:
  - the Board of directors' assessment of the year's highlights, primarily with regard to climatic and social challenges,
  - the publications of extra-financial rating agencies measuring the quality of the BNP Paribas' CSR positioning relative to its peers,
  - the alignment with the CSR objectives included in the compensation due to retention plans granted to the Group's key employees.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE RISK MANAGEMENT FRAMEWORK

DEFINITIONS AND FRAMEWORK

The ESG risk management framework of the Group has been built on the ground of voluntary actions and commitments as well as regulatory requirements, when applicable, and supervisory expectations, where relevant.

The long-standing voluntary actions with respect to international and European policy framework encompass good practices on both environmental and social fields and include the following principles:

- application of the 4th version of the Equator Principles (EP4) related to project finance activities. The Group works with its customers to identify, assess, and manage the environmental and social risks and impacts linked with major industrial and infrastructure projects. Any potential negative impact of these projects on communities, ecosystems or climate must be avoided, mitigated and/or offset;
- adoption of social and environmental goals aligned with global standards such as the United Nations Sustainable Development Goals and those of the financial community such as the Principles for Responsible Banking (PRB) and the Principles for Responsible Investment (PRI);
- actions following the framework of the United Nations Global Compact (Advanced level) and the United Nations Women's Empowerment Principles. The Group also complies with ILO Conventions concerning social and labour aspects and the internationally accepted OECD Guidelines for multinational enterprises;
- commitment to align greenhouse gas (GHG) emissions arising from its credit activities with the path required to achieve carbon neutrality in 2050. By joining the Net-Zero Banking Alliance (NZBA) and engaged to align thanks to the methodology guidance developed by the NZBA, the Group has been able to evaluate its pathways to Net-Zero on the following sectors: power generation, oil and gas (upstream and refining), and automotive. This is also used as a risk tool to anticipate and monitor the emissions of the lending portfolio;
- publication of a climate report from 2023 summarising the measures implemented to identify, analyse and manage its climate-related risks and opportunities.

With respect to legislative and regulatory requirements, the Group applies those in relation to the French Duty of Care law requiring, in particular, a vigilance plan to be established and implemented to identify and prevent the risk of serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment.

In addition, the risk management framework is being reinforced to integrate expectations resulting from the ECB Guide on climate-related and environmental risks (November 2020) and the EBA report on ESG risk management and supervision (June 2021).

Related actions aiming at further embedding the ESG into the risk management framework are handled within the ESG Methodologies, Analyses and Risk Management programme.

IDENTIFICATION OF ESG RISK, ASSESSMENT AND LIMITS

The Group does not consider the risk ESG as additional type of risks but as risk factors which may potentially impact any types of risk, and notably credit, market or operational risks.

Accordingly, ESG risk factors are being gradually incorporated in the Group's existing risk management framework and processes.

Given the still evolving feature of the ESG topics, projects are ongoing to further identify and integrate these risk factors into the risk management framework, for instance:

- in the Risk Appetite framework, and in the risk identification process as described below;

- the Group Risk Appetite Statement (RAS), which is defined consistently with the strategy of BNP Paribas, includes principles dedicated to ESG risk factors. These principles, coupled with dedicated metrics, define the risk tolerance of the Group on these dimensions. The Group Risk Appetite Statement integrates a metric on the share of coal in the Group's secondary energy mix (electricity production mix financed by the Group), with a limit set thereof. In addition, complementary indicators, resulting from the Net-Zero targets setting regarding the Oil & Gas, the Power and the Automotive sectors are part of the Risk Appetite Statement for monitoring purposes;
- the Group risk identification process (Risk ID) (see appendix 5 *Risk identification & assessment process ("Risk ID")*) has been adapted to integrate ESG topics and to inform the capital adequacy assessment and the resilience test.

The 2022 exercise included 30 major risk factors, eight of which are directly or indirectly related to climate and environmental aspects. They are shown in the following table:

	Time Horizons[1]	Severity	Trend	Type
Possible evolutions in insurance and reinsurance markets	Short term	Medium	↑	Structural
	Medium term	High		
	Long term	Very high		
Customers' expectations and impact of consumerism	Short term	High	→	Structural
	Medium term	High		
	Long term			
Investor's financial expectations	Short term	High	→	Structural
	Medium term	High		
	Long term			
Climate change & energy transition	Short term	High	↑	Structural
	Medium term	Very high		
	Long term	Extremely high		
Threats to health & environment	Short term	High	↑	Structural
	Medium term	Very high		
	Long term	Extremely high		
Banks and ESG concerns	Short term	High	↑	Structural
	Medium term	High		
	Long term	Very high		
Widening inequalities, societal fragmentation & social unrest	Short term	High	↑	Structural
	Medium term	Very high		
	Long term			
Employees' expectations & engagement Recruitment & retention	Short term	High	↑	Structural
	Medium term	High		
	Long term			

(1) Time horizons are defined as follows: Short term from 0 to 3 years; Medium term from 3 to 10 years, Long term from 10 to 30 years.

The Group risk identification process has been designed to favour anticipation and to promote a forward-looking approach when updating the risk inventory of the Group (final outcome of the process). The latter integrates "severe but plausible" elementary scenarios (the "risk events") that reflects the way the risk types faced by the Group could materialise.

For each risk event, the Risk ID methodology requires to identify the risk factors that underpin its materialisation, those that favour, trigger or worsen the event. ESG types of risks are included in the risk factors that shall be considered by contributors to the Risk ID process, including a dedicated climate and environment related risks category.

As for the horizons considered, if Risk ID contributors are asked to identify and assess scenarios that represent concerns in the coming 3 to 4 years (short to medium term), they are also invited to anticipate scenarios that could materialise in the longer term.

In the Risk ID methodology, four features enable to qualify the probability and the time horizon of each risk event, notably those that are favoured, triggered or worsened by ESG risk types:

- the frequency of the risk event;
- the imminence of the risk event;
- the probable evolution of the materiality of the risk event in the coming year;
- the relative materiality of the risk event on a 30-year horizon.

This approach enables the Group to consider in its risk inventory both frequent, probable risk events and unusual, long-term, less probable but more severe risk events.

- The country risk assessment: BNP Paribas takes into consideration the countries' vulnerability to climate risks when gauging the overall "country risks" and is assessing the sovereign counterparties' exposure to transition and physical climate risks. Country risk is an essential component in the assessment of the creditworthiness of the Bank's counterparties; sovereign risks are central to the analysis of the risks associated with the Bank's exposures to public and banking counterparties.
- Sectoral analysis: sectoral analyses and heatmaps on climate-related risks are being developed by the Group. Climate transition risk heatmap stands as a key tool for risk materiality assessment, risk monitoring and reporting, as it enables to qualify the mapping of the Group's exposures to sectors considered as vulnerable to climate transition risk factors, hence potential concentration thereof.
- In the credit risk framework with the ESG Assessment deployment (See appendix 5 *ESG Assessment (ESG-A)*), aiming at strengthening and further documenting monitoring process on ESG aspects both at counterparty and transaction level.

With respect to social risk factors and similarly to climate and environmental-related risks, they are incorporated as risk factors in the Group's process for identifying and assessing risks incurred by the Group, thus enabling the identification and assessment of elementary severe but plausible scenarios that are triggered, favoured or aggravated by social risk factors. (See Commitment 3 *Systematic integration and management of Environmental, social and governance risks (ESG)* in chapter 7 for further describing the ESG Assessment of corporates and appendix 5 *ESG Assessment (ESG-A)*).

MEASUREMENT, MONITORING & MITIGATION

Within a constant evolution the ESG field is characterised by emerging new standards that still lack convergence. In this perspective the sourcing of data with sufficient quality remains a challenge requiring a highly adaptive and polyvalent ESG data supply chain. Hence, the ESG action plan, launched from 2020, provided the Group with common standards and tools, such as impACT, the ESG data platform, which made internal and external ESG data available Group wide. ESG data acquisition strategy is based upon a use-case driven approach. A robust data governance has been implemented covering in particular:

- data categorisation (internal vs external…);
- gap analysis (existing, needs to be covered);
- ESG data supply chain definition (norms and estimation rules, golden sources identification…);
- ESG key data management and quality (identification of critical data and their attributes to feed the ESG data dictionary, data quality controls definition and implementation, ESG data quality dashboard).

The ESG Data Control Catalogue (DCC) presents a set of specific controls to apply to Key ESG data whenever relevant, and key performance indicators and data quality dashboards are produced to enable data quality monitoring and remediation. The focus is made on the 3 quality dimensions: completeness, validity, freshness. These key quality indicators are refreshed on a quarterly basis for the data identified as critical, *i.e.* GHG emissions data, Energy Performance Certificate data (EPCs), and EU Taxonomy alignment data.

Feedback loops are organised with the data providers to address data quality issues and remediation plans.

In addition, initiatives have been launched internally on EPCs to collect data on new deals and fill the gaps on stock deals according to roadmaps defined by each entity.

As highlighted in the section related to business strategy and processes, since 2011, BNP Paribas has gradually been incorporating ESG issues in its risk management systems, notably drawing on the following:

- financing and investment policies, classified as sector policies, have been established in particular for sectors extensively associated to ESG issues;
- provisions relating to social and environmental responsibility (including climate) have been added in the General Credit Policy and specific policies, and are progressively reinforced;
- adherence to the Equator Principles on project financing;
- integration of ESG criteria into supply chain management;
- integration of ESG criteria into asset management activities;
- offering of enhanced ESG training programmes;

- dedicated programmes to reinforce the integration of ESG into the risk management framework;
- active participation in open-source initiatives for methodology development regarding climate risk analyses, for instance, BNP Paribas is one of the founding members of the Open-Source Climate Risk (OS-Climate) initiative.

Besides, tools to enhance forward-looking assessment capabilities are being developed. In particular, climate scenarios analyses are being expanded, covering climate-related risk factors, leveraging on regulatory and supervisory exercises in that respect:

- use of traditional regulatory and internal stress tests to measure the consequences of a crisis scenario on an institution's solvency and liquidity situation. Gradually, this scenario analysis framework has been enriched for use in analysing the consequences of global warming and the energy transition on asset portfolios. Work is ongoing to integrate longer horizons (*e.g.* 50 years), to project the evolution in the breakdown of sectors in the institution's balance sheet, differentiated scenarios according to a detailed sectoral segmentation and to take into account specific factors such as the cost of carbon emissions, technological innovation and physical risks:
  - improvements to the climate scenario analyses framework in 2022: which include the development of a long-term strategy for the dynamic balance sheet projection in line with the different transition risk scenarios,
  - participation in the joint learning climate stress test organised by the ECB in early 2022: assessment of bank's modelling capabilities through transition and physical risks,
  - integration of climate risk scenario analyses and stress tests in its Internal Capital Assessment Adequacy Process (ICAAP). As part of this, BNP Paribas has included in its ICAAP climate scenario analyses which are, as a result, best suited to apprehend climate risk factors, given their forward-looking nature,
  - use of those scenarios for risk management purposes to allow the Group to improve its understanding of expected impacts of climate change on its business model,
  - integration in a first stage in the 2022 ICAAP of a transition risk scenario based on the short-term disorderly scenario provided by the ECB for its 2022 climate resistance test exercise, under which credit losses and market risk impacts have been projected. The climate scenarios of the 2022 ICAAP also include,
    - an assessment in an adverse scenario of losses calculated from operational risk events for which climate risk has been identified as a risk factor,
    - a reputation risk scenario, in which the consequences of a greenwashing scenario on revenues from asset management activities are assessed.

  Those different scenarios enable the Group to determine the materiality and sensitivity of climate risk factors to risks it is exposed to and for which climate risk can be a relevant risk factor. This concerns in particular business risk, credit risk and operational risk. Climate risk scenarios remain exploratory in nature and cover time horizons that far exceed horizons used for capital planning. As a result, although integrated in the ICAAP for risk management purposes, climate scenarios are not used to calculate an impact on the Group' capital position;
  - the Group will keep including climate scenario analyses in its future ICAAPs and expand their scope, notably with the inclusion of physical risk scenarios. For further information on the Group's developing climate stress testing infrastructure, please also refer to section 5.3 *Risk Management* which provides information on the Group's stress testing infrastructure, including relating to climate.

The Group does not calculate a capital charge linked to climate-related risk, which is considered a risk factor of risks such as business, credit or operational risk. The Group is, however, able to assess the contribution of events that can be triggered or worsened by climate risk to its internal capital requirement. The assessment relies on the Group's risk identification process.

The Group's resilience to environmental and social risk is underpinned by its diversified, integrated business model. The diversity of the business lines, the business sectors in which the Group operates and the geographic areas in which it is established is a key asset to mitigate risks of all kinds, whether they are climate, related to biodiversity or other environmental risks.

Several other elements can be highlighted as contributing significantly to the Group's resilience to environmental risks notably:

- the integration of the transition to carbon neutrality at the core of the 2025 strategic plan and the commitment to align its activities with a carbon neutrality trajectory by 2050. Formalised by the Group's membership in the Net-Zero Banking Alliance, BNP Paribas Cardif's membership in the Net-Zero Asset Owner Alliance and BNP Paribas Asset Management's membership in the Net-Zero Asset Manager Initiative, this commitment contributes to supporting the reduction in the Group's exposure to economic players responsible for generating the highest GHG emissions, and thus its exposure to transition risks, particularly those related to changes in public policies aimed at reducing emissions;
- expansion of teams dedicated to supporting customers in their transition (*e.g.* Low Carbon Transition Group);
- enhancement of the Group's capabilities to assess and manage environmental risks and incorporate them in its decision-making processes as described in other chapters.

Regarding social risks, activities of the corporate clients may introduce social risks related to the respect of human rights particularly in the area of workers' rights, and may have a negative impact on local communities. Hence, the Group encourages clients to manage their own activities with respect to human rights. It also endeavours to identify, assess, monitor and encourage the improvement of the current and future performance of clients operating in sensitive sectors through the application of its investment and financing policies. This set-up has been further strengthened with the deployment of the ESG assessment of the Group's customers on five dimensions, including social (health, safety and impact on communities). In case of suspicion or identification of serious human rights abuses by a BNP Paribas customer or a company in its portfolio, the Group conducts in-depth due diligences with the company concerned.

In addition, the adherence to international and European policy framework, which incorporates principles on the social field, can also contribute to reduce potential social risks. For example, as a signatory member of the Equator Principles, the Group ensures that any negative impacts of a project finance on communities, ecosystems or the climate are avoided and, if necessary, remedied; and encourages clients to obtain the Free, Prior and Informed Consent (FPIC) of the local communities impacted by their projects.

Further information is displayed in the Commitment 3 *Systematic integration and management of Environmental, social and governance risks (ESG)* and Commitment 8 *Combat Social Exclusion and Support HR* in chapter 7.

MEASURING THE POTENTIAL RISK OF CLIMATE CHANGE

Despite the developments in recent years in terms of standardising methodologies for the quantitative analysis of ESG factors and their impact on traditional financial risks, they must be interpreted with caution, taking into account their limitations. In the response to the public consultation of its Report on prudential disclosures for ESG[1] of January 2022, the EBA underlines the difficulties relating to these methodologies, namely the low historical depth, the unavailability of standardised and comparable data on the various geographies and sectors of activity, the multiplicity of methods and scenarios used to estimate missing data, among others.

The tables presented in this section should be read in conjunction with the methods and definitions used and described in the accompanying narrative. In the absence of a reference proposed by the supervisory authorities, the Group has chosen to refer, whenever possible, to European definitions or regulatory exercises. When this was not possible, the information was produced on the basis of forward-looking plans and projections, prepared in good faith by the Group based on internal definitions and estimates. The Group constantly adapts its methodologies taking into account the development of knowledge, the availability of data, the establishment or updating of recognised guidelines and standards.

Certain factors, which are external to the Group, may cause variations in the forecasts taken into account to prepare forward-looking plans and projections, such as changes in climate scenarios, changes in economic conditions or geopolitical risks. The information contained in this section may, therefore, be significantly revised in future publications.

As a result, the tables presented in this section can only be assessed on the date of publication of this document and must be interpreted taking into account the uncertainties related to the methodologies, projections and data used.

[1] *EBA draft ITS on Pillar 3 disclosures on ESG risks.pdf (europa.eu).*

BANKING BOOK - INDICATORS OF POTENTIAL CLIMATE CHANGE TRANSITION RISK

TABLE 114: CREDIT QUALITY OF EXPOSURES BY SECTOR, EMISSIONS AND RESIDUAL MATURITY

		a	b	d	e	f	g	h	l	m	n	o	p
													31 December 2022
				Gross carrying amount		**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**							
	in millions of euros		**of which exposures towards companies excluded from EU Paris-aligned Benchmarks**	**of which stage 2 exposures**	**of which non-performing exposures**		**of which Stage 2 exposures**	**of which non-performing exposures**	**≤ 5 years**	**> 5 year ≤10 years**	**> 10 year ≤ 20 years**	**> 20 years**	**Average weighted maturity** *(in years)*
1	**Exposures towards sectors that highly contribute to climate change[(*)]**	**330,046**	**22,538**	**46,639**	**10,472**	**(7,475)**	**(1,112)**	**(5,754)**	**270,655**	**29,967**	**28,006**	**1,418**	**4**
2	A – Agriculture, forestry and fishing	13,302	39	1,409	526	(325)	(69)	(211)	11,255	1,160	800	88	4
3	B – Mining and quarrying	9,501	6,896	909	194	(141)	(15)	(111)	8,562	707	224	7	3
4	*B.05 – Mining of coal and lignite*	*183*	*183*	*14*	*40*	*(22)*		*(22)*	*183*				*3*
5	*B.06 – Extraction of crude petroleum and natural gas*	*5,221*	*5,221*	*571*	*123*	*(69)*	*(1)*	*(63)*	*4,832*	*159*	*224*	*6*	*3*
6	*B.07 – Mining of metal ores*	*2,114*	*181*	*203*	*4*	*(19)*	*(9)*	*(5)*	*1,739*	*376*			*4*
7	*B.08 – Other mining and quarrying*	*691*	*19*	*40*	*23*	*(21)*	*(2)*	*(18)*	*648*	*41*		*1*	*3*
8	*B.09 – Mining support service activities*	*1,293*	*1,293*	*81*	*4*	*(10)*	*(3)*	*(4)*	*1,160*	*132*			*3*

		a	b	d	e	f	g	h	l	m	n	o	p
													31 December 2022
		Gross carrying amount				**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**							
	in millions of euros		**of which exposures towards companies excluded from EU Paris-aligned Benchmarks**	**of which stage 2 exposures**	**of which non-performing exposures**		**of which Stage 2 exposures**	**of which non-performing exposures**	**≤ 5 years**	**> 5 year ≤10 years**	**> 10 year ≤ 20 years**	**> 20 years**	**Average weighted maturity** *(in years)*
9	C – Manufacturing	91,160	5,050	11,715	2,723	(2,239)	(323)	(1,742)	85,109	4,743	1,063	245	3
10	*C.10 – Manufacture of food products*	*13,250*	*316*	*1,743*	*432*	*(310)*	*(60)*	*(220)*	*12,432*	*674*	*122*	*23*	*3*
11	*C.11 – Manufacture of beverages*	*4,116*		*600*	*53*	*(38)*	*(7)*	*(23)*	*3,978*	*107*	*30*		*3*
12	*C.12 – Manufacture of tobacco products*	*14*							*14*				*4*
13	*C.13 – Manufacture of textiles*	*1,241*		*199*	*83*	*(69)*	*(5)*	*(61)*	*1,212*	*14*	*9*	*7*	*3*
14	*C.14 – Manufacture of wearing apparel*	*1,715*		*105*	*92*	*(72)*	*(12)*	*(57)*	*1,669*	*34*	*8*	*5*	*2*
15	*C.15 – Manufacture of leather and related products*	*522*		*193*	*30*	*(28)*	*(7)*	*(21)*	*516*	*4*		*2*	*2*
16	*C.16 – Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials*	*1,125*		*103*	*48*	*(41)*	*(5)*	*(33)*	*980*	*126*	*18*	*1*	*3*

		a	b	d	e	f	g	h	l	m	n	o	p
													31 December 2022
				Gross carrying amount		**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**							
	in millions of euros		**of which exposures towards companies excluded from EU Paris-aligned Benchmarks**	**of which stage 2 exposures**	**of which non-performing exposures**		**of which Stage 2 exposures**	**of which non-performing exposures**	**≤ 5 years**	**> 5 year ≤10 years**	**> 10 year ≤ 20 years**	**> 20 years**	**Average weighted maturity** *(in years)*
17	*C.17 – Manufacture of paper and paper products*	*1,979*		*385*	*66*	*(68)*	*(7)*	*(55)*	*1,926*	*46*	*2*	*6*	*2*
18	*C.18 – Printing and reproduction of recorded media*	*709*		*122*	*67*	*(39)*	*(7)*	*(29)*	*671*	*27*	*8*	*3*	*3*
19	*C.19 – Manufacture of coke and refined petroleum products*	*3,565*	*3,565*	*172*	*12*	*(16)*	*(2)*	*(10)*	*2,656*	*429*	*479*		*5*
20	*C.20 – Manufacture of chemicals and chemical products*	*6,402*	*525*	*1,190*	*132*	*(89)*	*(20)*	*(55)*	*5,568*	*770*	*44*	*21*	*3*
21	*C.21 – Manufacture of basic pharmaceutical products and pharmaceutical prepa rations*	*5,416*		*518*	*6*	*(12)*	*(3)*	*(3)*	*5,355*	*43*	*5*	*13*	*2*
22	*C.22 – Manufacture of rubber products*	*4,877*	*107*	*528*	*127*	*(124)*	*(23)*	*(89)*	*4,587*	*232*	*32*	*25*	*3*
23	*C.23 – Manufacture of other non-metallic mineral products*	*3,065*		*318*	*157*	*(125)*	*(16)*	*(102)*	*2,852*	*163*	*37*	*14*	*3*
24	*C.24 – Manufacture of basic*	*5,326*	*110*	*644*	*85*	*(142)*	*(27)*	*(107)*	*5,030*	*219*	*52*	*25*	*3*

		a	b	d	e	f	g	h	l	m	n	o	p
													31 December 2022
		Gross carrying amount				**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**							
in millions of euros			**of which exposures towards companies excluded from EU Paris-aligned Benchmarks**	**of which stage 2 exposures**	**of which non-performing exposures**		**of which Stage 2 exposures**	**of which non-performing exposures**	**≤ 5 years**	**> 5 year ≤10 years**	**> 10 year ≤ 20 years**	**> 20 years**	**Average weighted maturity** *(in years)*
	metals												
25	*C.25 – Manufacture of fabricated metal products, except machinery and equipment*	*5,015*	*8*	*674*	*255*	*(198)*	*(23)*	*(161)*	*4,518*	*388*	*83*	*26*	*3*
26	*C.26 – Manufacture of computer, electronic and optical products*	*4,304*	*30*	*197*	*65*	*(67)*	*(5)*	*(53)*	*3,638*	*633*	*8*	*25*	*3*
27	*C.27 – Manufacture of electrical equipment*	*4,665*	*244*	*461*	*52*	*(58)*	*(6)*	*(43)*	*4,119*	*501*	*39*	*7*	*2*
28	*C.28 – Manufacture of machinery and equipment*	*9,376*	*1*	*1,072*	*431*	*(298)*	*(24)*	*(260)*	*9,221*	*114*	*22*	*19*	*3*
29	*C.29 – Manufacture of motor vehicles, trailers and semi-trailers*	*6,879*	*1*	*998*	*289*	*(243)*	*(26)*	*(204)*	*6,832*	*42*	*3*	*2*	*2*
30	*C.30 – Manufacture of other transport equipment*	*3,274*	*137*	*624*	*88*	*(73)*	*(17)*	*(56)*	*3,258*	*15*	*1*		*1*
31	*C.31 – Manufacture of furniture*	*743*		*150*	*44*	*(36)*	*(4)*	*(30)*	*677*	*45*	*20*	*1*	*3*

		a	b	d	e	f	g	h	l	m	n	o	p
													31 December 2022
				Gross carrying amount			**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**						
in millions of euros			**of which exposures towards companies excluded from EU Paris-aligned Benchmarks**	**of which stage 2 exposures**	**of which non-performing exposures**		**of which Stage 2 exposures**	**of which non-performing exposures**	**≤ 5 years**	**> 5 year ≤10 years**	**> 10 year ≤ 20 years**	**> 20 years**	**Average weighted maturity** *(in years)*
32	*C.32 – Other manufacturing*	*1,619*		*242*	*42*	*(42)*	*(12)*	*(27)*	*1,559*	*31*	*13*	*15*	*3*
33	*C.33 – Repair and installation of machinery and equipment*	*1,961*	*6*	*479*	*68*	*(50)*	*(5)*	*(42)*	*1,841*	*88*	*27*	*5*	*3*
34	D – Electricity, gas, steam and air conditioning supply	21,213	4,887	1,874	137	(135)	(43)	(68)	14,868	2,924	3,286	135	5
35	*D35.1 – Electric power generation, transmission and distribution*	*16,965*	*1,147*	*1,250*	*129*	*(106)*	*(28)*	*(60)*	*11,043*	*2,641*	*3,146*	*135*	*5*
36	*D35.11 – Production of electricity*	*13,014*	*763*	*1,098*	*121*	*(91)*	*(28)*	*(50)*	*7,582*	*2,219*	*3,101*	*112*	*5*
37	*D35.2 – Manufacture of gas; distribution of gaseous fuels through mains*	*3,914*	*3,740*	*610*	*8*	*(28)*	*(14)*	*(9)*	*3,533*	*282*	*100*		*1*
38	*D35.3 – Steam and air conditioning supply*	*334*		*15*		*(1)*			*292*	*2*	*41*		*1*
39	E – Water supply; sewerage, waste management and remediation activities	2,935	3	195	148	(134)	(4)	(124)	2,504	346	84		3

		a	b	d	e	f	g	h	l	m	n	o	p
													31 December 2022
				Gross carrying amount		**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**							
	in millions of euros		**of which exposures towards companies excluded from EU Paris-aligned Benchmarks**	**of which stage 2 exposures**	**of which non-performing exposures**		**of which Stage 2 exposures**	**of which non-performing exposures**	**≤ 5 years**	**> 5 year ≤10 years**	**> 10 year ≤ 20 years**	**> 20 years**	**Average weighted maturity** *(in years)*
40	F – Construction	25,096	323	3,292	2,272	(1,600)	(83)	(1,456)	22,386	1,316	1,342	53	3
41	*F.41 – Construction of buildings*	*15,665*	*92*	*1,768*	*1,591*	*(983)*	*(46)*	*(911)*	*13,896*	*849*	*884*	*35*	*3*
42	*F.42 – Civil engineering*	*3,175*	*184*	*533*	*181*	*(130)*	*(10)*	*(108)*	*3,036*	*80*	*52*	*7*	*3*
43	*F.43 – Specialised construction activities*	*6,256*	*47*	*992*	*499*	*(488)*	*(27)*	*(437)*	*5,453*	*387*	*406*	*10*	*3*
44	G – Wholesale and retail trade; repair of motor vehicles and motorcycles	63,307	3,048	11,433	1,939	(1,308)	(195)	(984)	58,452	3,416	1,248	190	3
45	H – Transportation and storage	30,514	2,285	6,806	806	(578)	(121)	(411)	25,132	3,268	1,982	133	4
46	*H.49 – Land transport and transport via pipelines*	*8,356*	*1,865*	*889*	*286*	*(192)*	*(32)*	*(134)*	*7,211*	*647*	*488*	*10*	*4*
47	*H.50 – Water transport*	*12,297*	*367*	*3,260*	*230*	*(177)*	*(27)*	*(140)*	*9,724*	*1,655*	*918*		*5*
48	*H.51 – Air transport*	*3,519*	*2*	*2,102*	*102*	*(54)*	*(38)*	*(20)*	*3,004*	*417*	*90*	*7*	*4*
49	*H.52 – Warehousing and support activities for transportation*	*6,197*	*51*	*547*	*185*	*(153)*	*(23)*	*(114)*	*5,053*	*547*	*483*	*115*	*4*

		a	b	d	e	f	g	h	l	m	n	o	p
													31 December 2022
				Gross carrying amount			**Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions**						
	in millions of euros		**of which exposures towards companies excluded from EU Paris-aligned Benchmarks**	**of which stage 2 exposures**	**of which non-performing exposures**		**of which Stage 2 exposures**	**of which non-performing exposures**	**≤ 5 years**	**> 5 year ≤10 years**	**> 10 year ≤ 20 years**	**> 20 years**	**Average weighted maturity** *(in years)*
50	*H.53 – Postal and courier activities*	*145*		*8*	*3*	*(3)*		*(2)*	*140*	*2*	*2*		*2*
51	I – Accommodation and food service activities	7,576		2,299	528	(365)	(113)	(232)	5,868	1,081	596	31	4
52	L – Real estate activities	65,442	6	6,708	1,199	(649)	(146)	(415)	36,520	11,005	17,381	536	7
53	**Exposures towards sectors other than those that highly contribute to climate change[(*)]**	**128,619**	**1,798**	**16,595**	**2,858**	**(1,803)**	**(358)**	**(1,244)**	**112,001**	**10,569**	**4,172**	**1,877**	**1**
54	K – Financial and insurance activities	26,945	829	3,369	669	(349)	(101)	(195)	22,115	2,854	1,295	682	1
55	Exposures to other sectors (NACE codes J, M – U)	101,673	969	13,226	2,189	(1,455)	(257)	(1 049)	89,886	7,715	2,877	1,195	2
56	**TOTAL**	**458,665**	**24,336**	**63,234**	**13,330**	**(9,278)**	**(1,470)**	**(6,998)**	**382,655**	**40,536**	**32,178**	**3,295**	**3**

(*) In accordance with Commission Delegated Regulation (EU) 2020/1818 supplementing Regulation (EU) 2016/1011 as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks – regulation on climate benchmarks: the sectors listed in Annex I, sections A to H and section L, of Regulation (EC) No. 1893/2006.

The Group's total exposure to non-financial corporates stands at EUR 459 billion at 31 December 2022 including loans and advances, debt securities and equity instruments not held for trading. The table shows a mapping of exposures by sector with the detail of those considered to significantly contribute to climate change and may not, under any circumstances, be interpreted as an exposure to transition risk as such.

The exposure towards companies excluded from Paris-aligned Benchmarks[1] stands at EUR 24 billion and is composed of exposure towards companies active in fossil fuel. These companies have been identified thanks to a double screening based on:

1. the identification of counterparties belonging to oil, gas and coal sectors as identified in the Group's internal activity referential or according to the NACE code declared by the counterparty;
2. the identification of counterparties deriving their revenue from fossil fuel value chain as per defined in the Climate Benchmark Standard Regulation[2] obtained from an external data provider.

Assets which finance environmentally sustainable activities have not been disclosed in compliance with the EBA calendar, as those are based on the disclosures by financed counterparties of their own EU-Taxonomy aligned activities.

Financed greenhouse gas emissions of the Group's non-financial counterparties are not disclosed as planned during the phasing-in period till June 2024 as the underlying data coming from the clients is not always available with a sufficient quality. These data are not required on a regulatory basis yet, hence, more than three-quarters of the Group's portfolio would rely on low quality estimated data, based on geographical and sectorial average, not taking into consideration the specific situation of the clients even in the most emitting sectors.

Internally within the risk identification process (Risk ID), the Bank identifies the climate change risk factors, including three drivers related to the transition, and how they materialise into the traditional financial (*e.g.* credit risk) and non-financial risks (*e.g.* legal risk, operational risk).

This process highlights how credit exposure to sector highly sensitive to the transition (*e.g.* power generation sector, fossil fuel extraction) could materialise through transmission channel (*e.g.* emergence of new climate-related regulations, shifts in prices and asset values) into credit risk, which is the most salient risk for the banking book.

The Bank has adapted its credit risk management by taking into account ESG risks and transition risk in particular into the Global Credit policy and into the specific credit policies when it is relevant (*e.g.* coal-fired power generation policy for instance).

TEMPLATE 115: EXPOSURES TO TOP 20 CARBON-INTENSIVE FIRMS

		a	b	c	d	e
						31 December 2022
		Gross carrying amount *(in millions of euros)*	**Gross carrying amount towards the counterparties compared to total gross carrying amount (aggregate)(*)**	**Of which environmentally sustainable** *(in millions of euros)*	**Weighted average maturity** *(in years)*	**Number of top 20 polluting firms included**
1	**TOTAL**	**7,885**	**0.72%**	**-**	**4**	**16**

(*) For counterparties among the top 20 carbon emitting companies in the world.

The identification of the counterparties making up the list of the 20 firms with the highest carbon intensity worldwide is based on the public list provided by the Climate Accountability Institute in 2018[3]. This list shows limits as notably it only contains companies active in fossil fuel activities compared to the others proposed in the EBA instructions, nevertheless it is also the most recent and the one for which the Group has computed the highest exposure.

The assets included in the table are composed of loans and advances, debt securities and equity instruments not held for trading granted to these clients. They are compared to the gross carrying amount of the assets included in the banking book, excluding financial assets held for trading and held for sale.

After matching on a name-by-name basis the Climate Accountability Institute list with the internal third parties referential at business group level, the related carrying amount, corresponding to the financing of 16 of them, has been aggregated and stands at EUR 8 billion.

[1] *In accordance with article 12 (1) (d) to (g) and article 12 (2) of Regulation (EU) 2020/1818.*

[2] *According to Directive (EU) 2020/1818, companies active in fossil fuels are those whose income comes from exploration, mining, drilling, production, storage and transport, refining or distribution of fossil fuels with thresholds of 1% for coal, 10% for oilseed fuels and 50% for gas.*

[3] *https://climateaccountability.org/carbonmajors_dataset2020.html – Top Twenty CO2e 2018 table.*

ENERGY EFFICIENCY OF THE COLLATERAL

TABLE 116: LOANS COLLATERALISED BY IMMOVABLE PROPERTY – ENERGY EFFICIENCY OF THE COLLATERAL

		a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p
																	31 December 2022
																	Total gross carrying amount
								Level of energy efficiency (EP score in kWh/m² of collateral)							**Level of energy efficiency (EPC label of collateral)**		**Without EPC label of collateral**
	In millions of euros		**0; ≤ 100**	**> 100; ≤ 200**	**> 200; ≤ 300**	**> 300; ≤ 400**	**> 400; ≤ 500**	**> 500**	**A**	**B**	**C**	**D**	**E**	**F**	**G**		**of which level of energy efficiency (EP score in kWh/m² of collateral) estimated**
1	**TOTAL EU**	**200,012**	**18,030**	**47,092**	**41,226**	**26,390**	**22,524**	**16,947**	**1,206**	**992**	**1,572**	**2,008**	**1,859**	**2,033**	**2,604**	**187,738**	**-**
2	Of which Loans collateralised by commercial immovable property	65,399	8,007	19,704	13,766	6,293	4,874	5,126	66	62	135	162	128	75	40	64,732	87%
3	Of which Loans collateralised by residential immovable property	134,381	10,023	27,386	27,452	20,072	17,453	11,822	1,139	930	1,438	1,846	1,731	1,957	2,564	122,775	76%
4	Of which Collateral obtained by taking possession: residential and commercial immovable properties	232		2	7	25	197									232	100%
5	Of which Level of energy efficiency (EP score in kWh/m2 of collateral) estimated	159,705	16,294	44,637	38,923	24,514	20,813	14,524									
6	**TOTAL NON-EU**	**7,519**	**11**	**63**	**70**	**22**	**6**	**2**	**-**	**2**	**9**	**11**	**8**	**2**	**1**	**7,486**	**-**
7	Of which Loans collateralised by commercial immovable property	3,321	1	3	3	1							1	1		3,318	0%
8	Of which Loans collateralised by residential immovable property	4,198	10	60	67	22	6	2		1	9	11	7	1	1	4,168	3%
9	Of which Collateral obtained by taking possession: residential and commercial immovable properties																0%
10	Of which Level of energy efficiency (EP score in kWh/m2 of collateral) estimated	142	9	47	61	18	5	2									

The Group's total portfolio of loans collateralised by immovable properties stands at EUR 208 billion at 31 December 2022, including loans collateralised by both commercial and residential immovable properties and collateral obtained by taking possession. Its breakdown by energy efficiency of the guarantee is displayed in two forms: its value in kWh/m^2 and in label (A to G) of the collateral as defined by the Energy Performance of Buildings Directive[1] and the Energy Efficiency Directive[2]. The Energy Performance Certificates (EPCs) provide information on the energy efficiency of the collateral which enables to:

- support/advise clients in their home purchase and during their home sustainable transition;

[1] *Directive 2010/31/EU.*

[2] *Directive 2012/27/EU.*

- integrate EPC-related information into the credit decision process and credit risk management framework;
- improve the accuracy of financial risk measures performed in climate scenario analyses.

The availability of Energy Performance Certificates across Europe is nevertheless not homogeneous, as it strongly relies on geographical specificities, such as national data protection laws in Belgium, or local real estate market practices. Moreover, open-source data bases are sometimes available, barely covering a whole country and often showing data with poor quality, as only collected at the last sale of the assets, often more than two years ago.

As Energy Performance Certificates are based on EU regulation, data for real estate collateral located outside of the European Union cannot be obtained except in a case where a mapping with the EU EPC label exists. As in most cases no mapping exists, the columns corresponding to the EPC label of real estate collaterals located outside of the EU have been left blank and only the energy efficiency in kWh/m2 has been estimated, when relevant.

As of 31 December, 2022, Bank of the West assets sold on the 1 February 2023 are accounted as assets held for sale and are thus not included in the banking book. As such they are not part of this table.

As a result, Energy Performance Certificates (EPCs) are either:

- collected by entities, during the loan origination process. In this case they are considered as reported data;
- obtained from central national databases. When a 1-to-1 matching with the financed asset is possible, EPC data is considered as reported. When the matching is deduced (based on the address for example), EPC data is considered as estimated;
- estimated on the basis of proxies or rules (based on the average energy efficiency for a region or a country for example).

Loans guaranteed by a mutual guarantee fund, especially the *Crédit Logement* framework in France, do not fall under the definition of loans collateralised by immovable property and are not reported in this table.

Should these loans have been reported, the total gross carrying amount of real estate loans as of 31 December 2022 would have increased by EUR 78 billion, of which EUR 6 billion in the "0; < 100" bucket, EUR 27 billion in the "> 100; ≤ 200" bucket, EUR 29 billion in the "> 200; ≤ 300" bucket, EUR 12 billion in the "> 300; ≤ 400" bucket, EUR 3 billion in the "> 400; ≤ 500" bucket and EUR 1 billion in the "> 500" bucket.

ALIGNMENT METRICS BY SECTOR

To achieve the banking's sector ambition to align its climate commitments with the objectives of the Paris Agreement and to pursue a warming target limited to 1.5°C, BNP Paribas signed the Net-Zero Alliances in 2021.

As part of its 2025 Strategic Plan, the Group has published a first Analysis for Climate and Alignment Report in May 2022 which has started steering the alignment of its portfolio with its Net-Zero commitment for three key sectors: power generation, oil and gas and automotive.

As of 31 December 2022, an update of the progress of the alignment for these three sectors, which answer the requirement to report alignment metrics, are reported in Commitment 1 – *Systematic integration and management of Environmental, social and governance risks (ESG)* in chapter 7. These metrics although they met most of the requirements do not exactly respect all definitions and criteria defined by EBA as they are measured according to NZBA framework.

For this first time application of the ESG Pillar3 the Group has noted some methodological adjustments needed to respond more precisely to the requirements of this table, which are being evaluated and prioritised and is fully committed to working towards the publication of the whole table:

- in terms of sector: the table requires the inclusion of the coal sector in the perimeter of the "Upstream oil & gas" sector;
- in terms of portfolio amounts disclosed: the disclosure of the gross carrying amount of the portfolios instead of the total exposure including drawn and committed undrawn amounts;
- in terms of precise scope of counterparties: the use of NACE codes to map the counterparties included in each sector instead of internal sectorial approach;
- in terms of target date: the use of a rolling target (3 years after the year of reference) instead of fixed targets. Though, this requirement is met this year, as the first target year for the Group is 2025.

BANKING BOOK – INDICATORS OF POTENTIAL CLIMATE CHANGE PHYSICAL RISK

TABLE 117: EXPOSURES SUBJECT TO POTENTIAL PHYSICAL RISK

	a	b	c	d	e	f	g	h	i	j
										31 December 2022
										Gross carrying amount
										of which exposures sensitive to impact from climate change physical events
							Breakdown by maturity bucket	of which exposures sensitive to impact from chronic climate change events	of which exposures sensitive to impact from acute climate change events	of which exposures sensitive to impact both from chronic and acute climate change events
	in millions of euros		≤ 5 years	> 5 year ≤ 10 years	> 10 year ≤ 20 years	> 20 years	Average weighted maturity *(in years)*			
1	A – Agriculture, forestry and fishing	13,302	89	9	6	1	4		106	
2	B – Mining and quarrying	9,501								
3	C – Manufacturing	91,160	40	2	1		3		43	
4	D – Electricity, gas, steam and air conditioning supp ly	21,213	25	4	5		5		35	
5	E – Water supply; sewerage, waste management and remediation activities	2,935	1				3		1	
6	F – Construction	25,096	585	35	36	1	3		657	
7	G – Wholesale and retail trade; repair of motor vehicles and motorcycles	63,307	14	1			3		15	
8	H – Transportation and storage	30,514	15	2	1		4		18	
9	L – Real estate activities	65,442	371	110	174	5	7		661	
10	*Loans collateralised by residential immovable property*	*13,064*	*150*	*74*	*101*	*2*	*3*		*327*	
11	*Loans collateralised by commercial immovable property*	*55,657*	*489*	*241*	*331*	*6*	*3*		*1,068*	
12	*Repossessed collateral*	*232*								

13	Exposures to other sectors (NACE codes I, J & M – U)	136,194	256	25	10	4	4		295	
14	**TOTAL**	**458,665**	**1,395**	**189**	**233**	**12**		**-**	**1,828**	**-**

The table before shows the potential exposures sensitives to physical risks.

Disclaimer: Given the current lack of stability of the models, the data gaps and the guidelines uncertainty, the Bank has opted for the disclosure from its outcome in the physical risk scenarios of the 2022 European Central Bank Climate stress test. The results of the flood, heat wave and drought scenarios of the ECB’s 2022 climate stress test have been adjusted to reflect the materiality of chronic physical risk factors over the horizon of the estimated duration of the credit portfolios, by only retaining exposures to non-financial companies to match the model expected by EBA. These figures are not comparable with other banks publications having taken other disclosure options and are published for information only. Those figures are only a first attempt to flag exposures potentially sensitive to physical risk events and should not be understood as direct or integrated risks.

BNP Paribas expects that this first exercise will help to clarify the instructions and working assumptions of a common methodology to be applied for future years. It should also be noted that these analyses are based on an adjusted version of the ECB scenarios initially presenting a time horizon of 2050, to reflect the materiality of the chronic physical risk factors to the expected duration of the credit portfolios, all other things being equal.

Physical risks are defined as the risks of any negative financial impact on the institution stemming from the current or prospective impacts of physical effects of environmental factors on its counterparties or invested assets.

The presentation of assets subject to climate change physical risks in the Group’s balance sheet requires the definition of methodologies and hypothesis to identify the corresponding counterparties.

Two physical risk scenarios were retained by the European Central Bank for its 2022 climate stress test exercise. They are based on anticipating as at today the levels of expected chronic heat levels and an acute river flooding event forecast for 2050. The acute extreme climate events are managed through this thirty-year anticipation of severe events that are plausible in 2050. No chronic physical risk events have been specifically covered in the 2022 ECB climate stress test.

In the ECB drought and heat risk scenario, the economic effects of a severe drought and heatwave in Europe were modelled. Extended periods of hot weather can lead to sizeable output losses across several economic sectors, for example through the decrease in labour productivity for outdoor professional activities. Through their exposure to these vulnerable industries, banks could sustain losses. To limit the scope of the exercise, the scenario only models the shocks to sectoral gross value-added growth. The scenario calibration is based on NGFS (Network for Greening the Financial System) estimates for labour productivity shocks due to heat stress across relevant countries in 2050. Thus, the key transmission channel of heatwave risk to the economy is through labour productivity. For example, a severe heatwave can weaken the productivity of construction workers or that of farmers who face harsher working conditions.

For this drought risk scenario, BNP Paribas provided its corporate exposures not secured by real estate with headquarters in France, Belgium, Italy, Germany and Luxembourg.

River flooding has historically been a major source of physical risk in Europe and, with a rise in extreme levels of precipitation being associated with climate change, this risk is expected to increase. The recent floods during the summer of 2021 show the consequences of heavy rainfall on both human lives lost and physical capital being destroyed or severely impaired. Under the river flooding scenario used by the ECB in its 2022 climate stress test, it is assumed that severe floods sweep across Europe on the first day of projection. While the probability of such an event is very low, it allows relevant flood risk scenarios to be created across the European Union. Flood risk is different across Europe and can vary significantly even within a few kilometres. Therefore, the flood risk scenario accounts for within-country variation in risks. As such, shocks to residential and commercial real estate exposures are estimated at NUTS3 regional level (“*Nomenclature des Unités Territoriales Statistiques*” – the level 3 being departments for France), according to a specific flood risk level.

The flood risk scenario was developed based on insights from the work carried out by the European Commission’s Joint Research Centre on flood risk, as well as from granular geospatial flood risk data collected for the purposes of the ECB economy-wide climate stress test based on the Four Twenty-Seven dataset.

For this flood risk scenario, BNP Paribas provided its commercial real estate exposures located in France, Belgium and Italy.

BANKING BOOK INDICATORS OF CLIMATE CHANGE MITIGATING ACTIONS

Mitigating actions that are not covered in the EU Taxonomy

TABLE 118: CLIMATE CHANGE MITIGATION ACTIONS

		a	b	c	d	e
						31 December 2022
In millions of euros *Type of financial instrument*		**Type of counterparty**	**Gross carrying amount**	**Type of risk mitigated (Climate change transition risk)**	**Type of risk mitigated (Climate change physical risk)**	**Qualitative information on the nature of the mitigating actions**
1	**Bonds (with climate change mitigation/adaptation objective and/or component)**	Financial corporations				Refer to narrative comments
2		Non-financial corporations				
3		Other counterparties	2,687	Yes		
4	**Loans (with climate change mitigation/adaptation objective and/or component)**	Financial corporations	1,560	Yes		Refer to narrative comments
5		Non-financial corporations	11,554	Yes		
6		*of which Loans collateralised by commercial immovable property*	*1,851*	*Yes*		
7		Households	12,713	Yes		
8		*of which Loans collateralised by residential immovable property*	*6,259*	*Yes*		
9		*of which building renovation loans*	*1,329*	*Yes*		
10		Other counterparties	3	Yes		

The table shows the loans and bonds, held in the banking book, measured on a gross carrying amount basis, and that contribute to mitigate climate change risks according to the ESG internal classification principles of the Bank.

Bonds outstanding stand at EUR 2.7 billion and are identified by a third part as aligned with key green bond principles defined by the International Capital Market Association. A matching is done with the banking book portfolio, which is screened on the different criteria collected by external information in order to select the bonds which finance low-carbon and/or climate resilient projects or climate transition projects.

Reported obligations are only those recorded in assets for which the business model is to collect the contractual cash flows and hold the asset until maturity.

Loans outstanding stand at EUR 26 billion measured on the basis of the gross carrying amount. They have been identified by the bank as corresponding to loans with specified climate mitigation purpose based on the transactions tagging process deployed by the Group in the credit process. The internal principles on which the tagging is done are based on the Loan Market Association principles. The outstanding also includes Sustainability-Linked Loans Corporations, whose loan agreement contains at least one performance indicator related to climate change mitigation.

Appendix 1: Sovereign exposures

The BNP Paribas Group is exposed to sovereign risk, which is the risk of a State defaulting on its debt, *i.e.* a temporary or prolonged interruption of debt servicing (interest and/or principal). The Group is thus exposed to credit, counterparty or market risk according to the accounting category of the financial asset issued by the sovereign State.

Exposure to sovereign debt mainly consists of securities. The Group holds sovereign bonds as part of its liquidity management process. Liquidity management is based in particular on holding securities eligible as collateral for refinancing by central banks and includes a substantial share of highly rated debt securities issued by governments, representing a low level of risk. Moreover, as part of its assets and liability management and structural interest rate risk management policy, the Group also holds a portfolio of assets including sovereign debt instruments, with interest-rate characteristics that contribute to its hedging strategies. In addition, the Group is a primary dealer in sovereign debt securities in a number of countries, which leads it to take temporary long and short trading positions, some of which are hedged by derivatives.

Sovereign exposures held by the Group are presented in the table hereafter in accordance with the method defined by the EBA for the 2014 stress tests covering a scope which includes sovereigns as well as local and regional authorities.

BANKING AND TRADING BOOKS SOVEREIGN EXPOSURES BY GEOGRAPHICAL BREAKDOWN

							31 December 2022
	Banking book[1]				Trading book		
					Financial instruments at fair value through profit or loss held for trading (excl. derivatives)	Derivatives[2]	
Exposures *In millions of euros*	**Total**	**of which financial assets at amortised cost**	**of which financial instruments at fair value through equity**	**of which financial instruments at fair value through profit or loss**		**Direct exposures[3]**	**Indirect exposures[4]**
Eurozone							
Belgium	9,914	8,961	953		(676)	(57)	106
France	12,709	11,135	1,528	46	(3,669)	(12)	83
Germany	5,006	4,205	801		3,264	(174)	(2)
Ireland	994	994			(97)	4	
Italy	11,556	9,793	1,763		(211)	1,915	(58)
Portugal	3,101	3,101			(449)	(6)	
Spain	9,835	8,547	1,288		(132)		40
Other eurozone countries	1,395	1,173	222		(663)	701	
TOTAL EUROZONE	**54,510**	**47,909**	**6,555**	**46**	**(2,633)**	**2,371**	**169**
Other European Economic Area countries							
Poland	4,837	3,906	931		8	(2)	
Other EEA countries	749	698	50	1	(24)	(79)	
TOTAL OTHER EEA COUNTRIES	**5,586**	**4,604**	**981**	**1**	**(16)**	**(81)**	**0**
TOTAL EEA	**60,096**	**52,513**	**7,536**	**47**	**(2,649)**	**2,290**	**169**
United States	23,448	14,415	9,033		14,650	(24)	617
Canada	3,531	2,179	1,352		(19)	2,600	
Japan	83	38	45		9,380	575	(151)
United Kingdom	1,950	1,667	283		565		257
Türkiye	2,725	2,299	426		82		(12)
Other	13,349	9,032	4,317		12,503	1,619	(90)

TOTAL	**105,182**	**82,143**	**22,992**	**47**	**34,512**	**7,060**	**790**

(1) Book value after revaluation and before any impairment provision.
(2) Market value.
(3) Sovereign counterparty risk: direct exposure to a sovereign counterparty. This excludes exposure to a non-sovereign counterparty fully or partly covered by a sovereign counterparty.
(4) Positions held with a non-sovereign counterparty, exposing BNP Paribas to a credit risk on a sovereign third party. For example, sale of a CDS to a non-sovereign third party as a hedge against a sovereign's default. This excludes exposures to non-sovereign counterparties fully or partly covered by a sovereign government.

							31 December 2021
	Banking book[(1)]					**Trading book**	
						Derivatives[(2)]	
Exposures *In millions of euros*	**Total**	**of which financial assets at amortised cost**	**of which financial instruments at fair value through equity**	**of which financial instruments at fair value through profit or loss**	**Financial instruments at fair value through profit or loss held for trading (excl. derivatives)**	**Direct exposures[(3)]**	**Indirect exposures[(4)]**
Eurozone							
Belgium	11,557	9,137	2,420		(86)	288	33
France	9,249	8,088	1,161		5,502	(33)	88
Germany	7,336	5,032	2,304		5,003	262	5
Ireland	1,740	1,417	323		17	(17)	1
Italy	9,475	9,268	207		725	8,529	(59)
Portugal	4,039	3,635	404		(126)	(5)	
Spain	12,832	10,469	2,362		(1,702)		
Other eurozone countries	2,404	1,614	791		(1,592)	306	1
TOTAL EUROZONE	**58,632**	**48,660**	**9,972**	**-**	**7,741**	**9,330**	**69**
Other European Economic Area countries							
Poland	5,396	4,449	947		(30)	(188)	
Other EEA countries	1,192	986	205	1	177	(24)	2
TOTAL OTHER EEA COUNTRIES	**6,588**	**5,435**	**1,152**	**1**	**147**	**(212)**	**2**
TOTAL EEA	**65,220**	**54,095**	**11,124**	**1**	**7,888**	**9,118**	**71**
United States	13,565	8,983	4,581		21,470	224	(294)
Canada	3,978	2,293	1,685		165	(26)	
Japan	149	39	111		10,279	659	15
United Kingdom	6,442	4,982	1,461		5		(28)
Türkiye	2,024	1,540	483		326		25
Other	14,452	8,284	6,167		12,185	2,590	(134)
TOTAL	**105,830**	**80,216**	**25,612**	**1**	**52,318**	**12,565**	**(345)**

(1) Book value after revaluation and before any impairment provision.
(2) Market value.
(3) Sovereign counterparty risk: direct exposure to a sovereign counterparty. This excludes exposure to a non-sovereign counterparty fully or partly covered by a sovereign counterparty.
(4) Positions held with a non-sovereign counterparty, exposing BNP Paribas to a credit risk on a sovereign third party. For example, sale of a CDS to a non-sovereign third party as a hedge against a sovereign's default. This excludes exposures to non-sovereign counterparties fully or partly covered by a sovereign government.

Appendix 2: Regulatory capital – Detail

REGULATORY CAPITAL – DETAIL (EU CC1)

		a	a	b	
In millions of euros		**31 December 2022**	**31 December 2021**	**Reference to Table 8**	**Notes**
Common Equity Tier 1 (CET1) capital: instruments and reserves					
1	Capital instruments and the related share premium accounts	26,236	26,236	6	
	of which: Instrument type 1	*26,236*	*26,236*		
2	Retained earnings	77,751	72,913	6	
3	Accumulated other comprehensive income (and other reserves)	(3,319)	454		
3a	Funds for general banking risk				
4	Amount of qualifying items referred to in article 484 (3) and the related share premium accounts subject to phase out from CET1				
5	Minority interests (amount allowed in consolidated CET1)	1,736	1,618	8	(1)
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	4,933	4,543	7	(2)
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**107,337**	**105,763**		
Common Equity Tier 1 (CET1) capital: regulatory adjustments					
7	Additional value adjustments (negative amount)	(1,514)	(1,608)		
8	Intangible assets (net of related tax liability) (negative amount)	(10,559)	(10,091)	3	(3)
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions in article 38 (3) are met) (negative amount)	(160)	(299)		
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments that are not valued at fair value	(12)	(978)		
12	Negative amounts resulting from the calculation of expected loss amounts	(298)	(333)		
13	Any increase in equity that results from securitised assets (negative amount)				
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	(118)	267		
15	Defined-benefit pension fund assets (negative amount)	(457)	(447)		(3)
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	(137)	(53)		
17	Direct, indirect and synthetic holdings of the CET 1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)				
18	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)				

	In millions of euros	a 31 December 2022	a 31 December 2021	b Reference to Table 8	Notes
19	Direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)				
20a	Exposure amount of the following items which qualify for a RW of 1,250%, where the institution opts for the deduction alternative	(223)	(219)		
20b	*of which qualifying holdings outside the financial sector (negative amount)*				
20c	*of which securitisation positions (negative amount)*	*(223)*	*(219)*		
20d	*of which free deliveries (negative amount)*				
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in article 38 (3) are met) (negative amount)				
22	Amount exceeding the 17.65% threshold (negative amount)				
23	*of which direct, indirect and synthetic holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities*				
25	*of which deferred tax assets arising from temporary differences*				
25a	Losses for the current financial year (negative amount)				
25b	Foreseeable tax charges relating to CET1 items except where the institution suitably adjusts the amount of CET1 items insofar as such tax charges reduce the amount up to which those items may be used to cover risks or losses (negative amount)				
26	Empty set in the EU				
27	Qualifying AT1 deductions that exceed the AT1 items of the institution (negative amount)				
27a	Other regulatory adjustments(*)	(2,031)	(26)		
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1)**	**(15,509)**	**(13,787)**		
29	**Common Equity Tier 1 (CET1) capital**	**91,828**	**91,976**		
Additional Tier 1 (AT1) capital: instruments(**)					
30	Capital instruments and the related share premium accounts	11,800	7,487		
31	*of which: classified as equity under applicable accounting standards*	*11,800*	*9,207*	*4*	
32	*of which: classified as liabilities under applicable accounting standards*		*205*		
33	Amount of qualifying items referred to in article 484 (4) and the related share premium accounts subject to phase out from AT1 as described in article 486(3) of CRR(***)		205	4	(4)
33a	Amount of qualifying items referred to in article 494a(1) subject to phase out from AT1				
33b	Amount of qualifying items referred to in article 494b(1) subject to phase out from AT1		750		

		a	a	b	
In millions of euros		31 December 2022	31 December 2021	Reference to Table 8	Notes
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	303	324		
35	*of which: instruments issued by subsidiaries subject to phase out*				
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**12,103**	**8,766**		
Additional Tier 1 (AT1) capital: regulatory adjustments					
37	Direct and indirect holdings by an institution of own AT1 instruments (negative amount)	(37)	(37)		
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)				
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)				
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	(450)	(450)		
42	Qualifying T2 deductions that exceed the T2 items of the institution (negative amount)				
42a	Other regulatory adjustments to AT1 capital				
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**(487)**	**(487)**		
44	**Additional Tier 1 (AT1) capital**	**11,616**	**8,280**		
45	**Tier 1 capital (T1 = CET1 + AT1)**	**103,445**	**100,255**		
Tier 2 (T2) capital: instruments and provisions(**)					
46	Capital instruments and the related share premium accounts	16,883	15,102	5	(5)
47	Amount of qualifying items referred to in article 484 (5) and the related share premium accounts subject to phase out from T2 as described in article 486 (4) CRR				
47a	Amount of qualifying items referred to in article 494a (2) subject to phase out from T2		31	5	(5)
47b	Amount of qualifying items referred to in article 494b (2) subject to phase out from T2(***)	3,588	5,265	5	(5)
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	222	202		
49	*of which instruments issued by subsidiaries subject to phase out*				
50	Credit risk adjustments		83		
51	**Tier 2 (T2) capital before regulatory adjustments**	**20,692**	**20,683**		
Tier 2 (T2) capital: regulatory adjustments					

	In millions of euros	a 31 December 2022	a 31 December 2021	b Reference to Table 8	Notes
52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	(137)	(138)		
53	Direct, indirect and synthetic holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)				
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)				
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	(3,132)	(3,088)	1	(6)
56a	Qualifying eligible liabilities deductions that exceed the eligible liabilities items of the institution (negative amount)				
56b	Other regulatory adjustments to T2 capital	(307)	(455)		
57	**Total regulatory adjustments to Tier 2 (T2) capital**	(3,575)	(3,681)		
58	**Tier 2 (T2) capital**	**17,117**	**17,001**		
59	**Total capital (TC = T1 + T2)**	**120,562**	**117,256**		
60	**Total risk-weighted assets**	**744,851**	**713,671**		
Capital ratios and buffers					
61	Common Equity Tier 1 (as a percentage of total risk exposure amount)	12.33%	12.89%		
62	Tier 1 (as a percentage of total risk exposure amount)	13.89%	14.05%		
63	Total capital (as a percentage of total risk exposure amount)	16.19%	16.43%		
64	Institution CET1 overall capital requirement (CET1 requirement in accordance with article 92 (1) CRR, plus additional CET1 requirement which the institution is required to hold in accordance with point (a) of article 104(1) CRD, plus combined buffer requirement in accordance with article 128(6) CRD) expressed as a percentage of risk exposure amount)	9.45%	9.23%		
65	*of which capital conservation buffer requirement*	*2.50%*	*2.50%*		
66	*of which countercyclical buffer requirement*	*0.09%*	*0.03%*		
67	*of which systemic risk buffer requirement*	*0.08%*	*0.00%*		
67a	*of which Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer*	*1.50%*	*1.50%*		
67b	*of which Pillar 2 Requirements – additional CET1 SREP requirements)*	*0.78%*	*0.70%*		
68	Common Equity Tier 1 available to meet buffer (as a percentage of risk exposure amount)	6.80%	7.11%		
Amounts below the thresholds for deduction (before risk weighting)					
72	Direct and indirect holdings of own funds and eligible liabilities of financial sector entities where the institution does not have a significant	4,259	3,849	2	(6)

	In millions of euros	a 31 December 2022	a 31 December 2021	b Reference to Table 8	Notes
	investment in those entities (amount below 10% threshold and net of eligible short positions)				
73	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 17.65% thresholds and net of eligible short positions)	4,635	4,374	1	(6)
75	Deferred tax assets arising from temporary differences (amount below 17.65% threshold, net of related tax liability where the conditions in article 38 (3) are met)	3,308	2,691		
Applicable caps on the inclusion of provisions in Tier					
76	Credit risk adjustments included in T2 in respect of exposures subject to standardised approach (prior to the application of the cap)				
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	3,173	2,827		
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)		83		
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	2,035	1,952		
Capital instruments subject to phase out arrangements (only applicable between 1 January 2013 and 1 January 2022)					
80	Current cap on CET1 instruments subject to phase out arrangements				
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)				
82	Current cap on AT1 instruments subject to phase out arrangements		1,012		
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)				
84	Current cap on T2 instruments subject to phase out arrangements		185		
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)				

(*) The other regulatory adjustments include adjustments related to the transitional IFRS provisions and -EUR 962 million for a share buy-back programme under the "ordinary" distribution policy (subject to usual conditions).

(**) In accordance with the eligibility rules for grandfathered debt in additional Tier 1 and Tier 2 capital applicable.

(***)This amount includes grandfathered debts issued under the law of third countries to the European Union without a bail-in clause under Regulation (EU) No. 2019/876.

(1) Minority interests are adjusted for their capitalisation surplus for regulated entities. For other entities, minority interests are not recognised in full Basel 3.

(2) Profit eligible of the period is mainly reduced by related proposed distribution of dividend on result.

(3) The deduction of intangible assets and pension plans is calculated net of related deferred tax liabilities.

(4) Own funds instruments that will be progressively be excluded (Grandfathered instruments), including instruments issued by subsidiaries.

(5) A prudential discount is applied to Tier 2 capital instruments with less than five years of residual maturity.

(6) Holdings of equity instruments in financial institutions are recorded in the banking book, as detailed in the consolidated accounting balance sheet to the prudential balance sheet reconciliation, as well as in the trading book.

Appendix 3: Countercyclical capital buffer and G-SIB buffer

COUNTERCYCLICAL CAPITAL BUFFER

The calculation and the amount of the BNP Paribas countercyclical capital buffer are given in the tables below in accordance with the instructions of Commission Delegated Regulation (EU) No. 2015/1555 of 28 May 2015.

INSTITUTION-SPECIFIC COUNTERCYCLICAL CAPITAL BUFFER (EU CCYB2)

		a
	In millions of euros	**31 December 2022**
010	Total risk-weighted assets	744,851
020	BNP Paribas countercyclical capital buffer rate	0.09%
030	Countercyclical capital buffer requirement	682

At 31 December 2022, the BNP Paribas countercyclical capital buffer rate is 0.09% against 0.03% at 31 December 2021.

The countercyclical capital buffer is calculated as the weighted average of the countercyclical buffer rates that apply in the countries where the relevant credit exposures of the Group are located. The weight applied to the countercyclical buffer rate in each country is the share of own funds requirements in total own funds requirements relating to relevant credit exposures in the territory in question.

At 31 December 2022, BNP Paribas' countercyclical capital buffer rate of 0.03% was due to the rates applicable in Bulgaria (1%), Denmark (2.0%), Estonia (1%), Iceland (2%), Luxembourg (0.5%), Norway (2%), Czech Republic (1.5%), United Kingdom (1%), Romania (0.5%), Slovakia (1%), Sweden (1%) and Hong Kong (1%). This rate is expected to be around 0.4% at 31 December 2023 due to the activation or increase in requirements announced by certain European countries (see table hereinafter).

GEOGRAPHICAL DISTRIBUTION OF CREDIT EXPOSURES RELEVANT FOR THE CALCULATION OF THE COUNTERCYCLICAL CAPITAL BUFFER (CCYB1)

	a	b	c	d	e	g	h	i	j	k	l	m	
												31 Dec. 2022	31 Dec. 2023
	General credit exposures		Relevant credit exposures – Market risk			Own fund requirements							
In millions of euros	Exposure value under the standardised approach	Exposure value under the IRB approach	Exposure value under the standardised approach	Exposure value under the IRB approach	Securitisation exposures Exposure value for non-trading book	of which credit risk exposure	of which market risk exposure	of which securitisation positions	Total	Risk-weighted exposure amounts	Own fund requirement weights (%)	Countercyclical buffer rate (%)	Countercyclical buffer rate (%) announced[**]
010 Breakdown by country													
Europe[*]	**222,938**	**707,416**			**61,939**	**34,904**	**1,515**	**814**	**37,233**	**465,417**	**74%**		
of which Germany	19,849	27,776			2,515	1,882		32	1,914	23,927	4%		0.75%
of which Bulgaria	501	146				38			38	478	0%	1.000%	2.00%
of which Croatia	8	90				4			4	44	0%		0.50%
of which Denmark	1,806	3,300				195			195	2,443	0%	2.000%	2.50%
of which Estonia	2	109				5			5	60	0%	1.000%	1.50%
of which France	63,636	287,145			39,123	14,033	1,493	503	16,029	200,362	32%		0.50%
of which Hungary	253	1,436				61			61	757	0%		0.50%
of which Ireland	955	9,420			750	440		10	450	5,627	1%		1.00%
of which Iceland	1	21				2			2	24	0%	2.000%	2.00%
of which Lithuania	18	7				2			2	21	0%		1.00%
of which Luxembourg	3,260	37,691				1,806			1,806	22,579	4%	0.500%	0.50%
of which Norway	462	2,811				83			83	1,038	0%	2.000%	2.50%
of which Netherlands	4,850	20,154			1,190	909		14	922	11,527	2%		1.00%
of which Czech Republic	757	361				62			62	778	0%	1.500%	2.50%
of which Romania	920	377				64			64	796	0%	0.500%	1.00%

	a	b	c	d	e	g	h	i	j	k	l	m	
												31 Dec. 2022	**31 Dec. 2023**
	General credit exposures		**Relevant credit exposures – Market risk**			**Own fund requirements**							
In millions of euros	**Exposure value under the standardised approach**	**Exposure value under the IRB approach**	**Exposure value under the standardised approach**	**Exposure value under the IRB approach**	**Securitisation exposures Exposure value for non-trading book**	**of which credit risk exposure**	**of which market risk exposure**	**of which securitisation positions**	**Total**	**Risk-weighted exposure amounts**	**Own fund requirement weights (%)**	**Countercyclical buffer rate (%)**	**Countercyclical buffer rate (%) announced(**)**
of which United Kingdom	12,280	58,555			10,041	2,200		152	2,352	29,396	5%	1.000%	2.00%
of which Slovakia	147	54				12			12	153	0%	1.000%	1.50%
of which Sweden	2,259	2,484			448	198		4	202	2,531	0%	1.000%	2.00%
North America	**65,649**	**93,234**			**28,402**	**6,561**	**38**	**425**	**7,023**	**87,793**	**14%**		
Asia Pacific	**8,312**	**50,610**			**1,894**	**2,892**		**23**	**2,915**	**36,436**	**6%**		
of which Australia	62	7,820			4	213		0	214	2,669	0%		1.00%
of which Hong Kong	1,796	7,785				393			393	4,918	1%	1.000%	1.00%
Rest of the world	**23,745**	**34,848**			**43**	**2,967**	**5**	**2**	**2,974**	**37,171**	**6%**		
020TOTAL	**320,644**	**886,109**			**92,278**	**47,324**	**1,558**	**1,264**	**50,145**	**626,817**	**100%**	**0.092%**	**0.37%**

(*) Within the European Union, the European Free Trade Association (EFTA) and the United Kingdom.
(**) According to the rates published on the ESRB website as at 10 January 2023.

G-SIB BUFFER

The measurement approach of the global systemic importance is indicator-based. The selected indicators reflect the size of banks, their interconnectedness, the use of banking information systems for the services they provide, their global cross-jurisdictional activity and their complexity. The methodology is described in a document published in July 2013 by the Basel Committee, entitled *Global systemically important banks: updated assessment methodology and the higher loss absorbency requirement* (BCBS 255).

The Group received notification from the *Autorité de contrôle prudentiel et de résolution* (ACPR), dated 18 November 2022, that it was on the 2022 list of global systemically important financial institutions in sub-category 2, corresponding to its score in the database at end-2021.

As a result, the G-SIB buffer requirement for the Group, applicable from 1 January 2023 remains unchanged at 1.5% of the total exposure amount.

SYSTEMIC RISK BUFFER (G-SIB)

In millions of euros	31 December 2022
Cross-juridictional activity	
1 Cross-juridictional claims	1,359,358
2 Cross-juridictional liabilities	1,255,194
Size	
3 Total exposures	2,629,311
Interconnectedness	
4 Intra-financial system assets	336,835
5 Intra-financial system liabilities	298,893
6 Securities outstanding	317,231
Substitutability	
7 Assets under custody	5,854,163
Trading volume fixed income	1,308,393
Trading volume equities and other securities	2,621,514
Financial institution infrastructure	
8 Payment activity	58,091,405
Underwritten transactions in debt and equity markets	
9 Underwritten transactions in a debt and equity markets	178,373
Complexity	
10 Notional amount of over-the-counter (OTC) derivatives	26,324,698
11 Level 3 assets	29,469
12 Trading and available for sale (AFS) securities	73,923

Appendix 4: Capital requirements of significant subsidiaries

The following tables give the capital requirements of significant subsidiaries (see paragraph *Significant subsidiaries* in section 5.2 *Scope of application*) by type of risk, as contribution to the Group's total capital requirement.

BNP PARIBAS FORTIS GROUP

		RWAs		Capital requirements
In millions of euros		**31 December 2022**	**31 December 2021**	**31 December 2022**
1	**Credit risk**	**133,033**	**128,365**	**10,643**
2	of which standardised approach[1]	59,185	50,824	4,735
4a	of which advanced IRB (A-IRB) approach	59,657	61,686	4,773
5	of which equities under the simple weighting approach	14,192	15,856	1,135
6	**Counterparty credit risk**	**1,402**	**1,859**	**112**
7	of which SACCR (derivatives)[2]	604	761	48
8	of which internal model method (IMM)	580	956	46
8a	of which exposures to CCP related to clearing activities	152	38	12
8b	of which CVA	67	97	5
9	of which other	1	8	
16	**Securitisation exposures in the banking book**	**724**	**1,276**	**58**
17	of which internal ratings-based approach (SEC-IRBA)	295	650	24
18	of which standardised approach (SEC-SA)	13	15	1
19	of which external ratings-based approach (SEC-ERBA)	416	610	33
20	**Market risk**	**788**	**402**	**63**
21	of which standardised approach	788	402	63
23	**Operational risk**	**10,806**	**11,174**	**864**
EU 23a	of which basic indicator approach	1,912	1,634	153
EU 23b	of which standardised approach	2,449	2,395	196
EU 23c	of which Advanced Measurement Approach (AMA)	6,444	7,146	516
24	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**4,088**	**4,074**	**327**
29	**TOTAL**	**150,840**	**147,150**	**12,067**

(1) Since 30 June 2021, exposures in the form of units or shares in undertakings for collective investment, previously weighted according to the simple weighting method, are now treated according to the transparency approach. The underlying exposures of these collective investment

In millions of euros	RWAs 31 December 2022	RWAs 31 December 2021	Capital requirements 31 December 2022

undertakings are weighted according to the standardised credit risk approach.

(2) Since 30 June 2021, in accordance with Regulation (EU) No. 2019/876 (CRR 2), the exposure at default for repurchase agreements and derivatives, previously modelled according to the mark-to-market approach, is now modelled according to the standardised approach, corresponding to the sum of the replacement cost and the potential future exposure.

BNL GROUP

	In millions of euros	RWAs 31 December 2022	RWAs 31 December 2021	Capital requirements 31 December 2022
1	**Credit risk**	**38,097**	**42,898**	**3,048**
2	of which standardised approach(1)	7,320	10,253	586
EU 4a	of which advanced IRB (A-IRB) approach	29,638	31,506	2,371
5	of which equities under the simple weighting approach	1,139	1,139	91
6	**Counterparty credit risk**	**205**	**480**	**16**
7	of which SACCR (derivatives)(2)	184	322	15
8	of which internal model method (IMM)			
EU 8a	of which exposures to CCP related to clearing activities			
EU 8b	of which CVA	20	158	2
9	of which other			
16	**Securitisation exposures in the banking book**	**507**	**476**	**41**
17	of which internal ratings-based approach (SEC-IRBA)	393	365	31
18	of which standardised approach (SEC-SA)	113	112	9
19	of which external ratings-based approach (SEC-ERBA)			
20	**Market risk**	**2**	**6**	
21	of which standardised approach	2	6	
23	**Operational risk**	**3,393**	**3,626**	**271**
EU 23a	of which basic indicator approach	54	157	4
EU 23b	of which standardised approach	112	319	9
EU 23c	of which Advanced Measurement Approach (AMA)	3,227	3,150	258
24	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**19**	**4**	**1**
29	**TOTAL**	**42,223**	**47,490**	**3,378**

(1) Since 30 June 2021, exposures in the form of units or shares in undertakings for collective investment, previously weighted according to the simple weighting method, are now treated according to the transparency approach. The underlying exposures of these collective investment

In millions of euros	RWAs 31 December 2022	RWAs 31 December 2021	Capital requirements 31 December 2022

undertakings are weighted according to the standardised credit risk approach.

(2) Since 30 June 2021, in accordance with Regulation (EU) No. 2019/876 (CRR 2), the exposure at default for repurchase agreements and derivatives, previously modelled according to the mark-to-market approach, is now modelled according to the standardised approach, corresponding to the sum of the replacement cost and the potential future exposure.

In millions of euros		RWAs 31 December 2022	RWAs 31 December 2021	Capital requirements 31 December 2022
1	**Credit risk**	**48,526**	**43,246**	**3,882**
2	of which standardised approach(1)	48,048	42,566	3,844
EU 4a	of which advanced IRB (A-IRB) approach	93	194	7
5	of which equities under the simple weighting approach	385	486	31
6	**Counterparty credit risk**	**817**	**1,252**	**65**
7	of which SACCR (derivatives)(2)	80	246	6
8	of which internal model method (IMM)	278	252	22
EU 8a	of which exposures to CCP related to clearing activities	378	658	30
EU 8b	of which CVA	79	95	6
9	of which other			
16	**Securitisation exposures in the banking book**	**3**	**4**	
17	of which internal ratings-based approach (SEC-IRBA)			
18	of which external ratings-based approach (SEC-ERBA)	1	2	
19	of which standardised approach (SEC-SA)	2	2	
20	**Market risk**	**5**	**1**	
21	of which standardised approach	5	1	
23	**Operational risk**	**4,492**	**4,879**	**359**
EU 23a	of which basic indicator approach	146	130	12
EU 23b	of which standardised approach	3,564	3,566	285
EU 23c	of which Advanced Measurement Approach	783	1,183	63
24	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**2,028**	**854**	**162**
29	**TOTAL**	**55,872**	**50,235**	**4,470**

(1) Since 30 June 2021, exposures in the form of units or shares in undertakings for collective investment, previously weighted according to the simple weighting method, are now treated according to the transparency approach. The underlying exposures of these collective investment undertakings are weighted according to the standardised credit risk approach.

(2) Since 30 June 2021, in accordance with Regulation (EU) No. 2019/876 (CRR 2), the exposure at default for repurchase agreements and derivatives, previously modelled according to the mark-to-market approach, is now modelled according to the standardised approach, corresponding to the sum of the replacement cost and the potential future exposure.

In millions of euros		RWAs 31 December 2022	RWAs 31 December 2021	Capital requirements 31 December 2022
1	**Credit risk**	**47,935**	**42,544**	**3,835**
2	of which standardised approach(1)	47,670	42,262	3,814
EU 4a	of which advanced IRB (A-IRB) approach			
5	of which equities under the simple weighting approach	265	282	21
6	**Counterparty credit risk**	**163**	**342**	**13**
7	of which SACCR (derivatives)(2)	84	246	7
8	of which internal model method (IMM)			
EU 8a	of which exposures to CCP related to clearing activities			
EU 8b	of which CVA	79	95	6
9	of which other			
16	**Securitisation exposures in the banking book**	**3**	**4**	
17	of which internal ratings-based approach (SEC-IRBA)			
18	of which external ratings-based approach (SEC-ERBA)	1	2	
19	of which standardised approach (SEC-SA)	2	2	
20	**Market risk**	**0**	**-**	**0**
21	of which standardised approach			
23	**Operational risk**	**3,651**	**3,634**	**292**
EU 23a	of which basic indicator approach	89	72	7
EU 23b	of which standardised approach	3,562	3,562	285
EU 23c	of which Advanced Measurement Approach			
24	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**58**	**70**	**5**
29	**TOTAL**	**51,811**	**46,594**	**4,145**

(1) Since 30 June 2021, exposures in the form of units or shares in undertakings for collective investment, previously weighted according to the simple weighting method, are now treated according to the transparency approach. The underlying exposures of these collective investment undertakings are weighted according to the standardised credit risk approach.

(2) Since 30 June 2021, in accordance with Regulation (EU) No. 2019/876 (CRR 2), the exposure at default for repurchase agreements and derivatives, previously modelled according to the mark-to-market approach, is now modelled according to the standardised approach, corresponding to the sum of the replacement cost and the potential future exposure.

In millions of euros		RWAs 31 December 2022	RWAs 31 December 2021	Capital requirements 31 December 2022
1	**Credit risk**	**57,112**	**54,454**	**4,569**
2	of which standardised approach[1]	49,970	43,667	3,998
EU 4a	of which advanced IRB (A-IRB) approach	7,096	10,710	568
4	of which equities positions under the simple weighting approach	46	76	4
6	**Counterparty credit risk**	**37**	**31**	**3**
7	of which SACCR (derivatives)[2]	8	7	1
8	of which internal model method (IMM)			
EU 8a	of which exposures to CCP related to clearing activities			
EU 8b	of which CVA	28	24	2
9	of which other			
16	**Securitisation exposures in the banking book**	**341**	**321**	**27**
17	of which internal ratings-based approach (SEC-IRBA)	154	153	12
18	of which external ratings-based approach (SEC-ERBA)	186	168	15
19	of which standardised approach (SEC-SA)			
20	**Market risk**	**216**	**8**	**17**
21	of which standardised approach	216	8	17
23	**Operational risk**	**6,829**	**6,714**	**546**
EU 23a	of which basic indicator approach	188	148	15
EU 23b	of which standardised approach	1,913	1,933	153
EU 23c	of which Advanced Measurement Approach	4,727	4,632	378
24	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**1,557**	**1,470**	**125**
29	**TOTAL**	**66,091**	**62,997**	**5,287**

(1) Since 30 June 2021, exposures in the form of units or shares in undertakings for collective investment, previously weighted according to the simple weighting method, are now treated according to the transparency approach. The underlying exposures of these collective investment undertakings are weighted according to the standardised credit risk approach.

(2) Since 30 June 2021, in accordance with Regulation (EU) No. 2019/876 (CRR 2), the exposure at default for repurchase agreements and derivatives, previously modelled according to the mark-to-market approach, is now modelled according to the standardised approach, corresponding to the sum of the replacement cost and the potential future exposure.

In millions of euros		RWAs		Capital requirements
		31 December 2022	31 December 2021	31 December 2022
1	**Credit risk**	**24,683**	**23,598**	**1,975**
2	of which standardised approach[(1)]	17,374	16,571	1,390
EU 4a	of which advanced IRB approach	6,774	6,561	542
5	of which equities under the simple weighing approach	535	466	43
6	**Counterparty credit risk**	**28**	**50**	**2**
7	of which SACCR (derivatives)[(2)]	24	40	2
8	of which internal model method (IMM)			
EU 8a	of which exposures to CCP related to clearing activities			
EU 8b	of which CVA	3	2	
9	of which other	1	8	
15	**Settlement risk**			
16	**Securitisation exposures in the banking book**	**26**	**30**	**2**
17	of which internal ratings-based approach (SEC-IRBA)			
18	of which external ratings-based approach (SEC-ERBA)	26	29	2
19	of which standardised approach		1	
20	**Market risk**	**13**	**6**	**1**
21	of which standardised approach	13	6	1
23	**Operational risk**	**1,495**	**1,755**	**120**
EU 23a	of which basic indicator approach	281	179	22
EU 23b	of which standardised approach	228	225	18
EU 23c	of which Advanced Measurement Approach	986	1,351	79
24	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**192**	**214**	**15**
29	**TOTAL**	**26,438**	**25,654**	**2,115**

(1) Since 30 June 2021, exposures in the form of units or shares in undertakings for collective investment, previously weighted according to the simple weighting method, are now treated according to the transparency approach. The underlying exposures of these collective investment undertakings are weighted according to the standardised credit risk approach.

(2) Since 30 June 2021, in accordance with Regulation (EU) No. 2019/876 (CRR 2), the exposure at default for repurchase agreements and derivatives, previously modelled according to the mark-to-market approach, is now modelled according to the standardised approach, corresponding to the sum of the replacement cost and the potential future exposure.

Appendix 5: Environmental, Social and Governance risk

ESG ASSESSMENT (ESG-A)

The ESG analysis of corporate clients has been expanded to all sectors, thanks to a new risk assessment tool: the ESG Assessment (ESG-A). This assessment aims to perform a systematic ESG analysis as part of the credit process by integrating ESG criteria within the other criteria included in the assessment of the clients' credit profile.

The ESG-A covers the environmental (climate and biodiversity), social (health and safety at work and impact on communities) and governance (business ethics) dimensions through a set of questions, supplemented by an analysis of the controversies affecting the client. The questionnaires developed in this context are specific to each sector in order to better integrate the challenges and issues specific to related activities.

Overall, ESG Assessment enables to:

- assess clients' compliance with sectoral policies;
- assess the maturity of the clients' ESG strategy and its implementation as well as their capability to monitor their ESG key material issues and publish performance indicators;
- determine whether actions plans have been undertaken;
- identify if some commitments have been taken by the clients on specific topics;
- get a sense of forward-looking ESG path of the clients.

The deployment of ESG-A, included in the credit files for all business sectors and business groups, will enable the RISK Function to exercise greater control over the ESG dimensions during credit committees, on a documented basis. Currently designed for large companies, this framework will be gradually adapted and extended to different customer segments.

This ESG-A which is being rolled-out for corporate clients covers the performance assessment of the counterparty and includes questions on the way ESG-related issues are tackled by the Bank's clients. This set of questions cover, for example, the following aspects:

- Environment:
  - existence of GHG emission reduction targets set with a clear deadline,
  - use of sectorial standard metric to measure GHG intensity,
  - status and the target classification related to the "Science Based Target" initiative,
  - existence of a Net-Zero emission target or a carbon neutrality target,
  - extent of physical risk exposure and actions to mitigate it,
  - the way biodiversity matters are addressed by the company;
- Social:
  - existence of a health & safety management system,
  - ability to disclose/provide performance indicators with regards to health & safety aspects to workers relying on frequency and/or severity rates,
  - commitment to disclose or provide health & safety indicators for workers and subcontractors;
- Governance:
  - existence of a code of conduct in place to address ethical considerations, deployment of a whistleblowing system,
  - relevant employees' compensation (such as top management variable compensation) linked to ESG performance,
  - transparency: check if company's extra-financial information (*i.e.* indicators or policies) are audited by an external third party.

As previously mentioned, the questionnaire aims at guiding the assessment and dialogue with the client, and, among other things, it enables to evaluate counterparty's governance capability to identity and monitor ESG key material issues as well as to publish ESG performance indicators.

RISK IDENTIFICATION & ASSESSMENT PROCESS ("RISK ID")

BNP Paribas' risk identification & assessment process (Risk ID) is part of the Group risk management framework. Risk ID is a fully integrated process, involving business lines, the RISK Function and the other control functions throughout the Group. It serves to maintain up-to-date Risk Inventories (both at local and Group levels). The Risk ID process aims at the identification and assessment of all the risks the bank is, or might be exposed to, in a forward-looking perspective.

The Risk ID process covers:

- all sets of activities and exposures, on and off-balance sheet, as well as new products and activities;
- all risk types and all geographies;
- all business lines and legal entities.

As part of the Group's Risk ID process, all business lines are requested to update, on a regular basis, their Risk Inventory, which consists in identifying a set of elementary severe but plausible scenarios ("risk events") corresponding to the way the risk types the Group is or might be exposed to, could materialise. Each scenario is attached to one of the 102 risk types of the Group reference risk types, called the taxonomy, and is associated with a set of risk factors (selected from the 109 proposed in the risk factor taxonomy) that are liable to trigger, favour or aggravate the scenario. There can be up to five risk factors for a given scenario. A scenario can be linked to individual counterparties; to one (or several) specific sector(s) and all activities are covered.

Among the 109 risk factors proposed in the risk factor taxonomy, 13 pertain to ESG categories, of which:

- 9 are totally or partially related to climate and environmental concerns;
- 5 are totally or partially related to social concerns;
- 3 are totally or partially related to governance concerns.

These ESG-related risk factors have been designed in line with EBA and ECB recommendations. They are used in the Risk ID process to assess, in a forward-looking way, how C&E, Social and Governance risk factors could give rise to elementary scenarios, corresponding to the materialisation of, virtually, any kind of risk types, be they financial or non-financial.

The ESG risk factors are presented in the following table:

Level 1 Risk factor type	Level 2 Risk factor type		Level 3 Risk factor type
Environmental, social & governance	Physical climate change risk factors	1	Acute physical impact of climate change
		2	Chronic physical impact of climate change
	Transition due to climate change risk factors	3	Transition to a low carbon economy to mitigate climate change – Policy changes
		4	Transition to a low carbon economy to mitigate climate change – Technological changes
		5	Transition to a low carbon economy to mitigate climate change – Behavioural changes
	Other environmental risk factors	6	Biodiversity loss, land degradation and other nature-related risk factors
		7	Pollution and other environmental risk factors
	Social risk factors	8	Human rights – Local communities & consumers
		9	Human rights – Workforce
		10	Other social risk factors
	Governance risk factors	11	Governance risk factors linked to inadequate management of E & S risks
		12	Non-compliance with corporate governance framework / codes
	ESG related liability consequences		ESG-related liability consequences

Transmission channels: the potential connections between climate & environment (C&E), social and governance-related risk factors and the materialisation of traditional types of risk (transmission channels) are multifaceted, as presented in the tables below:

C&E-related risk factors

Climate change-related physical risk factors

- *Acute*
- *Chronic*

Transition to low carbon economy risk factors

- *Policy changes*
- *Technological changes*
- *Behavioural / consumer preference changes*

C&E-related governance risk factor

C&E-related liability risk factor

Transmission channels

- Property damages
- Operational disruption
- New climate-related regulations
- Supply chain disruption
- Losses of business opportunity
- Stranded assets and workers
- Productivity changes
- Increased costs (compliance, legal)
- Impact on wealth and solvency
- Sanctions & fines
- Shifts in prices and asset values
- Labour market and employees' expectations
- Clients' expectations
- Demography / longevity
- Political decisions/social unrest

Scenarios
(materialisation of traditional risk types)

Financial risks

- *Business & strategic risk (sector exit)*
- *Credit risk (default, collateral depreciation, country risk…)*
- *Market risk (repricing…)*
- *Liquidity risk (increased demand, risk of climate-related outflows / default of inflows…)*
- *Insurance underwriting risk (claims increase…)*

Non-financial risks

- *Execution risk*
- *ICT (obsolescence, disruptions…)*
- *Damage to physical assets*
- *Third-party risk (failure, non-compliance…)*
- *Legal risk*
- *Health issue and human resources safety risks*

Social-related risk factors

Human rights – Local communities & consumers

Human rights – Workforce

Other social risk factors

(due to environmental and health concerns or change in social policies or market sentiment linked to the social transformation towards more inclusive, equitable society or the evolution of social norms, preferences, and expectations)

Social-related governance risk factor

Social-related liability risk factor

Transmission channels

- New social-related regulations
- Increased costs (compliance, legal)
- Impact on wealth and solvency
- Sanctions & fines
- Legal proceeds
- Labour market and employees' expectations
- Clients' expectations
- Reputational hit leading to business impacts
- Political decisions
- Social unrest

Scenarios
(materialisation of traditional risk types)

Financial risks

- *Business & strategic risk (sector exit)*
- *Credit risk (default, collateral depreciation, country risk…)*
- *Market risk (repricing…)*
- *Liquidity risk (increased demand, risk of climate-related outflows / default of inflows…)*
- *Insurance underwriting risk (claims increase…)*

Risques non-financiers

- *Execution risk*
- *ICT (obsolescence, disruptions…)*
- *Damage to physical assets*
- *Third-party risk (failure, non-compliance…)*
- *Legal risk*
- *Health issue and human resources safety risks*

Governance-related risk factors

Governance risk factorslinked to inadequate management of E&S risks

Non-compliance with corporate governance frameworks or codes

Governance-related liability risk factor

Transmission channels

- New governance-related regulations
- Increased costs (compliance, legal)
- Sanctions & fines
- Legal proceeds
- Labour market and employees' expectations
- Clients' expectations
- Reputational hit leading to business impacts

Scenarios
(materialisation of traditional risk types)

Financial risks

- *Business & strategic risk (sector exit)*
- *Credit risk (default, collateral depreciation, country risk...)*
- *Market risk (repricing...)*
- *Liquidity risk (increased demand, risk of climate-related outflows / default of inflows...)*
- *Insurance underwriting risk (claims increase...)*

Non-financial risks

- *Execution risk*
- *ICT (obsolescence, disruptions...)*
- *Damage to physical assets*
- *Third-party risk (failure, non-compliance...)*
- *Legal risk*
- *Health issue and human resources safety risks*

Appendix 6: List of tables and figures

Pages

Appendix 7: Acronyms

Acronyms	
ABCP	Asset-Backed Commercial Paper
ABE	*Autorité Bancaire Européenne (EBA)*
ABS	Asset-Backed Securities
ACPR	*Autorité de contrôle prudentiel et de résolution*
ALCo	Asset and Liability Committee
ALM	Asset and Liability Management
AMA	Advanced Measurement Approach
BNB	*Banque Nationale de Belgique*
bp	Basis points
BRRD	Bank Recovery and Resolution Directive
CCCA	Collective Commitment to Climate Action
CCIRC	Control, Risk Management and Compliance Committee
CCF	Credit Conversion Factor
CDO	Collaterised Debt Obligations
CC	Central Counterparty
CDS	Credit Default Swap
CEBS	Committee of European Banking Supervisors
CGEN	Corporate Governance, Ethics, Nominations and CSR Committee
CLO	Collaterised Loan Obligations
CMBS	Commercial Mortgage Backed Securities
CMG	Crisis Management Group
CRD	Capital Requirement Directive
CRM	Comprehensive Risk Measure
CRR	Capital Requirement Regulation
CSR	Corporate Social Responsibility
CVA	Credit Valuation Adjustment
D-SIBS	Domestic Systemically Important Banks
EAD	Exposure at Default
EBA	European Banking Authority
ECB	European Central Bank
EDTF	Enhanced Disclosure Task Force
EEA	European Economic Area
EEPE	Effective Expected Positive Exposure
EL	Expected Loss
EP4	4th version of the Equator Principles
ESG	Environmental, social and governance
ESG-A	ESG Assessment
EU	European Union
FBF	*Fédération Bancaire Française*

Acronyms

Fed	Federal Reserve System of the United States
FICC	Fixed Income Credit and Commodities
FSB	Financial Stability Board
GES	Greenhouse gas (GHG) emissions
G-SIBs	Global systemically important banks
GDP	Gross Domestic Product
GRR	Global Recovery Rate
GSIS	Group Sustainability and Incentive Scheme
GTS	Growth Technology Sustainability
HQLA	High Quality Liquid Assets
HRC	Homogeneous Risk Category
ICAAP	Internal Capital Adequacy Assessment Process
IFRS	International Financial Reporting Standards
ILAAP	Internal Liquidity Adequacy Assessment Process
ILO	International Labour Organization
IMF	International Monetary Fund
IRBA	Internal Ratings-Based Approach (internal models)
IRC	Incremental Risk Charge
ISDA	International Swaps and Derivatives Association
KYC	Know Your Customer
LGD	Loss Given Default
kWh/m^2	Kilowatt per hour per square metre
LGD	Loss Given Default
LTV	Loan-to-Value
MDA	Maximum Distributable Amount
MREL	Minimum Requirement for own funds and Eligible Liabilities
MTN	Medium-Term Note
NACE	Statistical classification of economic activities
NBI	Net Banking Income
NEST	Network of Experts in Sustainability Transitions
NGFS	Network for Greening the Financial System
NPV	Net Present Value
NSFR	Net Stable Funding Ratio
NUTS3	Nomenclature of territorial units statistics - Level 3
NZBA	Net-Zero Banking Alliance
OECD	Organisation for Economic Cooperation and Development
OS-Climate	Open-Source Climate
PACTA	Paris Agreement Capital Transition Assessment
PD	Probability of Default
PRB	Principles for Responsible Banking
PRI	Principles for Responsible Investment

Acronyms

PVA	Prudent Valuation Adjustment
RAS	Risk Appetite Statement
RISK ID	Risk Identification
RMBS	Residential Mortgage-Backed Securities
RW	Risk weight
SDG	United Nations Sustainable Development Goals
SFT	Securities Financing Transaction
SME	Small and Medium-sized Enterprise
SR	Policyholders' Surplus Reserve
SRB	Single Resolution Board
SREP	Supervisory Review and Evaluation Process
SRT	Significant Risk Transfer
STS	Simple, transparent et standard
TLAC	Total Loss Absorbing Capacity
TLTRO	Targeted Long-Term Refinancing Operation
VaR	Value at Risk

6 INFORMATION ON THE PARENT COMPANY FINANCIAL STATEMENTS 31 DECEMBER 2022

6.1 BNP Paribas SA financial statements

On 1st October 2022, the retroactive merger from 1st January of BNP Paribas Securities Services into BNP Paribas SA was completed by absorption. On that date, BNP Paribas Securities Services was dissolved by operation of law without liquidation.

The legal disappearance of BNP Paribas Securities Services led to the closure of fourteen branches following the transfer of their assets and liabilities to BNP Paribas SA branches in each country in Europe, America and Asia. This transaction also resulted in the creation of four new branches of BNP Paribas SA in Switzerland, Greece, Jersey and Guernsey. Thus, the 2022 financial statements are prepared taking this legal transaction into account.

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2022

In millions of euros	Notes	Year to 31 December 2022	Year to 31 December 2021
Interest income	2.a	29,450	15,942
Interest expense	2.a	(22,333)	(9,409)
Income on equities and other variable instruments	2.b	6,312	5,519
Commission income	2.c	8,711	7,125
Commission expense	2.c	(2,052)	(1,536)
Net gains on trading account securities	2.d	6,889	2,830
Net gains on securities available for sale	2.e	(1,244)	222
Other banking income		327	247
Other banking expenses		(351)	(331)
NET BANKING INCOME		**25,709**	**20,609**
Salaries and employee benefit expense	5.a	(8,116)	(6,642)
Other administrative expenses		(6,417)	(5,204)
Depreciation, amortisation and impairment on tangible and intangible assets		(763)	(687)
GROSS OPERATING INCOME		**10,413**	**8,076**
Cost of risk	2.f	(321)	(1,071)
OPERATING INCOME		**10,092**	**7,005**
Net gains or losses on disposals of long-term investments	2.g	(1,115)	1,012
Net additions to or reversals of regulated provisions		(1)	6
INCOME BEFORE TAX		**8,976**	**8,023**
Income tax	2.h	(943)	(716)
NET INCOME		**8,033**	**7,307**

BALANCE SHEET AT 31 DECEMBER 2022

In millions of euros, at	Notes	31 December 2022	31 December 2021
ASSETS			
Cash and amounts due from central banks		274,886	260,747
Treasury bills and money-market instruments	3.c	141,968	146,181
Due from credit institutions	3.a	201,981	214,097
Customer items	3.b	552,162	582,240
Bonds and other fixed-income securities	3.c	122,130	112,020
Equities and other variable-income securities	3.c	2,140	1,806
Investments in subsidiaries and equity securities held for long-term investment	3.c	3,825	3,796
Investments in affiliates	3.c	61,725	63,154
Intangible assets	3.j	2,994	2,541
Tangible assets	3.j	2,122	2,052
Treasury shares	3.d	38	38
Other assets	3.h	223,274	164,288
Accrued income	3.i	141,062	96,298
TOTAL ASSETS		**1,730,307**	**1,649,258**
LIABILITIES			
Due to central banks		681	687
Due to credit institutions	3.a	233,747	341,675
Customer items	3.b	832,154	729,688
Debt securities	3.f	160,373	148,792
Other liabilities	3.h	263,810	237,870
Accrued income	3.i	123,744	82,261
Provisions	3.k	2,013	1,857
Subordinated debt	3.l	29,919	26,069
TOTAL LIABILITIES		**1,646,441**	**1,568,899**
SHAREHOLDERS' EQUITY	6.b		
Share capital		2,469	2,469
Additional paid-in capital		22,374	22,374
Reserves and Retained earnings		50,990	48,209
Net income for the period		8,033	7,307
TOTAL SHAREHOLDERS' EQUITY		**83,866**	**80,359**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**1,730,307**	**1,649,258**

OFF-BALANCE SHEET	Notes	31 December 2022	31 December 2021
COMMITMENTS GIVEN			
Loan commitments	4.a	369,872	374,479
Guarantee commitments	4.b	231,899	167,478
Commitments given on securities	4.b	38,219	33,278

COMMITMENTS RECEIVED

Loan commitments	4.a	126,204	140,377
Guarantee commitments	4.b	333,633	287,356
Commitments given on securities	4.b	42,281	38,141

Notes to the parent company financial statements

NOTE 1 SUMMARY OF SIGNIFICANT ACCOUNTING PRINCIPLES APPLIED BY BNP PARIBAS SA

BNP Paribas SA's financial statements have been prepared in accordance with generally accepted accounting principles applied to credit institutions in France, set out in ANC (French Accounting Standards Authority) regulation 2014-07 of 26 November 2014 and its amending regulations since that date.

AMOUNTS DUE FROM CREDIT INSTITUTIONS AND CUSTOMERS

Amounts due from credit institutions include all subordinated and unsubordinated loans made in connection with banking transactions with credit institutions, with the exception of debt securities. They also include assets purchased under resale agreements, whatever the type of assets concerned, and receivables corresponding to securities sold under collateralised repurchase agreements. They are broken down between demand loans and deposits, and term loans and time deposits.

Amounts due from customers include loans to customers other than credit institutions, with the exception of loans represented by debt securities issued by customers, assets purchased under resale agreements, whatever the type of assets concerned, and receivables corresponding to securities sold under collateralised repurchase agreements. They are broken down between commercial loans, customer debit accounts, and other loans.

Amounts due from credit institutions and customers are recorded in the balance sheet at nominal value plus accrued interest not yet due.

Outstanding loans and confirmed credit facilities are broken down into sound loans, including sound restructured loans, and doubtful loans. The same analysis is performed for credit risks attached to forward financial instruments whose present value represents an asset for the Group.

Credit risks are monitored using BNP Paribas SA's internal credit risk rating system. This system is based on two key parameters: the probability of default by the counterparty, expressed as a rating, and the overall recovery rate determined by reference to the type of transaction. There are twelve counterparty ratings: ten covering sound loans and two covering doubtful loans and loans classified as irrecoverable.

Doubtful loans are defined as loans where the Bank considers that there is a risk that the borrowers will be unable to honour all or part of their commitments. The definition of default is consistent with the Basel definition, which takes into account the EBA guidelines of 28 September 2016, in particular the applicable thresholds for overdue amounts and probationary periods.

Loans overdue for more than 90 days, as well as loans subject to litigation are considered as doubtful. When a loan is classified as doubtful, all other loans and commitments to the debtor are automatically assigned the same classification.

The Bank recognises an impairment for doubtful accounts on these loans, in an amount corresponding to the difference between the gross loan value and present value of the future cash flows (from principal, interest, and any realised guarantees) that are deemed recoverable, using a discount rate equal to the original effective interest rate (for fixed-rate loans), or the most recent contractual interest rate (for floating-rate loans). The guarantees considered here include mortgages and pledges on assets, as well as credit derivatives acquired by the Bank as a protection against credit losses in the loan book.

These impairments are determined on an individual or collective basis based on statistical models for loan portfolios with similar risks and not impaired individually.

If a loan is restructured because the borrower is facing financial difficulties, the Bank calculates a discount equal to the difference in present value between the old and new repayment terms. These discounts are recognised as a deduction to assets and reversed through income on an actuarial basis over the remaining term of the loan. If any instalments on a restructured loan are not paid, the loan is reclassified as irrecoverable regardless of the terms of the restructuring.

In the case of doubtful loans where the borrower has resumed making regular payments in accordance with the original repayment schedule, the loan is reclassified as sound. Similarly, doubtful loans that have been restructured are also reclassified as sound, provided that the restructuring terms are satisfied.

Irrecoverable loans include loans to borrowers whose credit standing is such that after a reasonable time classified as doubtful loans, no reclassification as a sound loan is foreseeable, loans where an event of default has occurred, almost all restructured loans where the borrower has once again defaulted, and loans classified as doubtful for more than one year that are in default and are not secured by guarantees covering a substantial portion of the amount due.

Impairments for credit risk on assets are deducted from the carrying amount of the assets on the balance sheet. Provisions recorded under liabilities include provisions related to off-balance sheet commitments, loss provisions relating to interests in real-estate development programmes, provisions for claims and litigation, and provisions for unforeseeable industry risks.

Additions to and recoveries of provisions and impairment, losses on irrecoverable loans, recoveries on loans covered by provisions and discounts calculated on restructured loans are recorded in the profit and loss account under “Cost of risk”.

The interest received from the repayment of the carrying amount of loans that have been written-down, as well as the reversals of discounting effects and the discount on restructured loans, are recognised under “Interest income”.

In 2020, in response to the health crisis, numerous moratoria were granted to customers. These moratoria most often consist of extending maturities by a few months, with or without additional interest charges related to these maturity extensions. These deferrals did not have a significant impact on the interest margin. The moratorium agreement is most often considered in response to a temporary liquidity crisis of the borrower and the credit risk is, therefore, not considered to have increased significantly.

REGULATED SAVINGS AND LOAN CONTRACTS

Home savings accounts (*Comptes Épargne Logement* – “CEL”) and home savings plans (*Plans d’Épargne Logement* – “PEL”) are government-regulated retail products sold in France. They combine a savings phase and a loan phase which are inseparable, with the loan phase contingent upon the savings phase.

These products contain two types of obligations for BNP Paribas SA: an obligation to pay interest on the savings for an indefinite period at a rate set by the government on inception of the contract (in the case of PEL products) or at a rate reset every semester using an indexation formula set by law (in the case of CEL products); and an obligation to lend to the customer (at the customer’s option) an amount contingent upon the rights acquired during the savings phase at a rate set on inception of the contract (in the case of PEL products) or at a rate contingent upon the savings phase (in the case of CEL products).

BNP Paribas SA’s future obligations with respect to each generation (in the case of PEL products, a generation comprises all products with the same interest rate at inception; in the case of CEL products, all such products constitute a single generation) are measured by discounting potential future earnings from at-risk outstandings for that generation.

At-risk outstandings are estimated on the basis of a historical analysis of customer behaviour, and equate to statistically probable outstanding loans and the difference between statistically probable outstandings and minimum expected outstandings, with minimum expected outstandings being deemed equivalent to unconditional term deposits.

Earnings for future periods from the savings phase are estimated as the difference between the reinvestment rate and the fixed savings interest rate on at-risk savings outstanding for the period in question. Earnings for future periods from the loan phase are estimated as the difference between the refinancing rate and the fixed loan interest rate on at-risk outstanding loans for the period in question.

The reinvestment rate for savings and the refinancing rate for loans are derived from the swap yield curve and from the spreads expected on financial instruments of similar type and maturity. Spreads are determined on the basis of actual spreads on fixed-rate home loans in the case of the loan phase and on products offered to retail clients in the case of the savings phase.

In order to reflect the uncertainty of future interest-rate trends, and the impact of such trends on customer behaviour models and on at risk outstandings, the obligations are estimated using the Monte-Carlo method.

When the sum of BNP Paribas SA’s estimated future obligations with respect to the savings and loan phases of any generation of contracts indicates a potentially unfavourable situation for BNP Paribas SA, a provision is recognised, with no offset between generations, in the balance sheet under “Provisions”. Movements in this provision are recognised as interest income and expense in the profit and loss account.

SECURITIES

The term “Securities” covers interbank market securities, treasury bills and negotiable certificates of deposit, bonds and other “fixed-income” securities (whether fixed- or floating-rate) and equities and other variable-income securities.

Securities are classified as: “Trading securities”, “Securities available for sale”, “Equity securities available for sale in the medium term”, “Debt securities held to maturity”, “Equity securities held for long-term investment”, or “Investments in subsidiaries and affiliates”.

Trading securities acquired or disposed of under agreements whose terms require delivery of the securities within a period defined by regulation or by an agreement on the relevant market are recorded in the balance sheet on the settlement date. Other categories of securities acquired or disposed of under the same conditions are recorded on the transaction date.

When a credit risk has occurred, fixed-income securities held in the “Available for sale” or “Held to maturity” portfolio are classified as doubtful, based on the same criteria as those applied to doubtful loans and commitments.

When securities exposed to counterparty risk are classified as doubtful and the related provision can be separately identified, the corresponding charge is included in “Cost of risk”.

Trading account securities

“Trading account securities” are securities bought or sold with the intention of selling them or repurchasing them in the near future, as well as those held as a result of market-making activities. These securities are valued individually at market value if they meet the following criteria:

- they can be traded on an active market (*i.e.* a market where third parties have continuous access to market prices through a securities exchange, brokers, traders, or market-makers);
- the market prices reflect actual, regularly-occurring transactions taking place under normal competition conditions.

“Trading account securities” also include securities bought or sold for specific asset-management objectives (especially in terms of sensitivity) for trading books comprised of forward financial instruments, securities, or other financial instruments taken globally, as well as borrowed securities. When the latter are not backed by cash, they are presented in the balance sheet as a deduction from the debt representing the value of the borrowed securities. In the same way, financial instruments received as fully-owned collateral under financial guarantee contracts with the right of re-use, recorded in the balance sheet and revalued according to the rules applicable to trading securities, are presented with a deduction from the liability representing the restitution commitment.

Changes in the market value of these securities are recognised in income. “Trading account securities” cannot be reclassified into another category and must follow the valuation rules for this category until they are sold, fully redeemed, or recognised as a loss and consequently removed from the balance sheet.

In the case of exceptional circumstances necessitating a change in investment strategy, “Trading securities” can be reclassified as “Securities available for sale” or “Debt securities held to maturity” depending on the new strategy.

If fixed-income securities classified as “Trading securities” can no longer be traded on an active market, and if the Bank has the intention and ability to hold these securities for the foreseeable future or until maturity, they can be reclassified as “Securities available for sale” or “Debt securities held to maturity”.

The accounting rules for the new category would apply to reclassified securities as of the reclassification date.

If the market in which securities classified as “Trading account securities” were purchased can no longer be considered active, the securities will be valued using methods that take into account the new market conditions.

Securities available for sale

The “Securities available for sale” category includes securities not classified into one of the other categories.

Bonds and other fixed-income securities are valued at the lower of cost (excluding accrued interest) or probable market prices. This is generally determined on the basis of stock market prices. Accrued interest is posted to the profit and loss account under “Interest income on bonds and other fixed-income securities”.

For fixed-income securities available for sale that have been purchased on the secondary market, any difference between cost and redemption price is recognised in income using the actuarial method over the remaining life of the securities. On the balance sheet, their carrying amount is amortised to their redemption value over their remaining life.

Equities are valued at the lower of cost or probable market prices. This is generally determined on the basis of stock market prices for listed equities, or BNP Paribas SA’s share in net equity, calculated on the basis of the most recent financial statements available, for unlisted equities. Dividends received are recognised in the profit and loss account under “Income on variable-income securities” on a cash basis.

The cost of securities available for sale that have been sold is determined on a first in, first out (FIFO) basis. Disposal gains or losses, and additions to and reversals of lower of cost and market provisions are reflected in the profit and loss account under “Gains (losses) on securities available for sale”.

In the case of exceptional circumstances necessitating a change in investment strategy, or if the securities can no longer be traded on an active market, securities classified as “Securities available for sale” may be reclassified as “Debt securities held to maturity” and must be identified within this portfolio. These securities would then be recognised according to the method used for “Debt securities held to maturity”.

Equity securities available for sale in the medium term

Equity securities available for sale in the medium term comprise investments made for portfolio management purposes, with the aim of realising a profit in the medium term without investing on a long-term basis in the development of the issuer's business. This category includes venture capital investments.

Equity securities available for sale in the medium term are recorded individually at the lower of historic cost and fair value. Fair value takes into account the issuer's general business outlook and the planned holding period. The fair value of listed shares is determined by reference to the average stock market price determined over a one-month period.

Debt securities held to maturity

Fixed-income securities with a specified maturity (mainly bonds, interbank market securities, treasury bills, and other negotiable debt securities) are recorded under "Debt securities held to maturity" to reflect BNP Paribas SA's intention of holding them to maturity.

Bonds classified under this heading are financed by matching funds or hedged against interest-rate exposure for their remaining lives.

The difference between cost and the redemption price of these securities is recognised in income using the actuarial method over the remaining life of the securities. On the balance sheet, their carrying amount is amortised to their redemption value over their remaining life.

Interest on debt securities held to maturity is recorded in the profit and loss account under "Interest income on bonds and other fixed-income securities".

An impairment is recognised when a decline in the credit standing of an issuer jeopardises redemption at maturity.

If a significant portion of the "Debt securities held to maturity" is sold or reclassified into a different category, the sold or reclassified securities cannot be returned to the "Debt securities held to maturity" category at any time during the current financial period or the following two financial years. All the securities classified as "Debt securities held to maturity" would then be reclassified as "Securities available for sale in the medium term".

If exceptional market circumstances necessitate a change in investment strategy, and "Trading account securities" and "Securities available for sale" are reclassified as "Debt securities held to maturity", the sale of any "Debt securities held to maturity" prior to the maturity date would not invoke the reclassification clauses in the above paragraph if the sale occurred because the securities had once again become tradable on an active market.

Equity securities held for long-term investment, investments in subsidiaries and affiliates

Equity interests include investments in subsidiaries and affiliates in which BNP Paribas SA exercises significant influence over management and investments considered strategic to BNP Paribas SA's business development. This influence is deemed to exist when BNP Paribas SA holds an ownership interest of at least 10%.

"Equity securities held for long-term investment" are shares and related instruments that BNP Paribas SA intends to hold on a long-term basis in order to earn a satisfactory long-term rate of return without taking an active part in the management of the issuing company, but with the intention of promoting the development of lasting business relationships by creating special ties with the issuer.

Other investments in affiliates consist of shares and other variable-income securities in companies over which BNP Paribas SA has exclusive control (*i.e.* companies likely to be fully consolidated into the Group).

These types of securities are recorded individually at the lower of cost and fair value.

Fair value for each security is determined on the basis of available information, including discounted future cash flows, net revalued assets and/or multiples commonly used to assess future yields. For securities listed on an active market, the fair value is considered to be the average market price over the previous one-month period.

For simplicity, listed securities acquired for less than EUR 10 million may be valued on the basis of the average closing stock market price in the month prior to closing.

Disposals, gains or losses and provision movements are recorded in the profit and loss account under "Net gains or losses on disposals of long-term investments".

Dividends are recognised as soon as payment has been approved by the Annual General Meeting or when they are received if the shareholders' decision is unknown. They are recorded under "Income on equities and variable-income securities".

Treasury shares

Treasury shares held by BNP Paribas SA are classified and valued as follows:

- treasury shares held, purchased under a market-making agreement or acquired in connection with index arbitrage transactions are recorded under "Trading securities" at market price;

- shares held for allocation to employees are recorded in the securities available for sale category. Shares granted to employees of BNP Paribas SA subsidiaries and branches are charged to the subsidiaries according to the provisions of local law;
- treasury shares held to be granted to employees are not impaired, but a provision is recognised for these shares based on the services provided by the employees who will receive the shares;
- treasury shares that are intended to be cancelled or that are not being held for either of the above reasons are included in long term investments. Treasury shares intended to be cancelled are stated at cost. All others are stated at the lower of cost and fair value.

FIXED ASSETS

Buildings and equipment are stated at acquisition cost or at the adjusted value determined in accordance with France's finance laws of 1977 and 1978. Revaluation differences on non-depreciable assets, recorded at the time of these statutory revaluations, are included in share capital.

Fixed assets are initially recognised at purchase price plus directly attributable costs, together with borrowing costs where a long period of construction or adaptation is required before the asset can be brought into service.

Software developed by BNP Paribas SA that fulfils the criteria for capitalisation is capitalised at direct development cost, which includes external costs and staff costs directly attributable to the project.

Subsequent to initial recognition, fixed assets are measured at cost less accumulated depreciation or amortisation and any impairment losses.

Fixed assets are depreciated or amortised using the straight-line method over the useful life of the asset. Depreciation and amortisation expense are recognised in the profit and loss account under "Depreciation, amortisation, and provisions on property, plant and equipment and intangible assets".

The portion of recognised depreciation or amortisation that exceeds the economic amount, mainly calculated on a straight-line basis, is recorded in the balance sheet as a liability under "Regulatory provisions: accelerated depreciation and amortisation". BNP Paribas SA does not calculate the deferred tax effects of accelerated depreciation and amortisation.

Where an asset consists of a number of components which may require replacement at regular intervals, or which have different uses or generate economic benefits at different rates, each component is recognised separately and depreciated using a method appropriate to that component. BNP Paribas SA has adopted the component-based approach for property used in operations.

The depreciation periods used for office property are as follows: eighty years or sixty years for the shell (for prime and other property respectively); thirty years for facades; twenty years for general and technical installations; and ten years for fixtures and fittings.

Depending on its type, software is amortised over a period of no more than eight years for infrastructure developments and three years or five years in the case of software developed primarily for the purpose of providing services to customers.

Depreciable fixed assets are tested for impairment if there is an indication of potential impairment at the balance sheet date. Non-depreciable assets are tested for impairment annually.

If there is an indication of impairment, the new recoverable amount of the asset is compared with the carrying amount. If the asset is found to be materially impaired, an impairment loss is recognised in the profit and loss account. This loss is reversed in the event of a change in the estimated recoverable amount or if there is no longer an indication of impairment, with the exception of goodwill and residual merger premium (see below) allocated to goodwill. Impairment losses are taken into account in the profit and loss account under "Depreciation, amortisation, and provisions on property, plant and equipment and intangible assets".

- Goodwill in the business is now presumed to have an unlimited period of use. It is therefore non-amortisable, without any required justification. However, this is a refutable presumption, meaning that if there is a limited period for use, the goodwill must be amortised over its actual or fixed period of use (ten years) if it is not possible to reliably assess this period. In addition, if goodwill is not amortised, it must now be tested for impairment annually regardless of whether there is any indication of impairment.
- The merger premium is allocated to the various assets contributed as a result of mergers and similar transactions up to the limit of identified unrealised gains. The amount is allocated in the dedicated sub-accounts of the assets concerned, according to the amortisation, depreciation and provisioning rules for these assets.
- After allocation to the different underlying assets (see above), the net balance of the residual merger premium is carried to goodwill.

Gains and losses on disposals of property, plant and equipment, and intangible assets used in operations are recognised in the profit and loss account under "Net gains or losses on disposals of long-term investments".

AMOUNTS DUE TO CREDIT INSTITUTIONS AND CUSTOMERS

Amounts due to credit institutions and customers are presented according to their initial term or type: demand accounts and time deposits for credit institutions; regulated savings accounts and other deposits for customers. These sections include securities and other assets sold under repurchase agreements depending on the type of counterparty. Accrued interest is recorded on a separate line. Savings accounts with special arrangements are presented as the centralised share with the *Caisse des Dépôts et Consignations*, less the savings deposits collected.

DEBT SECURITIES

Debt securities are presented according to the nature of their support: savings certificates, interbank market securities, negotiable debt securities, bonds and similar securities, excluding subordinated notes classified as subordinated debt.

Accrued interest on debt securities is recorded on a separate line of the balance sheet and is debited to the profit and loss account.

Bond issue and redemption premiums are amortised using the yield-to-maturity method over the life of the bonds. Bond issuance costs are amortised using the straight-line method over the life of the bonds.

PROVISIONS FOR INTERNATIONAL COMMITMENTS

Provisions for international commitments are based on the evaluation of non-transfer risk related to the future solvency of each of the countries at risk and on the systemic credit risk incurred by debtors in the event of a constant and durable deterioration in the overall situation and economies of these countries. Additions and reversals of these provisions are reflected in the profit and loss account under “Cost of risk”.

PROVISIONS FOR NON-BANKING TRANSACTIONS

BNP Paribas SA records provisions for clearly identified contingencies and charges whose timing or amount is uncertain. In accordance with current regulations, these provisions for non-banking transactions may be recorded only if the Bank has an obligation to a third party at year-end, there is a high probability of an outflow of resources to the third party, and no equivalent economic benefits are expected in return from the third party.

COST OF RISK

The “Cost of risk” line item includes expenses arising from the identification of counterparty and credit risks, litigation, and fraud inherent to banking transactions conducted with third parties. Net movements in provisions that do not fall under the category of such risks are classified in the profit and loss account according to their type.

FORWARD FINANCIAL INSTRUMENTS

Forward financial instruments are purchased on various markets for use as specific or general hedges of assets and liabilities, or for transaction purposes.

The Bank’s commitments related to these instruments are recognised off-balance sheet at nominal value. The accounting treatment of these instruments depends on the corresponding investment strategy.

Derivative financial instruments held for hedging purposes

Income and expenses related to forward derivative financial instruments held for hedging purposes and designated to one instrument or a group of homogeneous instruments are recognised in income symmetrically with the income and expenses on the underlying instrument, and under the same accounting heading.

Income and expenses related to forward financial instruments used to hedge overall interest rate risk are recognised in income on a *pro rata* basis.

Derivative financial instruments held for trading purposes

Derivatives held for trading purposes can be traded on organised markets or over-the-counter.

Derivatives held within a trading book are valued at market value on the balance sheet date. The corresponding gains or losses (realised and unrealised) are recognised in income. They are recognised in the profit and loss account under “Gains (losses) on trading account securities”.

The market value is determined from either:

- the listed price, if one is available;

- a valuation method using recognised financial models and theories, with parameters calculated from transaction prices observed on active markets, or from statistical or other quantitative methods.

In both cases, BNP Paribas SA makes conservative value adjustments to account for modelling, counterparty, and liquidity risks.

Some complex derivatives, which are typically custom-made from combined instruments and highly illiquid, are valued using models where certain parameters are not observable on an active market.

The margin generated during the trading of these complex financial instruments is deferred and reversed in profit or loss over the period during which the valuation parameters are expected to be unobservable. When parameters that were originally unobservable become observable, or when the valuation can be substantiated in comparison with recent similar transactions in an active market, the unrecognised portion of the day one profit is released to the profit and loss account

Derivative financial instruments held within an isolated open position

Depending on the nature of the instruments, gains and losses on contracts representing isolated open positions are recognised in income when the contracts are settled or on a *pro rata* basis. Derivatives are measured at market value on the balance sheet date and a provision for unrealised losses is recognised for each group of homogeneous contracts.

CORPORATE INCOME TAX

A charge for corporate income tax is taken in the period in which the related taxable income and expenses are booked, regardless of the period in which the tax is actually paid. When the period in which the income and expenses are booked differs from that in which the income is taxed and expenses deducted, BNP Paribas SA recognises a deferred tax, whose amount is calculated according to the liability method, with the basis taken to be all temporary differences between the book value and tax basis of balance sheet items, and applying applicable future tax rates once these have been approved. Deferred tax assets are recognised in accordance with the likelihood of their being recovered.

EMPLOYEE PROFIT-SHARING

As required by French law, BNP Paribas SA recognises employee profit-sharing in the profit and loss account in the year in which the employee entitlement arises. The amount is reported under “Salaries and employee benefit expenses” in the profit and loss account.

EMPLOYEE BENEFITS

BNP Paribas SA employees receive each of the following four types of benefits:

- termination benefits, payable primarily in the case of early termination of an employment contract;
- short-term benefits, such as salary, annual leave, incentive plans, profit-sharing and additional payments;
- long-term benefits, including compensated leaves of absence, long-service awards, and other types of cash-based deferred compensation;
- post-employment benefits, consisting mainly in France of supplementary pension benefits paid by the BNP Paribas SA pension funds and end-of-career bonuses, and in other countries by pension plans, some of which are funded by pension funds.

Termination benefits

Termination benefits are employee benefits payable as a result of a decision by BNP Paribas SA to terminate a contract of employment before the legal retirement age or by an employee to accept voluntary redundancy in exchange for a benefit. Termination benefits due more than 12 months after the balance sheet date are discounted.

Short-term benefits

The Group recognises an expense when it has used services rendered by employees in exchange for employee benefits.

Long-term benefits

Long-term benefits are benefits (other than post-employment benefits and termination benefits) which do not fall wholly due within twelve months after the end of the period in which the employee renders the associated services. The actuarial techniques used are similar to those used for defined-benefit post-employment benefits, except that actuarial gains and losses are recognised immediately, as are the effects of any plan amendments.

This category relates to compensation paid in cash and deferred for more than twelve months, which is accrued in the financial statements for the financial years during which the employee rendered the corresponding services. If this deferred variable compensation is subject to the employee’s continued presence at the vesting date, the services are presumed to been rendered during the vesting period and the corresponding compensation expense is recognised on a *pro rata* basis over that period. The expense is recognised under salary and employee benefits expenses with a corresponding liability in the balance sheet. It is revised to take account of any non-fulfilment of the continued presence or performance conditions, and changes in the BNP Paribas share price, for deferred compensation indexed to the share.

If there is no continued presence condition, the expense is not deferred but recognised immediately with a corresponding liability in the balance sheet, which is then revised on each reporting date until settlement, to account for any performance conditions and changes in the BNP Paribas share price.

Post-employment benefits

The post-employment benefits provided to BNP Paribas SA employees in France include both defined-contribution plans and defined-benefit plans.

Defined-contribution plans, such as *Caisse nationale d'assurance vieillesse* and supplemental national and trade union plans that pay pensions to former BNP Paribas SA employees in France, do not give rise to an obligation for BNP Paribas SA and consequently do not require a provision. The amount of the employer's contributions payable during the period is recognised as an expense.

Only defined-benefit plans, such as the retirement packages paid for by BNP Paribas SA's retirement fund, give rise to an obligation for BNP Paribas SA. This obligation must be measured and recognised as a liability by means of a provision.

The classification of plans into these two categories is based on the economic substance of the plan, which is reviewed to determine whether BNP Paribas SA has a legal or constructive obligation to pay the agreed benefits to employees.

Post-employment benefit obligations under defined-benefit plans are measured using actuarial techniques that take demographic and financial assumptions into account. The amount of the obligation recognised as a liability is measured on the basis of the actuarial assumptions applied by the Group, using the projected unit credit method. This method takes into account various parameters, tailored to the country in question, such as demographic assumptions, the probability that employees will leave before retirement age, salary inflation, a discount rate, and the general inflation rate. The value of any plan assets is deducted from the amount of the obligation. When the value of the plan assets exceeds the amount of the obligation, an asset is only recognised if it represents a future economic benefit in the form of a reduction in future contributions or a future partial refund of amounts paid into the plan.

The amount of the obligation under a plan, and the value of the plan assets, may show significant fluctuations from one period to the next due to changes in actuarial assumptions, thereby giving rise to actuarial gains and losses. Actuarial gains and losses and the effect of limits on assets are recognised in full in profit or loss; the expected gains from investments are calculated at the discount rate of the corresponding commitments.

RECOGNITION OF INCOME AND EXPENSES

Interest and fees and commissions qualified as interest are recognised on an accrual basis. These include the commissions charged by the Bank as part of an overall loan package (*i.e.*, application fees, commitment fees, participation fees, *etc*.). The marginal transaction costs that the Bank must pay when granting or acquiring loans are also spread out over the effective life of the corresponding loan.

Fees and commissions not qualified as interest that relate to the provision of services are recognised when the services are performed or, for ongoing services, on a *pro rata* basis over the length of the service agreement.

FOREIGN CURRENCY TRANSACTIONS

Foreign exchange positions are generally valued at the official year-end exchange rate. Exchange gains and losses on transactions in foreign currency carried out in the normal course of business are recognised in the profit and loss account.

Exchange differences arising from the conversion of assets held on a long-term basis, including equity securities held for long-term investment, the capital made available to branches, and other foreign equity investments denominated in foreign currencies and financed in euros, are recognised as translation adjustments for the balance sheet line items recording the assets.

Exchange differences arising from the conversion of assets held on a long-term basis, including equity securities held for long-term investment, the capital made available to branches, and other foreign equity investments, denominated and financed in foreign currencies, are recognised symmetrically as translation differences for the corresponding financing.

TRANSLATION OF ACCOUNTS EXPRESSED IN FOREIGN CURRENCIES

Monetary and non-monetary foreign currency-denominated assets and liabilities of foreign branches are translated into euros at the year-end exchange rate. Translation adjustments regarding the capital made available to BNP Paribas SA branches outside of France are included in "Accrued income" and "Accrued expenses".

NOTE 2 NOTES TO THE 2022 PROFIT AND LOSS ACCOUNT

2.a NET INTEREST INCOME

BNP Paribas SA includes in "Interest income" and "Interest expense" all income and expenses from financial instruments measured at amortised cost according to the effective interest rate method (interest, commission and expenses) and from financial instruments measured at fair value that do not meet the definition of a derivative instrument. The change in fair value on financial instruments at fair value through profit or loss (excluding accrued interest) is recognised under "Gains (losses) on trading account securities".

Interest income and expense on derivatives accounted for as fair value hedges are included with the revenues generated by the hedged item.

	Year to 31 December 2022		Year to 31 December 2021	
In millions of euros	**Income**	**Expenses**	**Income**	**Expenses**
Credit institutions	**10,442**	**(6,240)**	**4,531**	**(3,243)**
Demand accounts, loans and borrowings	8,501	(4,736)	3,666	(2,428)
Securities given/received under repurchase agreements	1,672	(1,504)	706	(815)
Subordinated loans	269		159	
Customers	**13,102**	**(10,156)**	**7,338**	**(1,929)**
Demand accounts, loans, and term accounts	9,442	(5,987)	6,440	(1,340)
Securities given/received under repurchase agreements	3,659	(4,169)	897	(589)
Subordinated loans	1		1	
Finance lease	**1**		**1**	
Debt securities	**206**	**(5,937)**	**82**	**(4,237)**
Bonds and other fixed-income securities	**5,565**		**3,488**	
Trading account securities	223		339	
Securities available for sale	5,291		3,137	
Debt securities held to maturity	51		12	
Macro-hedging instruments	**134**		**502**	
INTEREST INCOME AND EXPENSE	**29,450**	**(22,333)**	**15,942**	**(9,409)**

2.b INCOME ON EQUITIES AND OTHER VARIABLE INSTRUMENTS

In millions of euros	**Year to 31 December 2022**	**Year to 31 December 2021**
Securities available for sale	42	52
Investments in subsidiaries and equity securities held for long-term investment	452	200
Investments in affiliates	5,818	5,267
INCOME ON EQUITIES AND OTHER VARIABLE INSTRUMENTS	**6,312**	**5,519**

2.c COMMISSIONS

In millions of euros	Year to 31 December 2022		Year to 31 December 2021	
	Income	Expenses	Income	Expenses
Commissions on banking and financing transactions	**3,425**	**(1,072)**	**3,147**	**(909)**
Customer items	1,820	(35)	1,540	(51)
Others	1,605	(1,037)	1,607	(858)
Commissions on financial services(*)	**5,286**	**(980)**	**3,978**	**(627)**
COMMISSION INCOME AND EXPENSES	**8,711**	**(2,052)**	**7,125**	**(1,536)**

(*) At 31 December 2022, the increase in financial services fees is attributable to the absorption of the activities of BNP Paribas Securities Services following the merger of the entity. For information purposes, these commissions at 31st December 2021 represented EUR 1,472 million in income and EUR 326 million in expenses in the financial statements of BNP Paribas Securities Services.

2.d GAINS OR LOSSES ON TRADING ACCOUNT TRANSACTIONS

In millions of euros	Year to 31 December 2022	Year to 31 December 2021
Fixed-income instruments and transactions in trading account securities	(4,427)	2,299
Currency instruments	7,416	1,432
Credit instruments	2,315	(1,716)
Other variable income financial instruments and transactions in trading account securities	1,585	815
NET GAINS ON TRADING ACCOUNT SECURITIES	**6,889**	**2,830**

2.e GAINS OR LOSSES ON SECURITIES AVAILABLE FOR SALE

In millions of euros	Year to 31 December 2022		Year to 31 December 2021	
	Income	Expenses	Income	Expenses
Divestments	369	(620)	378	(202)
Provisions	159	(1,152)	165	(119)
TOTAL	**528**	**(1,772)**	**543**	**(321)**
NET GAINS OR LOSSES ON SECURITIES AVAILABLE FOR SALE		**(1,244)**	**222**	

2.f COST OF RISK AND PROVISIONS FOR CREDIT RISKS

Cost of risk represents the net amount of impairment losses recognised with respect to credit risks inherent to BNP Paribas SA's banking intermediation activities, plus any impairment losses in the case of known counterparty risk on over-the-counter derivative financial instruments.

In millions of euros	**Year to 31 December 2022**	**Year to 31 December 2021**
Additions to or write-backs from provisions during the period	**(139)**	**(868)**
Customer items and credit institutions	(103)	(767)
Off-balance sheet commitment	11	14
Securities	(45)	(121)
Doubtful loans	(5)	(2)
Financial instruments for market activities	3	8
Irrecoverable loans not covered by provisions	**(259)**	**(256)**
Recoveries of loans written-off	**77**	**53**
COST OF RISK	**(321)**	**(1,071)**

In millions of euros	**Year to 31 December 2022**	**Year to 31 December 2021**
Balance at 1 January	**7,173**	**6,838**
Additions to or write-backs from provisions during the period	139	868
Write-offs during the period covered by provisions	(915)	(988)
Effect of movements in exchange rates and other	(65)	455
PROVISIONS FOR CREDIT RISKS	**6,332**	**7,173**

The provisions break down as follows:

In millions of euros	**31 December 2022**	**31 December 2021**
Provisions deducted from assets	**6,086**	**6,905**
For amounts due from credit institutions *(note 3.a)*	151	385
For amounts due from customers *(note 3.b)*	5,507	5,930
For securities	382	544
For financial instruments for market activities	46	46
Provisions recognised as liabilities *(note 3.k)*	**246**	**268**
For off-balance sheet commitments	204	234
For doubtful loans	42	34
PROVISIONS FOR CREDIT RISKS	**6,332**	**7,173**

2.g GAINS OR LOSSES ON DISPOSALS OF LONG-TERM INVESTMENTS

	Year to 31 December 2022		Year to 31 December 2021	
In millions of euros	Income	Expenses	Income	Expenses
Investments in subsidiaries and equity securities held for long-term investment	**165**	**(71)**	**398**	**(309)**
Divestments	150	(22)	348	(305)
Provisions	15	(49)	50	(4)
Investments in affiliates	**93**	**(1,238)**	**778**	**(112)**
Divestments	6	(284)	84	(23)
Provisions	87	(954)	694	(89)
Operating assets	**55**	**(119)**	**326**	**(69)**
TOTAL	**313**	**(1,428)**	**1,502**	**(490)**
NET GAINS OR LOSSES ON DISPOSALS OF LONG-TERM INVESTMENTS		**(1,115)**	**1,012**	

2.h INCOME TAX

In millions of euros	Year to 31 December 2022	Year to 31 December 2021
Current tax expense	(674)	(573)
Deferred tax	(269)	(143)
INCOME TAX	**(943)**	**(716)**

The basic tax consolidation agreements between BNP Paribas SA and the subsidiaries belonging to its tax group are designed to be tax neutral for every party. Each Group subsidiary recognises in its own books, over the full term of its consolidation, corporate income tax income or expense, additional contributions and all current or future taxes covered by the scope of tax consolidation just as they would if they were not part of a tax group. BNP Paribas SA, as the parent company, records the impact of Group tax savings from tax consolidation in France in current tax expense.

NOTE 3 NOTES TO THE BALANCE SHEET AT 31 DECEMBER 2022

3.a AMOUNTS DUE TO AND FROM CREDIT INSTITUTIONS

In millions of euros, at	31 December 2022	31 December 2021
Loans and receivables	**126,977**	**119,733**
Demand accounts	7,089	7,728
Term accounts and loans	112,327	105,416
Subordinated loans	7,561	6,589
Securities received under repurchase agreements	**75,155**	**94,749**
LOANS AND ADVANCES TO CREDIT INSTITUTIONS BEFORE IMPAIRMENT	**202,132**	**214,482**
of which accrued interest	*1,270*	*512*
of which irrecoverable loans		
of which potentially recoverable doubtful loans	*13*	*13*
Impairments on receivables due from credit institutions *(note 2.f)*	**(151)**	**(385)**
LOANS AND RECEIVABLES TO CREDIT INSTITUTIONS NET OF IMPAIRMENT	**201,981**	**214,097**

In millions of euros, at	31 December 2022	31 December 2021
Deposits and borrowings	**164,786**	**272,131**
Demand deposits	20,594	11,682
Term deposits and borrowings(*)	144,192	260,449
Securities given under repurchase agreements	**68,961**	**69,544**
DUE TO CREDIT INSTITUTIONS	**233,747**	**341,675**
of which accrued interest	*292*	*350*

(*) As of 31 December 2021, BNP Paribas SA borrowings from BNP Paribas Securities Services for EUR 101,595 million were included.

3.b CUSTOMER TRANSACTIONS

In millions of euros, at	31 December 2022	31 December 2021
Loans and receivables	**440,872**	**426,735**
Commercial and industrial loans	9,232	8,898
Demand accounts	17,167	17,821
Short-term loans(*)	132,990	121,776
Mortgages	90,981	96,067
Equipment loans	58,651	58,876
Export loans	6,560	6,984
Other customer loans	124,893	115,814
Subordinated loans	398	499
Securities received under repurchase agreements	**116,797**	**161,435**
CUSTOMER ITEMS BEFORE IMPAIRMENT – ASSETS	**557,669**	**588,170**
of which accrued interest	*2,584*	*939*
of which loans eligible for refinancing by the Banque de France	*119*	*29*
of which potentially recoverable doubtful loans and receivables	*4,448*	*4,277*
of which irrecoverable loans and receivables	*3,769*	*4,379*
Impairments on receivables due from customers *(note 2.f)*	**(5,507)**	**(5,930)**
CUSTOMER ITEMS NET OF IMPAIRMENT – ASSETS	**552,162**	**582,240**

(*) At 31 December 2022, the total amount of government-guaranteed loans, granted by BNP Paribas SA, mainly in France, amounted to EUR 11.6 billion, with a corresponding guarantee amount of EUR 10 billion. At 31 December 2021, the total amount of government-guaranteed loans, granted by BNP Paribas SA, was EUR 14 billion, with a corresponding guarantee amount of EUR 12 billion.

The following table gives the loans and receivables net of impairment due from customers by counterparty:

	31 December 2022				31 December 2021			
		Doubtful loans				Doubtful loans		
In millions of euros, at	Sound loans	Potentially recoverable	Irrecoverable	Total	Sound loans	Potentially recoverable	Irrecoverable	Total
Financial institutions	104,776	92	109	104,977	99,109	11	225	99,345
Corporate exposures	236,430	1,838	1,067	239,335	225,709	1,632	1,166	228,507
Entrepreneurs	9,274	93	90	9,457	9,976	87	103	10,166
Individuals	71,856	323	346	72,525	75,182	345	376	75,903
Other non-financial customers	9,003	38	30	9,071	6,855	29		6,884
TOTAL LOANS AND RECEIVABLES NET OF IMPAIRMENT	**431,339**	**2,384**	**1,642**	**435,365**	**416,831**	**2,104**	**1,870**	**420,805**

In millions of euros, at	31 December 2022	31 December 2021
Deposits	**676,015**	**521,683**
Demand deposits[(1)]	383,412	288,422
Term deposits	229,405	171,381
Regulated savings accounts	63,198	61,880
of which demand regulated savings accounts	*46,749*	*44,355*
of which share centralised with Caisse des Dépôts et Consignations[(2)]	*(15,157)*	*(13,400)*
Securities given under repurchase agreements	**156,139**	**208,005**
CUSTOMER ITEMS – LIABILITIES	**832,154**	**729,688**
of which accrued interest	*1,815*	*438*

(1) At 31 December 2022, the increase in demand accounts is attributable to the absorption of the activities of BNP Paribas Securities Services following the merger of the entity. For information, these deposits in the financial statements of BNP Paribas Securities Services at 31 December 2021 represented EUR 129,995 million.

(2) Regulation No. 2020-10 of 22 December 2020, which amends ANC Regulation No. 2014-07 allows the presentation of the centralised share with the Caisse des Dépôts et Consignations to be presented less the savings deposits collected. As of 31 December 2022, the amount of regulated savings centralised with the Caisse des Dépôts et Consignations amounted to EUR 15,157 million, compared to EUR 13,400 million at 31 December 2021.

3.c SECURITIES HELD

	31 December 2022		31 December 2021	
In millions of euros, at	Net carrying amount	Market value	Net carrying amount	Market value
Transaction	**65,855**	**65,855**	**80,514**	**80,514**
Securities available for sale	**72,178**	**72,239**	**65,309**	**66,842**
of which provisions	*(756)*		*(42)*	
Investments	**3,935**	**3,935**	**358**	**358**
TREASURY BILLS AND MONEY-MARKET INSTRUMENTS	**141,968**	**142,029**	**146,181**	**147,714**
of which receivables corresponding to loaned securities	*44,968*		*32,962*	
of which goodwill	*5,145*		*4,037*	
Transaction	**28,751**	**28,751**	**28,366**	**28,366**
Securities available for sale	**93,363**	**94,468**	**83,565**	**84,983**
of which provisions	*(681)*		*(538)*	
Investments	**16**	**16**	**89**	**268**
BONDS AND OTHER FIXED-INCOME SECURITIES	**122,130**	**123,235**	**112,020**	**113,617**
of which unlisted securities	*27,979*	*28,558*	*20,336*	*20,695*
of which accrued interest	*427*		*994*	
of which receivables corresponding to loaned securities	*14,395*		*30,377*	
of which goodwill	*46*		*245*	
Transaction	**368**	**368**	**247**	**247**

In millions of euros, at	31 December 2022 Net carrying amount	31 December 2022 Market value	31 December 2021 Net carrying amount	31 December 2021 Market value
Securities available for sale and equity securities available for sale in the medium term	**1,772**	**2,433**	**1,559**	**1,860**
of which provisions	*(446)*		*(479)*	
EQUITIES AND OTHER VARIABLE-INCOME SECURITIES	**2,140**	**2,801**	**1,806**	**2,107**
of which unlisted securities	*1,486*	*1,925*	*1,281*	*1,579*
of which receivables corresponding to loaned securities	*10*		*73*	
Associated companies	**3,462**	**6,631**	**3,446**	**6,193**
of which provisions	*(171)*		*(162)*	
Equity securities held for long-term investment	**363**	**455**	**350**	**474**
of which provisions	*(51)*		*(17)*	
INVESTMENTS IN SUBSIDIARIES AND EQUITY SECURITIES HELD FOR LONG-TERM INVESTMENT	**3,825**	**7,086**	**3,796**	**6,667**
of which unlisted securities	*1,841*	*3,440*	*2,238*	*3,665*
Investments in affiliates	**61,725**	**97,493**	**63,154**	**99,134**
of which provisions	*(8,696)*		*(7,707)*	
INVESTMENTS IN AFFILIATES	**61,725**	**97,493**	**63,154**	**99,134**

Equity investments in credit institutions and investments in affiliates held by BNP Paribas SA totalled EUR 1,530 million and EUR 30,576 million respectively as at 31 December 2022, compared with EUR 1,190 million and EUR 32,906 million respectively as at 31 December 2021.

Borrowed securities held by BNP Paribas SA break down as follows:

In millions of euros, at	31 December 2022	31 December 2021
Treasury bills and money-market instruments	106,000	110,617
Bonds and other fixed-income securities	24,214	32,586
Equities and other variable-income securities(*)	14,573	1
TOTAL	**144,787**	**143,204**

(*) The absorption of the borrowed securities activity of BNP Paribas Securities Services on 1st October 2022 into BNP Paribas SA generated an increase in this category of securities. For information, the securities borrowed by BNP Paribas Securities Services in equities and other variable income securities represented EUR 21,853 million at 31 December 2021.

Following Regulation No. 2020-10 of 22 December 2020, which amended Regulation ANC No. 2014-07, borrowed securities are presented as a deduction from the liabilities representing these same securities. The amount of securities borrowed represented EUR 144,787 million as at 31 December 2022, compared with EUR 143,204 million as at 31 December 2021.

3.d TREASURY SHARES

In millions of euros, at	31 December 2022 Gross book value	31 December 2022 Net carrying amount	31 December 2021 Net carrying amount
Transaction	-	-	-
Securities available for sale	6	6	6
Investment in subsidiaries	32	32	32
TREASURY SHARES	**38**	**38**	**38**

The fifth resolution of the Shareholders' Combined General Meeting of 17 May 2022, which replaced the fifth resolution of the Shareholders' Combined General Meeting of 18 May 2021, authorised BNP Paribas SA to buy back shares representing up to 10% of BNP Paribas SA's issued capital at a maximum purchase price of EUR 73 per share (unchanged from 31 December 2021). The shares could be acquired for the following purposes: for subsequent cancellation in accordance with conditions set by the Shareholders' Combined General Meeting of 17 May 2022, to fulfil the Bank's obligations relative to the issue of shares or share equivalents, for stock option plans, for share awards, or for granting or selling shares to employees under an employee profit-sharing plan, employee share ownership plan or Corporate Savings Plan and to cover any type of share award to the employees of BNP Paribas SA and companies controlled exclusively by BNP Paribas SA within the meaning of article L.233-16 of the French Commercial Code; to be held in treasury for subsequent remittance in exchange for payment for acquisitions, mergers, spin-offs or asset transfers; within the scope of a market-making agreement compliant with the Code of Ethics recognised by the Autorité des Marchés Financiers (French Financial Markets Authority – AMF); or for asset and financial management purposes.

This authorisation was granted for a period of eighteen months.

At 31 December 2022, BNP Paribas SA held 603,827 treasury shares classified as "Equity securities held for long-term investment".

BNP Paribas SA also held 118,144 treasury shares classified as "Securities available for sale" and intended to be used for free share awards to Group employees, granted or sold as part of an employee profit-sharing plan, employee share ownership plan, or Company Savings Plan.

3.e LONG-TERM INVESTMENTS

	Gross values					Provisions					Carrying amount	
In millions of euros	1 Jan. 2022	Purchases	Disposals and redemptions	Transfers and other movements	31 Dec. 2022	1 Jan. 2022	Additions	Write-backs	Other variations	31 Dec. 2022	31 Dec. 2022	31 Dec. 2021
Debt securities held to maturity *(note 3.c)*	447	3,580		(76)	3,951						3,951	447
Investments in subsidiaries and equity securities held for long-term investment *(note 3.c)*	3,976	623	(283)	(269)	4,047	179	48	(11)	6	222	3,825	3,796
Investments in affiliates *(note 3.c)*	70,861	549	(33)	(956)	70,421	7,707	951	(85)	123	8,696	61,725	63,154
of which merger premium on investments in affiliates	*4,258*			*317*	*4,575*	*2,883*	*28*	*(43)*		*2,868*	*1,707*	*1,375*
Treasury shares *(note 3.d)*	32				32						32	32
LONG-TERM INVESTMENTS	**75,316**	**4,752**	**(316)**	**(1,301)**	**78,451**	**7,886**	**999**	**(96)**	**129**	**8,918**	**69,533**	**67,429**

3.f DEBT SECURITIES

In millions of euros, at	31 December 2022	31 December 2021
Negotiable debt securities	65,654	74,021
Bond issues *(note 3.g)*	2,212	2,033
Other debt securities	92,507	72,738
DEBT SECURITIES	**160,373**	**148,792**
of which unamortised issuance premiums	*619*	*642*

3.G BOND ISSUES

Maturities of bonds issued by BNP Paribas SA, according to contractual maturity:

In millions of euros	Outstanding at 31/12/2022	2023	2024	2025	2026	2027	2028 to 2032	After 2032
Bond issues	2,212	212	124	289	123	159	917	388

In millions of euros	Outstanding at 31/12/2021	2022	2023	2024	2025	2026	2027 to 2031	After 2031

Bond issues	2,033	285	192	127	65	188	772	404

3.h OTHER ASSETS AND LIABILITIES

In millions of euros, at	31 December 2022	31 December 2021
Options purchased	47,960	48,533
Settlement accounts related to securities transactions	3,301	1,726
Deferred taxes – assets	797	659
Miscellaneous assets(*)	171,216	113,370
OTHER ASSETS	**223,274**	**164,288**
Options sold	51,064	46,622
Settlement accounts related to securities transactions	3,379	738
Liabilities related to securities transactions(**)	66,562	85,118
Deferred taxes – liabilities	293	234
Miscellaneous liabilities(*)	142,512	105,158
OTHER LIABILITIES	**263,810**	**237,870**

(*) At 31 December 2022, the increase is attributable to the absorption of the activities of BNP Paribas Securities Services following the merger of the entity. For information at 31 December 2021, other miscellaneous assets or miscellaneous liabilities represented respectively EUR 34,959 million and EUR 19,194 million in the parent company financial statements, mainly related to guarantee deposits received or paid on the activities managed by BNP Paribas Securities Services.

(**) Further to Regulation No. 2020-10 of 22 December 2020, the borrowed securities are presented as a deduction from the liabilities representing these same securities (see note 3.c).

Under “Miscellaneous liabilities”, BNP Paribas SA’s trade payables amount to EUR 83.1 million at 31 December 2022 and break down as follows, pursuant to article D.441-6 of the French Commercial Code.

Invoices *received,* due and outstanding at the year-end

	0 days (indicative)	1 to 30 days	31 to 60 days	61 to 90 days	91 days and over	Total (1 day and more)
Total invoices concerned, including taxes *(in millions of euros)*	1.9	27.5	7.8	8.9	37.0	81.2
Percentage of total purchases for the year, including taxes	0.04%	0.51%	0,14%	0,17%	0.69%	1.51%
Number of invoices concerned	502					11,645

Information related to invoices received and presented in the table above does not include banking and related transactions. The payment terms used are the statutory terms. Customer advances outside the scope of banking and related transactions are mainly loans to BNP Paribas Group entities. For amounts due to and from customers of BNP Paribas SA for banking and related transactions which are not shown in the table above, the remaining term of the sources and uses of funds is presented in note 6.e.

3.i ACCRUED INCOME

In millions of euros, at	31 December 2022	31 December 2021
Remeasurement of currency instruments and derivatives	119,167	79,118
Accrued income	4,849	3,666
Collection accounts	305	98
Other accrued income	16,741	13,416
ACCRUED INCOME	**141,062**	**96,298**
Remeasurement of currency instruments and derivatives	103,869	65,738
Accrued expenses	6,749	4,427
Collection accounts	2,476	2,340
Other accrued expenses	10,650	9,756
ACCRUED EXPENSES	**123,744**	**82,261**

3.j OPERATING ASSETS

	31 December 2022			31 December 2021
In millions of euros, at	Gross value	Depreciation, amortisation and impairment	Net amount	Net amount
Software	4,092	(3,282)	810	792
Other intangible assets	3,675	(1,491)	2,184	1,749
INTANGIBLE ASSETS	**7,767**	**(4,773)**	**2,994**	**2,541**
Land and buildings	2,314	(938)	1,376	1,400
Equipment, furniture and fixtures	2,481	(1,981)	500	458
Other fixed assets	204	(12)	192	138
Tangible assets - Merger premiums	84	(30)	54	56
TANGIBLE ASSETS	**5,083**	**(2,961)**	**2,122**	**2,052**

3.k PROVISIONS

In millions of euros, at	31 December 2021	Additions	Write-backs	Other variations	31 December 2022
Provisions for employee benefit obligations	**442**	**203**	**(270)**	**70**	**445**
Provisions for credit risks *(note 2.f)*	**34**	**12**	**(7)**	**3**	**42**
Provisions for commitments given *(note 2.f)*	**234**	**53**	**(74)**	**(9)**	**204**
Other provisions					
▪ for banking transactions	442	448	(140)	(88)	662
▪ for non-banking transactions	705	143	(414)	226	660

PROVISIONS	**1,857**	**859**	**(905)**	**202**	**2,013**

PROVISIONS FOR RISKS ON REGULATED SAVINGS PRODUCTS

In millions of euros, at	31 December 2022	31 December 2021
Deposits collected under home savings accounts and plans	**16,410**	**17,230**
of which for home savings plans	14,310	15,131
▪ *Aged more than 10 years*	*6,287*	*5,611*
▪ *Aged between 4 and 10 years*	*6,967*	*8,051*
▪ *Aged less than 4 years*	*1,056*	*1,469*
Outstanding loans granted under home savings accounts and plans	**9**	**22**
of which for home savings plans	2	4
Provisions for home savings accounts and plans	**47**	**92**
of which discount on home savings accounts and plans	0	0
of which provisions recognised for home savings plans	42	92
▪ *of which provisions for plans aged more than 10 years*	*26*	*48*
▪ *of which provisions for plans aged between 4 and 10 years*	*12*	*37*
▪ *of which provisions for plans aged less than 4 years*	*4*	*7*
of which provisions for home savings accounts	5	0

CHANGE IN PROVISIONS FOR REGULATED SAVINGS PRODUCTS

	Year to 31 December 2022		Year to 31 December 2021	
In millions of euros	Provisions for home savings plans	Provisions for home savings accounts	Provisions for home savings plans	Provisions for home savings accounts
Provisions at start of period	**92**	**-**	**121**	**-**
Additions to provisions during the period	-	5	-	-
Provisions write-backs during the period	(50)	-	(29)	-
Provisions at end of period	**42**	**5**	**92**	**-**

3.l SUBORDINATED DEBT

In millions of euros, at	31 December 2022	31 December 2021
Redeemable subordinated debt	**16,475**	**15,675**
Undated subordinated debt	**12,907**	**10,024**
Undated Super Subordinated notes	12,173	9,305

Undated Floating-Rate Subordinated notes	509	494
Undated Participating Subordinated notes	225	225
Related debt	**537**	**370**
SUBORDINATED DEBT	**29,919**	**26,069**

Redeemable subordinated debt

The redeemable subordinated debt issued by BNP Paribas SA is in the form of medium and long-term debt securities equivalent to ordinary subordinated debt; these issues are redeemable prior to the contractual maturity date in the event of liquidation of the issuer, and rank after the other creditors but before holders of participating loans and participating subordinated notes.

These debt issues may contain a call provision authorising the Group to redeem the securities prior to maturity by repurchasing them in the stock market, *via* a public tender or exchange offers, or (in the case of private placements) over the counter, subject to regulatory approval.

Debt issued by BNP Paribas SA *via* placements in the international markets may be subject to early redemption of the capital and early payment of interest due at maturity at the issuer's discretion on or after a date stipulated in the issue particulars (call option), or in the event that changes in the applicable tax rules oblige the BNP Paribas Group issuer to compensate debt-holders for the consequences of such changes. Redemption may be subject to a notice period of between 15 and 60 days, and is in all cases subject to approval by the banking supervisory authorities.

In 2021, three subordinated debt issued were repaid at or before maturity. These transactions resulted in a EUR 1,670 million reduction in the amount of redeemable subordinated debt.

In 2022, three subordinated debt issued were repaid at or before maturity. These transactions resulted in a EUR 1,107 million reduction in the amount of redeemable subordinated debt. In addition, two new subordinated debts were issued for an amount of EUR 1,583 million in 2022.

The following table gives the maturity schedule for redeemable subordinated debt at 31 December 2022:

In millions of euros	Outstanding at 31/12/2022	2023	2024	2025	2026	2027	2028 to 2032	After 2032
Redeemable subordinated debt	16,475	-	935	2,750	2,748	2,729	5,206	2,107

The following table gives the maturity schedule for redeemable subordinated debt at 31 December 2021:

In millions of euros	Outstanding at 31/12/2021	2022	2023	2024	2025	2026	2027 to 2031	After 2031
Redeemable subordinated debt	15,675	426	-	878	2,704	2,679	6,008	2,980

Undated subordinated debt

Undated Super Subordinated notes

BNP Paribas SA has issued Undated Super Subordinated Notes which pay a fixed, fixed adjustable or floating rate coupon and are redeemable at the end of a fixed period and thereafter at each coupon date or every five years. If the notes are not redeemed at the end of this period, some of these issues will pay a coupon indexed to Euribor, Libor or a swap rate or a fixed-rate coupon.

On 19 February 2021, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 1,250 million. This issue pays a fixed-rate coupon of 4.625%. These notes could be redeemed at the end of a period of ten years. If not redeemed in 2031, a coupon will be paid semi-annually indexed to the rate of the US Treasury bill with a constant five-year maturity (CMT rate).

On 8 March 2021, BNP Paribas SA redeemed the June 2007 issue, for an amount of USD 600 million. These notes paid a 6.5% fixed-rate coupon.

On 30 March 2021, BNP Paribas SA redeemed the March 2016 issue, for an amount of USD 1,500 million, before its first call date. These notes paid a 7.625% fixed-rate coupon.

On 3 January 2022, BNP Paribas SA redeemed the July 2006 issue for an amount of EUR 150 million. These notes paid a 5.45% fixed-rate coupon.

On 12 January 2022, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 1,250 million. This issue pays a fixed-rate coupon of 4.625%. These notes could be redeemed at the end of a period of five years. If not redeemed in 2027, a coupon will be paid semi-annually indexed to the rate of the US Treasury bill with a constant five-year maturity (CMT rate).

On 19 February 2022, BNP Paribas SA redeemed the June 2007 issue for an amount of USD 1,100 million. These notes paid a 7.195% fixed-rate coupon.

On 14 March 2022, BNP Paribas SA redeemed the December 2016 issue, for an amount of USD 750 million. These notes paid a 6.75% fixed-rate coupon.

On 17 June 2022, BNP Paribas SA redeemed the June 2015 issue for an amount of EUR 750 million, at its first call date. These notes paid a 6.125% fixed-rate coupon.

On 16 August 2022, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 2,000 million. This issue pays a fixed-rate coupon of 7.75%. These notes could be redeemed at the end of a period of seven years. If not redeemed in 2029, a coupon will be paid semi-annually indexed to the rate of the US Treasury bill with a constant five-year maturity (CMT rate).

On 6 September 2022, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 1,000 million. This issue pays a fixed-rate coupon of 6.875%. These notes could be redeemed at the end of a period of seven years and three months. If not redeemed in 2029, a coupon will be paid semi-annually indexed to the five-year European mid-swap rate.

On 17 November 2022, BNP Paribas SA issued Undated Super Subordinated notes in the amount of USD 1,000 million. This issue pays a fixed-rate coupon of 9.25%. These notes could be redeemed at the end of a period of five years. If not redeemed in 2027, a coupon will be paid semi-annually indexed to the rate of the US Treasury bill with a constant five-year maturity (CMT rate).

The following table summarises the characteristics of these various issues:

Issue date	**Currency**	**Amount in original currency** *(millions)*	**Coupon frequency**	**Rate and term before first call date**		**Rate after first call date**	**31 December 2022**	**31 December 2021**
July 2006	EUR	150	annual	5.45%	20 years	3-month Euribor +1.920%	0	150
June 2007	USD	1,100	semi-annual	7.195%	30 years	USD 3-month Libor +1.290%	0	966
June 2015	EUR	750	semi-annual	6.125%	7 years	EUR 5-year swap +5.230%	0	750
August 2015	USD	1,500	semi-annual	7.375%	10 years	USD 5-year swap +5.150%	1,402	1,318
December 2016	USD	750	semi-annual	6.750%	5.25 years	USD 5-year swap +4.916%	0	659
November 2017	USD	750	semi-annual	5.125%	10 years	USD 5-year swap +2.838%	701	659
August 2018	USD	750	semi-annual	7,000%	10 years	USD 5-year swap +3.980%	701	659
March 2019	USD	1,500	semi-annual	6.625%	5 years	USD 5-year swap +4.149%	1,402	1,317
July 2019	AUD	300	semi-annual	4.500%	5.5 years	AUD 5-year swap +3.372%	191	192
February 2020	USD	1,750	semi-annual	4.500%	10 years	US CMT 5 years +2.944%	1,636	1,537
February 2021	USD	1,250	semi-annual	4.625%	10 years	US CMT 5 years +3.340%	1,168	1,098
January 2022	USD	1,250	semi-annual	4.625%	5 years	US CMT 5 years +3.196%	1,168	0
August 2022	USD	2,000	semi-annual	7.750%	7 years	US CMT 5 years +4.899%	1,869	0
September 2022	EUR	1,000	semi-annual	6.875%	7.25 years	EUR 5-year mid-swap +4.646%	1,000	0
November 2022	USD	1,000	semi-annual	9.250%	5 years	US CMT 5 years +4.969%	935	0
UNDATED SUPER SUBORDINATED NOTES							**12,173**	**9,305**

BNP Paribas has the option of not paying interest due on these Undated Super Subordinated Notes. Unpaid interest is not carried forward.

For the notes issued before 2015, this non-payment is subject to the absence of any payment on BNP Paribas SA ordinary shares or on Undated Super Subordinated note equivalents in the previous year. This interest must be paid when dividends are paid on BNP Paribas SA's ordinary shares.

The contracts relating to these Undated Super Subordinated Notes contain a loss absorption clause. Under the terms of this clause, in the event of insufficient regulatory capital, the nominal value of the notes may be reduced in order to serve as a new basis for the calculation of the related coupons until the capital deficiency is made up and the nominal value of the notes is increased to its original amount.

Undated Floating-Rate Subordinated notes

The Undated Floating-Rate Subordinated notes (TSDIs) and other Undated Subordinated notes issued by BNP Paribas SA are redeemable on liquidation of the Bank after repayment of all other debts but ahead of Undated Participating Subordinated notes. They confer no rights over residual assets.

Characteristics of Undated Floating-Rate Subordinated notes:

Issue date	**Currency**	**Amount in original currency** *(in millions)*	**Interest Rate**	**31 December 2022**	**31 December 2021**
October 1985	EUR	305	TMO -0.25%	254	254
September 1986	USD	500	6 month-Libor +0.075%	255	240
UNDATED FLOATING-RATE SUBORDINATED NOTES				**509**	**494**

Payment of interest is obligatory on the TSDIs issued in October 1985 (representing a nominal amount of EUR 305 million), but the Board of directors may postpone interest payments if the Ordinary General Meeting of the Shareholders notes that there is no income available for distribution in the twelve months preceding the interest payment date. Interest payments are cumulative and are payable in full once dividend payments resume.

Payment of interest is obligatory on the TSDIs issued in September 1986 (representing a nominal amount of USD 500 million), but the Board of directors may postpone interest payments if the Ordinary General Meeting of the Shareholders approves a decision not to pay a dividend in the twelve months preceding the interest payment date. Interest payments are cumulative and are payable in full once dividend payments resume. The bank has the option of resuming payment of interest arrears, even where no dividend is paid out.

Undated Participating Subordinated notes

Undated participating subordinated notes issued by BNP Paribas SA in July 1984 in a total amount of EUR 337 million are redeemable only in the event of the liquidation of BNP Paribas SA, but may be bought back on the terms specified in the French act of 3 January 1983. The number of notes in circulation was 1,434,092 at 31 December 2022.

NOTE 4 FINANCING, GUARANTEE AND SECURITIES COMMITMENTS

4.a FINANCING COMMITMENTS

In millions of euros, at	**31 December 2022**	**31 December 2021**
Credit institutions	**64,314**	**62,994**
Customers	**305,558**	**311,485**
Confirmed letters of credit	106,579	106,368
Other commitments given to customers	198,979	205,117
FINANCING COMMITMENTS GIVEN	**369,872**	**374,479**

Credit institutions	**86,091**	**83,427**
Customers	**40,113**	**56,950**
FINANCING COMMITMENTS RECEIVED	**126,204**	**140,377**

4.b GUARANTEE AND SECURITIES COMMITMENTS

In millions of euros, at	**31 December 2022**	**31 December 2021**
Credit institutions	**107,858**	**52,781**
Customers	**124,041**	**114,697**
GUARANTEE COMMITMENTS GIVEN	**231,899**	**167,478**
Credit institutions	**93,377**	**91,917**
Customers	**240,256**	**195,439**
GUARANTEE COMMITMENTS RECEIVED	**333,633**	**287,356**

In millions of euros, at	**31 December 2022**	**31 December 2021**
COMMITMENTS GIVEN ON SECURITIES	**38,219**	**33,278**
COMMITMENTS RECEIVED ON SECURITIES	**42,281**	**38,141**

4.c FINANCIAL INSTRUMENTS GIVEN OR RECEIVED AS COLLATERAL

FINANCIAL INSTRUMENTS GIVEN AS COLLATERAL

In millions of euros, at	**31 December 2022**	**31 December 2021**
Financial instruments (negotiable securities and private receivables) lodged with central banks and eligible for use at any time as collateral for refinancing transactions after haircut	**80,379**	**97,577**
▪ Used as collateral with central banks	34,368	74,360
▪ Available for refinancing transactions	46,011	23,217
Other financial assets pledged as collateral for transactions with credit institutions, financial customers or subscribers of covered bonds issued by the Group	**173,847**	**153,284**

As at 31 December 2022, the Bank had EUR 80,379 million of financial instruments (negotiable securities and private receivables) deposited or pledged with central banks for use at any time as collateral for refinancing transactions (*vs*. EUR 97,577 million as at 31 December 2021). This amount includes EUR 70,683 million deposited with the Banque de France (*vs*. EUR 88,422 million at 31 December 2021) under the Banque de France's comprehensive collateral management system to cover Eurosystem monetary policy transactions and intraday loans. As at 31 December 2022, the Bank had EUR 34,368 million of collateral deposited with central banks (EUR 74,360 million as at 31 December 2021).

The other assets that the Bank has pledged as collateral with credit institutions and financial customers totalled EUR 40,500 million at 31 December 2022 (*vs*. EUR 36,794 million at 31 December 2021), included in particular financing for BNP Paribas Home Loan SFH.

FINANCIAL INSTRUMENTS RECEIVED AS COLLATERAL

In millions of euros, at	31 December 2022	31 December 2021
Financial instruments received as collateral (excluding repurchase agreements)	**52,468**	**40,918**

NOTE 5 SALARIES AND EMPLOYEE BENEFITS

5.a SALARIES AND EMPLOYEE BENEFIT EXPENSE

In millions of euros	Year to 31 December 2022	Year to 31 December 2021
Salaries	**(5,830)**	**(4,758)**
Tax and social security charges(1)	**(1,984)**	**(1,601)**
Employee profit-sharing and incentive plans	**(302)**	**(283)**
TOTAL SALARIES AND EMPLOYEE BENEFIT EXPENSES	**(8,116)**	**(6,642)**

(1) Including the remeasurement of actuarial effects on post-employment benefits.

BNP Paribas SA's headcount breaks down as follows:

Headcount at	31 December 2022	31 December 2021
BNP Paribas Metropolitan France	**36,673**	**33,848**
of which managers	*27,928*	*25,047*
Employees outside Metropolitan France	**26,411**	**18,596**
TOTAL BNP PARIBAS SA	**63,084**	**52,444**

The merger on 1st October 2022 of BNP Paribas Securities Services into BNP Paribas SA resulted in an increase in the headcount by absorption of activities. For information, the total headcount of BNP Paribas Securities Services at 31 December 2021 was 7,823.

5.b EMPLOYEE BENEFIT OBLIGATIONS

Defined-contribution plans

In France, BNP Paribas SA pays contributions to various nationwide basic and top-up pension plans. BNP Paribas SA has set up a funded pension plan under a company-wide agreement. Under this plan, employees will receive an annuity on retirement in addition to the pension paid by nationwide schemes.

Since defined-benefit plans have been closed to new employees in most countries outside France, they are offered the benefit of defined-contribution pension plans. Under these plans, the Group's obligation is essentially limited to paying a percentage of the employee's annual salary into the plan.

The amount paid into defined-contribution post-employment plans in France and other countries for the year 2022 was EUR 376 million, compared with EUR 313 million for the year 2021.

Defined-benefit plans

Existing legacy defined-benefit plans within BNP Paribas SA are valued independently using actuarial techniques by applying the projected unit cost method in order to determine the expense arising from rights vested in employees and benefits payable to retired employees. The demographic and financial assumptions used to estimate the present value of these obligations and of plan assets take into account economic conditions specific to each country.

Provisions set up to cover obligations under defined-benefit post-employment plans totalled EUR 120 million at 31 December 2022 (against EUR 135 million at 31 December 2021), comprised of EUR 61 million for French plans and EUR 58 million for other plans.

BNP Paribas recognised EUR 561 million of retirement plan assets (recognised surplus and reimbursement rights) at 31 December 2022 as compared to EUR 593 million at 31 December 2021.

Pension plans and other retirement benefits

Pension plans

In France, BNP Paribas pays a top-up banking industry pension arising from rights acquired to 31 December 1993 by retired employees and active employees in service at that date. These residual pension obligations are covered by a provision in BNP Paribas SA's financial statements or transferred to an insurance company.

The defined-benefit plans previously granted to Group executives have all been closed and converted into top-up type schemes. The amounts to be allocated to the beneficiaries, subject to their presence within the Group at retirement, were fixed when the previous schemes were closed. These pension plans have been outsourced to insurance companies. The market value of the related plan assets in these companies' balance sheets breaks down as 78% bonds, 8% equities, 13% property assets and 1% other financial instruments.

In BNP Paribas SA's foreign branches, pension plans are based either on pensions linked to the employee's final salary and length of service (United Kingdom), or on annual vesting of rights to a capital sum expressed as a percentage of annual salary and remunerated at a predefined rate (United States).

Some plans are managed by independent fund managers. At 31 December 2022, 84% of the gross obligations under these plans related to plans in the United Kingdom, United States and the Netherlands. The market value of the related plan assets was split as follows: 74% bonds, 6% equities, and 20% other financial instruments.

Other post-employment benefits

BNP Paribas SA employees also receive various other contractual postemployment benefits, such as indemnities payable on retirement. In France, the obligations for these benefits are funded through a contract held with an insurer that is independent from BNP Paribas SA.

The IFRIC decision of June 2021 provided for in ANC recommendation No. 2013-2 amended the measurement of the retirement benefit plans in France for which the entitlement scale is either capped in terms of total seniority, or composed of levels of acquisition of entitlements, or both, specifying the period and rate of recognition of the corresponding expenses. Its implementation led to a decrease in the present value of the gross obligation of EUR 77 million on 1st January 2021, offset by an increase in reserves for an amount net of tax of EUR 57 million.

Post-employment healthcare benefits

In France, BNP Paribas SA no longer has any obligation in relation to healthcare benefits for its retired employees.

Among BNP Paribas SA's foreign branches, there are several healthcare benefit plans for retired employees, mainly in the United States. Provisions for obligations under these plans amounted to EUR 13 million at 31 December 2022, compared to EUR 15 million at 31 December 2021.

Obligations under post-employment healthcare benefit plans are measured using the mortality tables applicable in each country and assumptions about trends in healthcare costs. They also build in assumptions about healthcare benefit costs, including forecast trends in the cost of healthcare services and in inflation, which are derived from historical data.

Provision for voluntary departure, early retirement plans, and headcount adaptation plans

The Bank has implemented a number of voluntary redundancy plans and a headcount adaptation plan for employees who meet certain eligibility criteria. The obligations to eligible active employees under such plans are provided for when the plan is the subject of an agreement or a bilateral draft agreement.

Provisions for these plans totalled EUR 66 million at 31 December 2022 (EUR 21 million at 31 December 2021).

In millions of euros, at	31 December 2022	31 December 2021
Provision for voluntary departure, early retirement plans, and headcount adaptation plans	66	21

NOTE 6 ADDITIONAL INFORMATION

6.a TRANSACTIONS IN SHARE CAPITAL

Resolutions of Shareholders' Annual General Meetings that can be used during the year are presented in chapter 2 *Corporate Governance report* of the Universal Registration Document.

Operations affecting share capital	Number of shares	Par value *(in euros)*	In euros	Date of authorisation by the Annual General Meeting	Date of decision by Board of directors	Date from which shares carry dividend rights
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2020	**1,249,798,561**	**2**	**2,499,597,122**			
Capital reduction by cancellation of shares	(15,466,915)	2	(30,933,830)	(1)	(1)	14 Dec. 21
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2021	**1,234,331,646**	**2**	**2,468,663,292**			
NUMBER OF SHARES ISSUED AT 31 DECEMBER 2022	**1,234,331,646**	**2**	**2,468,663,292**			

(1) Various resolutions passed by the Shareholders' Annual General Meeting and decisions of the Board of directors authorising the allocation of stock options exercised during the period.

6.b STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY BETWEEN 31 DECEMBER 2020 AND 31 DECEMBER 2022

In millions of euros	Share capital	Additional paid-in capital	Net income and reserves for the period	Total shareholders' equity
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2020	**2,500**	**23,240**	**51,484**	**77,224**
Dividend payout for 2020			(3,323)	(3,323)
Capital reduction (by cancellation of shares)	(31)	(866)	(3)	(900)
Retrospective effect of the change in method relating to employee benefit obligations			57	57
Other changes				
Accelerated depreciation			(6)	(6)
Net income for 2021			7,307	7,307
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2021	**2,469**	**22,374**	**55,516**	**80,359**
Dividend payout for 2021			(4,527)	(4,527)
Other changes			(1)	(1)
Accelerated depreciation			2	2
Net income for 2022			8,033	8,033
SHAREHOLDERS' EQUITY AT 31 DECEMBER 2022	**2,469**	**22,374**	**59,023**	**83,866**

6.c NOTIONAL AMOUNTS OF FINANCIAL INSTRUMENTS

The notional amounts of derivative financial instruments are merely an indication of the volume of BNP Paribas SA's activities in financial instrument markets, and do not reflect the market risks associated with such instruments.

Trading portfolio

In millions of euros, at	31 December 2022	31 December 2021
Currency derivatives	7,898,318	7,187,330
Interest rate derivatives	19,339,847	16,562,969
Equity derivatives	1,167,841	1,100,098
Credit derivatives	1,020,840	960,934
Other derivatives	239,812	207,817
FORWARD FINANCIAL INSTRUMENTS IN THE TRADING PORTFOLIO	**29,666,658**	**26,019,148**

Financial instruments traded on organised markets or admitted to clearing houses accounted for 47% of the Bank's derivatives transactions at 31 December 2022 (compared with 44% at 31 December 2021).

Hedging strategy

The total notional amount of derivative financial instruments used for hedging purposes stood at EUR 969,351 million at 31 December 2022, compared with EUR 748,690 million at 31 December 2021.

Derivatives used for hedging purposes are primarily contracted on over-the-counter markets.

Market value

The market value of the Bank's positive net position on outright transactions was EUR 17,182 million at 31 December 2022, compared with a positive net position of EUR 12,978 million at 31 December 2021. The market value of the Bank's net short position on conditional transactions was valued at EUR 9,250 million at 31 December 2022, compared with a net long position of EUR 5,162 million at 31 December 2021.

6.d SEGMENT INFORMATION

The following table gives a regional breakdown of BNP Paribas SA's interbank transactions and customer transactions recognised on the balance sheet:

	Interbank transactions		Customer items		Total by region	
In millions of euros, at	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
France	445,515	461,018	332,190	363,017	777,705	824,035
Other countries in the European Economic Area	78,841	79,612	92,882	92,612	171,723	172,224
Americas and Asia	92,852	78,692	123,222	123,137	216,074	201,829
Other countries	1,627	1,703	3,868	3,474	5,495	5,177
TOTAL USES OF FUNDS	**618,835**	**621,025**	**552,162**	**582,240**	**1,170,997**	**1,203,265**
France	148,586	279,474	391,492	352,083	540,078	631,557
Other countries in the European Economic Area	51,853	37,310	221,912	141,634	273,765	178,944
Americas and Asia	32,400	24,532	207,063	228,773	239,463	253,305
Other countries	1,589	1,046	11,687	7,198	13,276	8,244

TOTAL SOURCES OF FUNDS	234,428	342,362	832,154	729,688	1,066,582	1,072,050

82% of BNP Paribas SA's revenues in 2022 came from counterparties in the European Economic Area (83% in 2021).

6.e SCHEDULE OF USES AND SOURCES OF FUNDS

In millions of euros	Demand and overnight transactions	Term remaining Up to 3 months	3 months to 1 year	1 to 5 years	More than 5 years	Of which provisions	Total
Uses of funds							
Cash and amounts due from central banks and CCP	274,095	791					**274,886**
Treasury bills and money-market instruments	198	11,535	13,084	41,009	76,142	(756)	**141,968**
Due from credit institutions	10,989	93,608	31,609	48,984	16,791	(151)	**201,981**
Customer and leasing transactions	15,213	221,230	71,368	152,115	92,236	(5,506)	**552,162**
Bonds and other fixed-income securities	756	11,777	5,772	44,073	59,752	(681)	**122,130**
Sources of funds							
Amounts due to credit institutions and central banks and CCP	28,497	104,885	39,565	44,456	17,025		**234,428**
Customer items	443,805	311,195	48,517	22,448	6,189		**832,154**
Debt securities	416	26,174	25,332	47,626	60,825		**160,373**

6.f NON-COOPERATIVE STATES AND TERRITORIES

Authorisation from the Group's Compliance Department must be obtained through a special procedure before BNP Paribas SA or Group subsidiaries that report to BNP Paribas SA can open a location in a State considered "uncooperative" as defined by article 238-O A of the French General Tax Code and the Order issued on 2 March 2022 amending the list of non-cooperative States. In accordance with BNP Paribas' "best interests" ethics principle, and to ensure that the Group's internal control mechanisms are applied consistently, these locations are subject to the Group's regulations on Risk Management, anti-money laundering, corruption, financial embargoes, and terrorism financing.

Company name	Ownership interest (%)	Legal form	Type of licence	Business activity
British Virgin Islands				
Twenty-Three Investments Ltd – in liquidation	100	Investments Limited		In liquidation

6.2 Appropriation of income for the year ended 31 December 2022 and dividend distribution

At the Annual General Meeting of 16 May 2023, the Board of directors will propose an appropriation of net income for the year ended 31 December 2022 and dividend distribution under the following terms:

In millions of euros	
Net income	8,033
Unappropriated retained earnings	34,365
TOTAL TO BE APPROPRIATED	**42,398**
Dividend	4,814
Retained earnings	37,584
TOTAL APPROPRIATED INCOME	**42,398**

The total proposed dividend to be paid to BNP Paribas SA shareholders is EUR 4,814 million, which corresponds to EUR 3.90 per share (with a par value of EUR 2.00) based on the number of existing shares at 31 December 2022.

6.3 BNP Paribas SA five-year financial summary

	2018	2019	2020	2021	2022
Financial position at year-end					
a) Share capital *(in euros)*	2,499,597,122	2,499,597,122	2,499,597,122	2,468,663,292	2,468,663,292
b) Number of shares issued	1,249,798,561	1,249,798,561	1,249,798,561	1,234,331,646	1,234,331,646
c) Number of convertible bonds in issue	None	None	None	None	None
Results of operations for the year ***(in millions of euros)***					
a) Total revenues excluding VAT	33,333	40,100	32,108	31,884	50,446
b) Earnings before tax, depreciation, amortisation and impairment	4,631	7,611	7,159	7,769	11,129
c) Income tax expense	557	(325)	(653)	(716)	(943)
d) Profit after tax, depreciation, amortisation and impairment	5,027	7,490	4,404	7,307	8,033
e) Total dividend payout[(1)]	3,774	-	3,324	4,530	4,814
Earnings per share ***(in euros)***					
a) Profit after tax, but before amortisation and impairment	4.15	5.83	5.21	5.71	8.25
b) Profit after tax, depreciation, amortisation and impairment	4.02	5.99	3.52	5.92	6.51
c) Dividend per share[(1)]	3.02	-	2.66	3.67	3.90
Employee data					
a) Number of employees at year-end	54,299	53,880	52,590	52,444	63,084
b) Total payroll expense *(in millions of euros)*	4,208	4,797	4,721	4,792	5,899
c) Amount paid in respect of social benefits (social security, employee welfare, *etc.*) *(in millions of euros)*	1,604	1,535	1,485	1,543	1,738

(1) For 2022, subject to approval by the Annual General Meeting of 16 May 2023.

6.4 Main subsidiaries and associates of BNP Paribas SA

Name	Siren	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas(*)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(*)	Percent of share capital held	Ref.
			in millions of foreign currency				in millions of euros(**)				in %	
BNP PARIBAS SA (siren 662042449) is the parent company of all subsidiaries and associated companies												
I - Detailed information about subsidiaries and associated companies whose book value exceeds 1% of BNP Paribas SA's share capital												
1. Subsidiaries (more than 50% owned)												
Antin Participation 5 1 boulevard Haussmann 75009 Paris France	433,891,678	EUR	194	2	54	0	194	2	54	0	100%	(1)
Austin Finance 3 rue d'Antin 75002 Paris France	485,260,640	EUR	799	139	0	0	799	139	0	0	100%	(1)
Banca Nazionale Del Lavoro SPA Viale Altiero Spinelli 30 00157 Rome Italy		EUR	2,077	3,824	420	2,398	2,077	3,824	420	2,398	100%	(1)
Banco BNPP Brasil SA 510 Av. Presidente Juscelino Kubitschek, 10° to 13° Andares, Itaim Bibi 04543-906 Sao Paulo Brazil		BRL	1,755	1,611	222	1,037	310	284	39	183	100%	(2)
BNP Paribas Bank Polska SA 10/16 ul. Kasprzaka 01-211 Warsaw Poland		PLN	148	10,317	358	4,431	32	2,202	76	946	63%	(2)
Bank BNPP Indonesia PT 35th Floor Menara BCA Grand Indonesia Jl M H Thamrin No. 1 10310 Jakarta Indonesia		IDR	3,852,573	2,269,220	213,962	522,612	231	136	13	31	99%	(2)
BNP PUK Holding Ltd 10 Harewood Avenue London NW1 6AA UK		GBP	40	20	1	1	45	22	1	2	100%	(2)
BNPP Asset Management Holding 1 boulevard Haussmann 75009 Paris France	682,001,904	EUR	23	1,516	(60)	254	23	1,516	(60)	254	67%	(1)
BNPP Bank JSC 5 Lesnaya Street, Bld. Business Center White Square Russian Federation		RUB	5,798	2,556	6,485	10,289	74	33	83	132	100%	(2)

Name	Siren	Currency	Share capital	Reserves and retained earnings before income appro priation	Last publi shed net income	NBI or Pre-tax revenue BNP Paribas(*)	Share capital	Reserves and retained earnings before income appro priation	Last publis hed net income	NBI or Pre-tax revenue(*)	Percent of share capital held	Ref.
			in millions of foreign currency				in millions of euros(**)				in %	
125047 Moscow												
BNPP Canada Corp 1981 avenue McGill College H3A 2W8 Montreal Canada		CAD	159	272	12	8	110	188	8	5	100%	(2)
BNPP Cardif 1 boulevard Haussmann 75009 Paris France	382,983,922	EUR	150	2,107	363	605	150	2,107	363	605	100%	(1)
BNPP China Ltd 25/F Shanghai World Financial Center 100 Century Avenue Shanghai 200120 PRC 200120 Shanghai China		CNY	8,711	2,095	362	1,208	1,168	281	49	162	100%	(2)
BNPP Colombia Corporacion Financiera SA Carrera 8ª No. 99-51 Edificio World Trade Center, Torre A, Piso 9 Bogota DC Colombia		COP	133,721	(893)	47,473	129,104	26	0	9	25	94%	(2)
BNPP Développement 20 rue Chauchat 75009 Paris France	348,540,592	EUR	128	1,069	192	48	128	1,069	192	48	100%	(1)
BNPP El Djazair 8 rue de Cirta Hydra 16035 Algiers Algeria		DZD	20,000	8,989	3,889	13,811	137	61	27	94	84%	(2)
BNPP Factor 46/52 rue Arago 92823 Puteaux France	775,675,069	EUR	6	31	37	123	6	31	37	123	100%	(2)
BNPP Factor Sociedade Financeira de Credito SA 3525 Avenida de Boavista Edificio Aviz 6º 4100 Porto Portugal		EUR	13	68	4	10	13	68	4	10	100%	(2)
BNPP Fortis 3 montagne du Parc/Warandeberg 3 31000 Brussels Belgium		EUR	10,965	9,319	2,207	4,953	10,965	9,319	2,207	4,953	100%	(1)
BNPP Home Loan SFH 1 boulevard Haussmann 75009 Paris France	454,084,211	EUR	285	1	2	5	285	1	2	5	100%	(1)

Name	Siren	Currency	Share capital (in millions of foreign currency)	Reserves and retained earnings before income appropriation (in millions of foreign currency)	Last published net income (in millions of foreign currency)	NBI or Pre-tax revenue BNP Paribas(*) (in millions of foreign currency)	Share capital (in millions of euros(**))	Reserves and retained earnings before income appropriation (in millions of euros(**))	Last published net income (in millions of euros(**))	NBI or Pre-tax revenue(*) (in millions of euros(**))	Percent of share capital held (in %)	Ref.
BNPP India Holding Private Ltd 1 North Avenue – BNP Paribas House Maker Maxity, Bandra – Kurla Complex Bandra (East) 400 051 Mumbai India		INR	2,608	488	197	415	29	6	2	5	100%	(2)
BNPP IRB Participations 1 boulevard Haussmann 75009 Paris France	433,891,983	EUR	46	59	28	30	46	59	28	30	100%	(1)
BNPP Ireland Unlimited Co 5 George's Dock IFSC Dublin 1 Ireland		EUR	402	1	34	34	402	1	34	34	100%	(2)
BNPP Lease Group Leasing Solutions SPA 3 Piazza Lina Bo Bardi 20124 Milan Italy		EUR	65	4	(10)	1	65	4	(10)	1	74%	(2)
BNPP Malaysia Berhad Level 48, Vista Tower The Intermark 182 Jalan Tun Razak 50400 Kuala Lumpur Malaysia		MYR	650	237	55	137	138	50	12	29	100%	(2)
BNPP Mexico Avenida Paseo de las Palmas 11000 Ciudad de Mexico Mexico		MXN	4,500	0	0	0	216	0	0	0	100%	(2)
BNPP Personal Finance 1 boulevard Haussmann 75009 Paris France	542,097,902	EUR	547	5,459	243	1,534	547	5,459	243	1,534	100%	(1)
BNPP Prime Brokerage International Ltd c/o Marsh Management Services (Dublin) Limited 25/28 Adelaide Road Dublin 2 Ireland		USD	0	750	135	431	0	701	126	402	100%	(2)
BNPP Public Sector SCF 1 boulevard Haussmann 75009 Paris France	433,932,811	EUR	24	(1)	2	3	24	(1)	2	3	100%	(1)
BNPP Real Estate 167 quai de la Bataille de Stalingrad 92867 Issy-Les-Moulineaux France	692,012,180	EUR	383	487	64	752	383	487	64	752	100%	(2)
BNPP Real Estate Investment Management Italy SPA		EUR	10	14	(3)	10	10	14	(3)	10	100%	(2)

Name	Siren	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas(*)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(*)	Percent of share capital held	Ref.
			in millions of foreign currency				in millions of euros(**)				in %	
Via Carlo Bo 11 20143 Milan Italy												
BNPP Réunion 1 boulevard Haussmann 75009 Paris France	428,633,408	EUR	25	15	5	46	25	15	5	46	100%	(2)
BNPP SB Re 16 rue Edward Steichen L – 2540 Luxembourg		EUR	250	231	(10)	(10)	250	231	(10)	(10)	100%	(2)
BNPP Securities Asia Ltd 59-63/F II International Finance Centre 8 Finance Street Central Hong Kong		HKD	3,879	(2,087)	(189)	205	465	(250)	(23)	25	100%	(2)
BNPP Securities Japan Ltd GranTokyo North Tower 1-9-1 Marunouchi, Chiyoda-ku 100-6740 Tokyo Japan		JPY	156,050	63,953	19,339	43,724	1,113	456	138	312	100%	(2)
BNPP Securities Korea Co Ltd 24, 25FL, State Tower Namsan, 100, Toegye-ro, Jung-gu Seoul 100-052 Republic of Korea		KRW	250,000	7,025	(8,819)	8,578	185	5	(7)	6	100%	(2)
BNPP Suisse SA 2 place de Hollande 1211 Geneva 11 Switzerland		CHF	320	1,004	(72)	271	324	1,015	(72)	274	100%	(2)
BNPP USA Inc 787 Seventh Avenue NY 10019 New York United States		USD	15,060	1,023	2,659	2,695	14,075	956	2,485	2,519	100%	(2)
BNPP VPG Master LLC 787 Seventh Avenue NY 10019 New York United States		USD	29	39	3	3	27	36	3	3	100%	(2)
BNPP Wealth Management Monaco 5/17 avenue d'Ostende 98000 Monaco Monaco		EUR	13	32	3	31	13	32	3	31	100%	(2)
BNPP Yatirimlar Holding AS Ankara caddesi, Büyük Kelkit Han n° 243, Kat 5 Sirkeci, Eminönü/Fatih Istanbul Türkiye		TRY	1,032	7	7	9	52	0	0	0	100%	(2)
Compagnie Financière Ottomane SA		EUR	9	461	0	0	9	461	0	0	97%	(2)

Name	Siren	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas(*)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(*)	Percent of share capital held	Ref.
			in millions of foreign currency				in millions of euros(**)				in %	
44 avenue JF Kennedy L-1855 Luxembourg Luxembourg												
Exane 16 avenue Matignon 75008 Paris France	342,040,268	EUR	31	441	33	118	31	441	33	118	100%	(2)
Expo Atlantico EAII Investimentos Imobiliarios SA Torre Ocidente, Rua Galileu Galilei, n°2 1500-392 Lisbon Portugal		EUR	1	36	0	0	1	36	0	0	74%	(2)
Expo Indico EIII Investimentos Imobiliarios SA Torre Ocidente, Rua Galileu Galilei, n°2 1500-392 Lisbon Portugal		EUR	1	36	0	0	1	36	0	0	74%	(2)
Financière des Italiens 41 avenue de l'Opéra 75002 Paris France	422,994,954	EUR	412	(186)	191	0	412	(186)	191	0	100%	(1)
Financière des Paiements Électroniques 18 avenue Winston Churchill 94220 Charenton-le-Pont France	753,886,092	EUR	1	69	6	119	1	69	6	119	95%	(2)
Financière du Marché Saint-Honoré 37 place du Marché Saint-Honoré 75001 Paris France	662,047,513	EUR	297	243	(18)	0	297	243	(18)	0	100%	(1)
Floa Immeuble G7 - 71 rue Lucien Faure 33300 Bordeaux France	434,130,423	EUR	72	266	(69)	277	72	266	(69)	277	100%	(2)
Harewood Helena 1 Ltd 10 Harewood Avenue London NW1 6AA UK		USD	39	4	5	6	36	4	5	5	100%	(2)
Human Value Developers Private Ltd Lodha iThink Techno Campus, 10th Flr, Beta Bldg Off. JVLR, Opp. Kanjurmarg Rly Stn, Kanjurmarg East Maharashtra 400042 Mumbai India		INR	2,346	(147)	147	147	27	(2)	2	2	100%	(2)

Name	Siren	Currency	Share capital (in millions of foreign currency)	Reserves and retained earnings before income appro priation (in millions of foreign currency)	Last publi shed net income (in millions of foreign currency)	NBI or Pre-tax revenue BNP Paribas(*) (in millions of foreign currency)	Share capital (in millions of euros(**))	Reserves and retained earnings before income appro priation (in millions of euros(**))	Last publis hed net income (in millions of euros(**))	NBI or Pre-tax revenue(*) (in millions of euros(**))	Percent of share capital held (in %)	Ref.
International Factors Italia SPA 15 Via Vittor Pisani 20124 Milan Italy		EUR	56	764	37	122	56	764	37	122	100%	(2)
Natiocredibail 12 rue du Port 92000 Nanterre France	998,630,206	EUR	32	70	13	25	32	70	13	25	100%	(2)
Optichamps 41 avenue de l'Opéra 75002 Paris France	428,634,695	EUR	411	(164)	185	0	411	(164)	185	0	100%	(1)
Parilease 41 avenue de l'Opéra 75002 Paris France	339,320,392	EUR	129	247	0	0	129	247	0	0	100%	(2)
Participations Opéra 1 boulevard Haussmann 75009 Paris France	451,489,785	EUR	410	(184)	189	0	410	(184)	189	0	100%	(1)
Portzamparc 1 boulevard Haussmann 75009 Paris France	399,223,437	EUR	5	9	3	39	5	9	3	39	100%	(1)
Sagip 3 montagne du Parc 1000 Brussels Belgium		EUR	657	2,754	13	18	657	2,754	13	18	100%	(2)
Sharekhan Ltd Lodha iThink Techno Campus, 10th Flr, Beta Bldg Off. JVLR, Opp. Kanjurmarg Rly Stn, Kanjurmarg East Maharashtra 400042 Mumbai India		INR	587	13,419	1,945	7,394	7	152	22	84	73%	(2)
SNC Taitbout Participation 3 1 boulevard Haussmann 75009 Paris France	433,912,250	EUR	552	83	150	0	552	83	150	0	100%	(1)
Société Orbaisienne de Participations 1 boulevard Haussmann 75009 Paris France	428,753,479	EUR	311	(103)	1	0	311	(103)	1	0	100%	(1)
UkrSibbank Public JSC 7 Andreevskaya Street 04070 Kiev Ukraine		UAH	5,069	4,208	3,539	0	128	107	90	0	60%	(2)

(*) Pre-tax revenue for commercial entities and NBI for banking entities.
(**) Converted at the price on 31/12/2022.
(1) Non-audited social contribution data at 31/12/2022.
(2) Data used in Group consolidated financial statements at 31/12/2022.

Name	Siren	Currency	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue BNP Paribas(*)	Share capital	Reserves and retained earnings before income appropriation	Last published net income	NBI or Pre-tax revenue(*)	Percent of share capital held	Ref.
			in millions of foreign currency				in millions of euros(**)				In %	
2. Associated companies (10% to 50%-owned)												
Bank of Nanjing 50 Huaihai Road 210005 Nanjing China		CNY	10,007	95,502	15,966	40,925	1,342	12,809	2,141	5,489	14%	(3)
BGL BNPP 50 avenue JF Kennedy 2951 Luxembourg Luxembourg		EUR	713	6,727	401	842	713	6,727	401	842	16%	(2)
BNPP Leasing Solutions 16 rue Edward Steichen 2540 Luxembourg Luxembourg		EUR	1,815	349	234	239	1,815	349	234	239	50%	(2)
Crédit Logement 50 boulevard de Sébastopol 75003 Paris France	302,493,275	EUR	1,260	274	120	222	1,260	274	120	222	17%	(3)
Euro Protection Surveillance 30 rue du Doubs 67100 Strasbourg France	338,780,513	EUR	1	94	24	187	1	94	24	187	11%	(5)
Sicovam 18 rue Lafayette 75009 Paris France	411,200,363	EUR	10	875	41	41	10	875	41	41	15%	(4)
Union de Creditos Inmobiliarios Calle Retama 3 28045 Madrid Spain		EUR	154	618	(183)	(55)	154	618	(183)	(55)	10%	(2)

(*) Pre-tax revenue for commercial entities and NBI for banking entities.
(**) Converted at the price on 31/12/2022.
(2) Data used in Group consolidated financial statements at 31/12/2022.
(3) Social data at 31/12/2021.
(4) Social data at 31/07/2022.
(5) Social data at 30/09/2022.

In millions of euros	Subsidiaries		Associated companies	
	French	Foreign	French	Foreign
II - General information about all subsidiaries and associated companies				
Book value of shares				
Gross value	18,610	51,810	426	3,206

Carrying amount	17,156	44,568	419	3,043
Loans and advances given by BNP Paribas SA	26,061	3,276	107	13
Guarantees and endorsements given by BNP Paribas SA	48,916	30,217	0	49
Dividends received	1,586	4,232	33	300

6.5 Disclosures of investments of BNP Paribas SA in 2022 affecting at least 5% of share capital of french companies

Crossing threshold of more than 5% of the capital		
None		
Crossing threshold of more than 10% of the capital		
Unlisted	Fortia Financial Solutions	SAS
Unlisted	Liquidshare	SA
Unlisted	Sicovam Holding	SA
Crossing threshold of more than 20% of the capital		
Unlisted	Le Printemps des terres foncières	SAS
Crossing threshold of more than 33.33% of the capital		
Unlisted	2SF-Société des Services Fiduciaires	SAS
Crossing threshold of more than 50% of the capital		
Unlisted	Compagnie pour le Financement des Loisirs	SA
Crossing threshold of more than 66.66% of the capital		
Unlisted	Exane	SA
Unlisted	Exane Finance	SA
Unlisted	France Titrisation	SAS
Unlisted	Floa	SA
Unlisted	AELX	SAS

6.6 Statutory Auditors' report on the financial statements

For the year ended 31 December 2022

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report includes information specifically required by European regulations or French law, such as information about the appointment of Statutory Auditors. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying financial statements of BNP Paribas SA for the year ended 31 December 2022.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company at 31 December 2022 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Financial Statements Committee.

Basis for opinion

Audit framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under these standards are further described in the "Responsibilities of the Statutory Auditors relating to the audit of the financial statements" section of our report.

Independence

We conducted our audit engagement in compliance with the independence rules provided for in the French Commercial Code (*Code de commerce*) and the French Code of Ethics (*Code de déontologie*) for Statutory Auditors for the period from 1st January 2022 to the date of our report, and, in particular, we did not provide any non-audit services prohibited by article 5 (1) of Regulation (EU) No. 537/2014.

Justification of assessments – Key audit matters

In accordance with the requirements of articles L.823-9 and R.823-7 of the French Commercial Code relating to the justification of our assessments, we inform you of the key audit matters relating to the risks of material misstatement that, in our professional judgement, were the most significant in our audit of the financial statements, as well as how we addressed those risks.

These matters were addressed as part of our audit of the financial statements as a whole, and therefore contributed to the opinion we formed as expressed above. We do not provide a separate opinion on specific items of the financial statements.

Identification and assessment of credit risk on customer loan portfolios

(See Notes 1, 2.f, 3.b and 3.k to the financial statements)

Description of risk	How our audit addressed this risk
As part of its banking intermediation activities, BNP Paribas is exposed to credit risk. It recognises impairment losses to cover known credit risks which are inherent to its operations. Impairment losses either take the form of individual impairment losses recognised against the related on- and off balance sheet commitments or of collective impairment losses recognised against loan portfolios presenting similar risks which are not individually impaired. Collective provisions are determined using statistical models which require judgement at each stage of the calculation, particularly with respect to building similar portfolios and determining the inputs for the applicable risks and the obligating event of the provisions. Under certain circumstances, additional collective provisions for international commitments are recognised in order to take into account any risks identified by BNP Paribas which are not covered by the individual or collective provisions described above. At 31 December 2022, total balance sheet outstandings due from customers exposed to credit risk amounted to EUR 558 billion while total impairment losses stood at EUR 5.5 billion. In an environment still marked by considerable uncertainty relating to the macro-economic climate, we deemed the assessment of credit risk and the measurement of impairment losses to be a key audit matter insofar as management is required to exercise judgement and make estimates as regards credit granted to companies.	We assessed the relevance of BNP Paribas' control system and tested the manual and computerised controls for identifying and measuring impairment. We also examined the most significant outstandings and/or portfolios at the reporting date as well as on the credit granted to companies operating in more sensitive economic sectors or geographic regions. During our work, we focused on: ▪ counterparty business ratings: We assessed the risk level of a sample of outstandings under surveillance. During our work, we paid particular attention to the geographical regions and sectors impacted by the macro-economic climate, which remains uncertain; ▪ measuring provisions recorded individually: we verified that a periodic review of the counterparties under surveillance had been carried out by BNP Paribas and, based on a sample, assessed the assumptions and data used by management to estimate impairment; ▪ measuring collective provisions: assisted by our credit risk experts, we assessed the methods used by BNP Paribas across the various business lines, as well as the effectiveness of the data quality controls. In addition, we examined the disclosures in the notes to the financial statements with respect to credit risk.

Valuation of financial instruments

(See Notes 1, 2.d, 3.c, 3.h, 3.i and 6.c to the financial statements)

Description of risk	How our audit addressed this risk
As part of its trading activities, BNP Paribas holds financial instruments (assets and liabilities) which are recognised in the balance sheet at market value. Market value is determined according to different approaches, depending on the type of instrument and its complexity: (i) using directly observable quoted prices; (ii) using valuation models whose main inputs are observable; and (iii) using valuation models whose main inputs are unobservable. The valuations obtained may be subject to additional value adjustments to take into account certain specific trading, liquidity or counterparty risks. The techniques adopted by management to measure these instruments may therefore involve significant judgement as regards the models and data used. At 31 December 2022, the market value of trading securities represented EUR 95 billion, the bank's positive net position on firm transactions was valued at EUR 17 billion and the market value of the bank's net short position on conditional transactions was valued at EUR 9.3 billion. In light of the materiality of the outstandings and the judgement used to determine market value, we deemed the measurement of financial instruments to be a key audit matter, in particular the measurement of instruments requiring the use of unobservable inputs.	Assisted by our valuation experts, we verified that the key controls used by BNP Paribas with respect to the valuation of financial instruments function properly, in particular those relating to: ▪ the approval and regular review by management of the risks of the valuation models; ▪ the independent verification of the valuation inputs; ▪ the determination of value adjustments. Based on a sample, our valuation experts: ▪ analysed the relevance of the assumptions and inputs used; ▪ analysed the results of the independent review of the inputs by BNP Paribas; ▪ performed independent counter valuations using our own models. We also analysed, on a sample basis, any differences between the valuations obtained and collateral calls with counterparties. In addition, we examined the disclosures in the notes to the financial statements with respect to the valuation of financial instruments.

Measurement of equity investments, other equity securities held for long-term investment and investments in subsidiaries and affiliates

(See Notes 1, 3.c and 3.e to the financial statements)

Description of risk	How our audit addressed this risk
Equity investments, other equity securities held for long-term investment and investments in subsidiaries and affiliates are recognised on the balance sheet at a carrying amount of EUR 66 billion. They are measured individually at the of lower cost or value in use. Value in use is determined, for each investment, using a valuation approach based on available information including discounted future cash flows, net asset value and the related multiples commonly used to assess future yields. When their carrying amount exceeds value in use, an impairment loss is recognised for the difference. Given their materiality in the balance sheet and the sensitivity of the models used to the assumptions underlying the estimated values, we deemed the measurement of these investments to be a key audit matter.	Our audit work consisted in: ▪ assessing, using sampling techniques, the justification for the valuation methods and data used by management to estimate values in use; ▪ testing, using sampling techniques, the accuracy of the calculation of values in use used by the company. Lastly, we reviewed the disclosures on equity investments, other equity securities held for long-term investment and investments in subsidiaries and affiliates in the notes to the financial statements.

General IT controls

Description of risk	How our audit addressed this risk
The reliability and security of IT systems plays a key role in the preparation of BNP Paribas SA's financial statements. We thus deemed the assessment of the general IT controls of the infrastructures and applications that contribute to the preparation of accounting and financial information to be a key audit matter. In particular, a system for controlling access rights to IT systems and authorisation levels based on employee profiles represents a key control for limiting the risk of inappropriate changes to application settings or underlying data.	For the main systems used to prepare accounting and financial information, assisted by our IT specialists, our work consisted primarily in: ▪ obtaining an understanding of the systems, processes and controls which underpin accounting and financial data; ▪ assessing the general IT controls (application and data access management, application changes/developments management and IT operations management) on key systems (in particular accounting, consolidation and automatic reconciliation applications); ▪ examining the control for the authorisation of manual accounting entries; ▪ performing additional audit procedures, where appropriate; ▪ taking into account the cybersecurity risk related to the crisis in Ukraine and the widespread use of remote working.

Specific verifications

In accordance with professional standards applicable in France, we have also performed the specific verifications required by French legal and regulatory provisions.

Information given in the management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' management report and in the other documents provided to the shareholders with respect to the Company's financial position and the financial statements, with the exception of the item described below.

Concerning the fair presentation and the consistency with the financial statements of the disclosures about payment terms referred to in article D.441-6 of the French Commercial Code, we have the following matter to report: as indicated in the management report, these disclosures do not include banking and related transactions, as the Company considers that such transactions do not fall within the scope of the disclosures to be provided.

Report on corporate governance

We attest that the corporate governance section of the Board of Directors' management report sets out the information required by articles L.225-37-4, L.22-10-10 and L.22-10-9 of the French Commercial Code.

Concerning the information given in accordance with the requirements of article L.22-10-9 of the French Commercial Code relating to remuneration and benefits paid or awarded to corporate officers and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements, and, where applicable, with the information obtained by your Company from controlled companies within its scope of consolidation. Based on this work, we attest to the accuracy and fair presentation of this information.

Concerning the information given in accordance with the requirements of article L.22-10-11 of the French Commercial Code relating to those items the Company has deemed liable to have an impact in the event of a takeover bid or exchange offer, we have verified its consistency with the underlying documents that were disclosed to us. Based on this work, we have no matters to report with regard to this information.

Other information

In accordance with French law, we have verified that the required information concerning the purchase of investments and controlling interests and the identity of the shareholders and holders of the voting rights has been properly disclosed in the management report.

Other verifications and information pursuant to legal and regulatory requirements

Presentation of the financial statements included in the annual financial report

In accordance with professional standards applicable to the Statutory Auditors' procedures for annual and consolidated financial statements presented according to the European single electronic reporting format, we have verified that the presentation of the financial statements included in the annual financial report referred to in paragraph I of article L.451-1-2 of the French Monetary and Financial Code (*Code monétaire et financier*) and prepared under the Chief Executive Officer's responsibility, complies with this format, as defined by European Delegated Regulation No. 2019/815 of 17 December 2018.

On the basis of our work, we conclude that the presentation of the financial statements to be included in the annual financial report complies, in all material respects, with the European single electronic reporting format.

Appointment of the Statutory Auditors

We were appointed Statutory Auditors of BNP Paribas SA by the Annual General Meetings held on 23 May 2006 for Deloitte & Associés, 26 May 1994 for PricewaterhouseCoopers Audit and 23 May 2000 for Mazars.

At 31 December 2022, Deloitte & Associés, PricewaterhouseCoopers Audit and Mazars were in the seventeenth, the twenty-ninth and the twenty-third consecutive year of their engagement, respectively.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for preparing financial statements giving a true and fair view in accordance with French accounting principles, and for implementing the internal control procedures it deems necessary for the preparation of financial statements that are free of material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern, and using the going concern basis of accounting, unless it expects to liquidate the Company or to cease operations.

The Financial Statements Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risk management systems, as well as, where applicable, any internal audit systems relating to accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors of BNP Paribas SA.

Responsibilities of the Statutory Auditors relating to the audit of the financial statements

Objective and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free of material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions taken by users on the basis of these financial statements.

As specified in article L.823-10-1 of the French Commercial Code, our audit does not include assurance on the viability or quality of the Company's management.

As part of an audit conducted in accordance with professional standards applicable in France, the Statutory Auditors exercise professional judgement throughout the audit. They also:

- identify and assess the risks of material misstatement in the financial statements, whether due to fraud or error, design and perform audit procedures in response to those risks, and obtain audit evidence considered to be sufficient and appropriate to provide a basis for their opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtain an understanding of the internal control procedures relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management and the related disclosures in the notes to the financial statements;
- assess the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of the audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the Statutory Auditors conclude that a material uncertainty exists, they are required to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or are inadequate, to issue a qualified opinion or a disclaimer of opinion;
- evaluate the overall presentation of the financial statements and assess whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Financial Statements Committee

We submit a report to the Financial Statements Committee which includes, in particular, a description of the scope of the audit and the audit programme implemented, as well as the results of our audit. We also report any significant deficiencies in internal control that we have identified regarding the accounting and financial reporting procedures.

Our report to the Financial Statements Committee includes the risks of material misstatement that, in our professional judgement, were the most significant for the audit of the financial statements and which constitute the key audit matters that we are required to describe in this report.

We also provide the Financial Statements Committee with the declaration provided for in article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France, as defined in particular in articles L.822-10 to L.822-14 of the French Commercial Code and in the French Code of Ethics for Statutory Auditors. Where appropriate, we discuss any risks to our independence and the related safeguard measures with the Financial Statements Committee.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 13 March 2023

The Statutory Auditors

Deloitte & Associés	**PricewaterhouseCoopers Audit**	**Mazars**
Laurence Dubois	Patrice Morot	Virginie Chauvin

7 A COMMITTED BANK: INFORMATION CONCERNING THE ECONOMIC, SOCIAL, CIVIC AND ENVIRONMENTAL RESPONSIBILITY OF BNP PARIBAS

Summary

2022, THE FIRST YEAR OF THE IMPLEMENTATION OF THE GTS 2025 STRATEGIC PLAN ACCELERATING THE DEPLOYMENT OF SUSTAINABLE FINANCE

As a leading financial institution, BNP Paribas considers the environmental, social and governance challenges to be a major focus of its business model and its social and environmental responsibility.

For over a decade, BNP Paribas has integrated environmental and social criteria into its financing and investment policies to direct its business model towards the support of the energy and ecological transition, in making pioneering commitments to restrict the financing of activities that are most harmful to the environment and the climate. The Group has participated in much of the banking businesses' collective work to structure sustainable finance in line with the targets of the 2015 Paris Climate Agreement.

BNP Paribas' Social and Environmental Responsibility (CSR) strategy is based on an in-depth analysis of its environmental, social and governance (ESG) issues through a materiality matrix developed in consultation with its stakeholders[1], backed by a scientific framework[2] and benchmark principles[3]. These environmental, social and governance issues are integrated at the heart of BNP Paribas' company purpose (see 7.1 *Strategy*).

This strategy enabled it to reach a leading position in sustainable finance thanks to numerous solutions to support its clients' ecological and social transition: sustainable bonds, positive impact loans, socially responsible savings and inclusive financial offers, *etc*.

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1 *See 7.6 DEFP and 7.7 Vigilance Plan.*

2 *Publications of the IPCC (Intergovernmental Panel on Climate Change), IPBES (Intergovernmental Science and Policy Platform on Biodiversity and Ecosystems) and the IEA (International Energy Agency).*

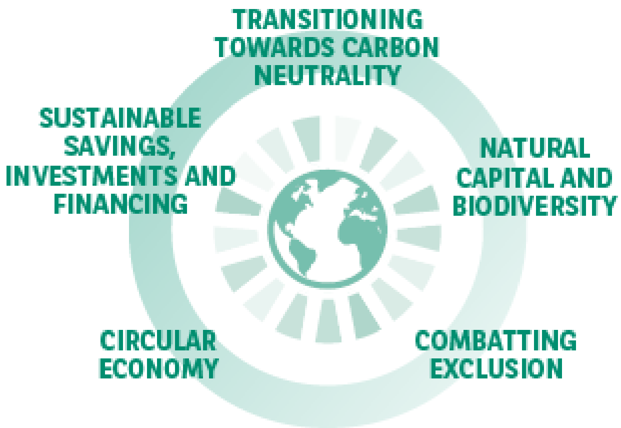
3 *United Nations Sustainable Development Goals and Guiding Principles on Business and Human Rights, ILO (International Labour Organization) fundamental conventions.*

BNP Paribas has included the scaling up of sustainable finance and CSR as one of the three pillars of its GTS 2025 strategic plan.

Aware of the necessity to integrate its CSR strategy into its business model in order to achieve its ambitious environmental, social and governance targets, in 2022, the Group launched its 2025 plan entitled GTS (Growth, Technology, Sustainability). The Sustainability component is built around three strategic areas to serve its clients and the society:

- aligning the Group's portfolios with trajectories compatible with global carbon neutrality in 2050 by reducing greenhouse gas (GHG) emissions;
- supporting clients in the transition to a sustainable and low-carbon economy, both through the increasing availability of sustainable finance products and through the expertise of its employees (Low-Carbon Transition Group, Network of Experts in Sustainability Transition);
- strengthening the ESG culture in enforcing appropriate management processes and tools, monitoring the development of market standards, and in a strengthened governance, directly supervised by its director and Chief Executive Officer.

The implementation of the Sustainability component is expressed through five priority areas:



A STRATEGY REQUIRING A LARGE-SCALE TRANSFORMATION

The effective implementation of an ambitious strategy requires appropriate governance and a transformation of the Company at all levels. BNP Paribas continued to strengthen its governance, in particular through the meetings of the Strategic Committee for Sustainable Finance chaired by the Group's Chief Executive Officer, the structuring of the CSR Function and the creation of the NEST (Network of Experts in Sustainability Transitions). NEST brings together a network of 500 employees who are experts in the energy transition, the circular economy, biodiversity, human rights and social inclusion. They gather their knowledge to support the transition of the Group's clients and share expertise with employees.

Lastly, the launch of the Sustainability Academy programme and platform with content and training dedicated to sustainable finance for all employees, embodies BNP Paribas' ambition to be a learning company in sustainable finance.

In addition, the Group has strengthened its ESG risk management consistent with the development of regulatory requirements[1], and accelerated the deployment of ESG Assessment across all major sectors by assessing 1,500 very large and large corporate clients (see Commitment 3*, Systematic integration and management of environmental, social and governance risks*) and detailed its vigilance plan (see 7.7 *Vigilance Plan*). Part of the management of ESG risks is now described in section 5.11 *ESG risks* of chapter 5 in order to meet the Pillar 3 of the European Banking Authority regulatory requirements.

With regard to the regulators, governments and parliamentarians, BNP Paribas adopted in November 2012 a "Charter for responsible representation with respect to the public authorities", which notably covers CSR issues. This was completed in 2022 with a commitment to ensure that BNP Paribas' representation activities are consistent with its global approach and its public commitments relating to the environment and climate change, in particular its support for the Paris Agreement goals.

[1] *See Pillar 3 ESG, chapter 5. Assets under management of open-ended funds distributed in Europe under articles 8 and 9 according to the SFDR (Sustainable Finance Disclosure Regulation).*

THE OBJECTIVES OF THE GTS 2025 PLAN ARE ROLLED OUT THROUGH QUANTITATIVE INDICATORS WITH OBJECTIVES FOR 2025

BNP Paribas has set its own specific targets in terms of sustainable finance that can be found within the 10 indicators of the Group's CSR dashboard (see 7.1 *Strategy*). The monitoring of this CSR dashboard is carried out on an annual basis by the Group's Executive Committee and Board of directors.

Hence, the Group aims to mobilise EUR 350 billion by 2025 through sustainable credit and bond issuance activities related to environmental and social issues, as well as to achieve EUR 300 billion in assets under management of open-ended funds distributed in Europe under articles 8 and 9 according to the SFDR[1].

At the end of 2022, the Group can highlight results in line with its targets, which demonstrate BNP Paribas' ability to implement its strategy in an operational way, and to have a positive environmental and social impact on the whole society (see our CSR dashboard results in 7.1 *Strategy*).

ALIGNMENT OF OUR LOAN AND INVESTMENT PORTFOLIOS

BNP Paribas is committed to aligning its loan and investment portfolios with trajectories compatible with collective carbon neutrality by 2050. More specifically, as part of the various GFANZ alliances[2], in 2022, the Group set itself ambitious quantitative decarbonisation targets for its loan and investment portfolios by 2025.

For its loan portfolio, BNP Paribas published its first Climate Analysis and Alignment Report[3] focusing on three sectors of activity that are especially greenhouse gases emitors (electricity production, oil and gas, automotive), and introducing targets for 2025.

Furthermore, BNP Paribas decided on more restrictive criteria for its oil and gas sector financing and investment policy, in order to orient its financings towards companies that have initiated their energy transition.

With a majority of financing for low-carbon energy production, BNP Paribas' support for the energy sector has already been deeply transformed

At the end of 2022, BNP Paribas' financing for energy production was already predominantly dedicated to low-carbon energies. With credit exposure of EUR 28.2 billion[4], low-carbon energies represent 55% of credit exposure to the energy production sector (compared to 45% for fossil fuels)[5].

The Group is continuing to exit coal by 2030 in OECD countries, and in the rest of the world in 2040. It has stopped financing new oil projects since 2016 and is now embarking on an exit from exploration-production with the objective of reducing its credit exposure by 80%, *i.e.* less than EUR 1 billion in 2030, compared to the current credit exposure of EUR 5 billion as of 30 September 2022, through the scheduled phasing out of financing activities specialised in or associated with this sector. Regarding gas, the Bank aims to reduce its credit exposure by 30% by 2030, and will reserve its financing for thermal power plants with low emission rates and security of supply.

At the same time, the Group has set a target of EUR 40 billion in credit exposure for the production of low-carbon, mainly renewable, energy by 2030.

BNP Paribas Asset Management and BNP Paribas Cardif have also set decarbonisation targets for their investment portfolios[6]. Within the framework of their activities, they are engaging the dialogue on ESG issues with the companies in which they invest, in order to preserve, and improve the medium- and long-term value of investments made on behalf of third parties. In 2022, discussions focused on energy transition, biodiversity, equality, human rights and Corporate Governance. BNP Paribas Asset Management encourages the ESG commitments of these companies through its voting rights policy (see *Integrating ESG criteria into assets under management*, Commitment 3).

[1] *See Pillar 3 ESG, chapter 5 Assets under management of open-ended funds distributed in Europe under articles 8 and 9 according to the SFDR (Sustainable Finance Disclosure Regulation).*

[2] *Glasgow Financial Alliance for Net-Zero, which brings together 493 companies in the financial sector through three alliances: Net-Zero Banking Alliance (NZBA), Net-Zero Asset Managers Initiative (NZAM) and Net-Zero Owner Alliance (AOA). BNP Paribas, BNP Paribas Asset Management and BNP Paribas Cardif are respectively members of these alliances.*

[3] *Climate Analytics and Alignment Report (https://group.bnpparibas/uploads/file/bnpp_climateanalytics_alignmentreport_final.pdf).*

[4] *Credit exposure as at 30 September 2022 for the production of low-carbon energy (renewable, biofuel and nuclear). This exposure amount is different from the amount calculated for indicator 1 and indicator 8 of the CSR dashboard.*

[5] *Oil refining, oil and gas exploration and production, coal.*

[6] *BNP Paribas Asset Management : Sustainable by nature sequel (https://www.bnpparibas-am.com/en/blog/sustainable-by-nature-sequel-our-portfolio-biodiversity-footprint). BNP Paribas Cardif : 2021 Responsible Investment Report (https://www.bnpparibascardif.com/documents/348001/348117/BNPP_Cardif_Art29_LEC_2021_EN_V3.pdf/52bf2483-f66d-4788-7237-fa973f76bb1f?t=1664378901594).*

A LEADER IN GREEN FINANCE, ENERGY AND ECOLOGICAL TRANSITION

In 2022, BNP Paribas consolidated its position as leader in green finance by positioning itself as the world's leading issuer of green bonds, and first in EMEA for ESG bonds.

Thus, in terms of the energy transition, BNP Paribas acted as financial advisor for the largest worldwide offshore wind farm project, *Dogger Bank Wind Farm*, which is part of the UK's strategy to become carbon neutral by 2050. The Group was also a major stakeholder in the financing of the largest photovoltaic project with storage in North America, called *Edwards Sanborn*, in the United States.

In terms of the circular economy, the Group played a key role in L'Oréal's EUR 3 billion sustainable bond issue, linked to the achievement of several targets, including one relating to the integration of 50% bio-sourced and recycled plastics in packaging. It also supported Carrefour's EUR 1.5 billion sustainable bond issue, notably related to a food waste reduction target. BNP Paribas also invested EUR 10 million in the EUR 15 million fundraising from Phenix, an impact enterprise that fights against food waste and food precariousness, by organising an efficient collection and redistribution of unsold products .

On the biodiversity component, BNP Paribas Asset Management and BNP Paribas Cardif published the first results of their research aimed at determining the footprint of their investments on biodiversity. The Group also participated in developing the nature-related risk management and reporting framework of the TNFD (*Taskforce on Nature-related Financial Discolsures*), and pursued its commitments under the act4nature[1] initiative. Moreover, BNP Paribas has extended its policies to protect sensitive ecosystems through its oil and gas policy, and has, therefore, undertaken not to finance any oil and gas projects in the Arctic and the Amazon. It also mobilised EUR 1.8 billion between 2019 and 2022 for financing contributing to the protection of biodiversity. It also made an investment in NatureMetrics, a company that measures the state of biodiversity on site thanks to environmental DNA technology (e-DNA).

In addition, in 2022, BNP Paribas and the Solar Impulse Foundation completed the first closing for EUR 100 million of the BNP Paribas Solar Impulse Venture fund, dedicated to supporting start-ups committed to the ecological transition. BNP Paribas invested EUR 75 million in this.

THE SOCIAL RESPONSIBILITY AT THE HEART OF BNP PARIBAS' OBJECTIVES

A pioneer in the development of impact bonds, BNP Paribas signed three new ones in 2022, bringing to 14 the number of projects since 2016, of which 11 are still active. Among the innovations, the very first environmental impact bond in France aims to create a new circular economy sector for medical assistance equipment.

14 new investments with a social or environmental impact were also made in 2022, on its own account and on behalf of third parties, for a total of EUR 59 million. The impact investing envelope for own account amounts EUR 200 million and will be deployed by 2025 in favour of impact companies that innovate in three areas: local development and climate, social and solidarity activities, and natural capital.

On the social level, the Group promotes diversity and inclusion by participating in the Diversity and Inclusion Index, carried out in France by the government in collaboration with the CNIL (National Commission for IT and freedoms), the Defender of Rights and a group of stakeholders specialised in diversity topics. In terms of professional equality, BNP Paribas has set ambitious targets for increasing the number of women in governing bodies (40% of SMPs[2] by the end of 2025) resulting in an increase in the proportion of women within the Group's managers.

With a long-standing commitment to supporting local associations through its Foundation (*Projet Banlieues* created in 2006 and renewed in 2022 for three years), in 2022, BNP Paribas also celebrated the tenth anniversary of its Rescue & Recover Fund, which participated in the financing of 42 campaigns for partner associations representing EUR 13 million, of which EUR 5 million was mobilised in 2022 in support of the Ukrainian population. In total, the Group has mobilised over EUR 15 million to contribute to preserving the physical, psychological and social safety of employees in Ukraine and to help Ukrainian refugees.

Attentive to the societal challenges of the countries in which it operates, in particular those of vulnerable populations, BNP Paribas continued its efforts in terms of financial inclusion: nearly three million Nickel accounts (basic banking services open to all) have been opened since its creation and the Group supported the launch of the *Just Sustainability Transitions Institute*, whose aim is to increase funding for populations most vulnerable to climate change and biodiversity loss.

THE GROUP'S ACTIONS AND RESULTS IN TERMS OF CSR ARE RATED POSITIVELY BY MANY EXTERNAL STAKEHOLDERS

The relevance, ambition and comprehensiveness of its CSR strategy has earned BNP Paribas several awards recognising its ambition and achievements (Best bank for sustainable finance in 2022 for Euromoney, Net-Zero progression of the year – EMEA[3] for Environmental Finance), and enabled it to be among the leading financial institutions in extra-financial benchmark ratings (CSA by Standard & Poor's, ESG Profile by Moody's ESG Solutions, ESG Rating by MSCI, see 7.1 *Strategy*).

1 *https://www.act4nature.com/wp-content/uploads/2021/05/BNP-Paribas-VF-03_05.pdf.*

2 *The Group's Senior Management Position (SMP) population is composed of employees holding approximately 3,000 positions considered to have the most significant impact from a strategic, commercial, functional and expertise point of view.*

3 *Europe, Middle-East, Africa.*

NGOs, associations and medias also recognised BNP Paribas in their rankings, in particular Corporate Knights[1], ShareAction[2] and Global Canopy[3].

7.1 Strategy

BNP PARIBAS' COMPANY PURPOSE AND CONSIDERATION OF ENVIRONMENTAL AND SOCIAL ISSUES

BNP Paribas' company purpose was adopted by the Board of directors at the end of 2019, and was published in early 2020.

"We are at the service of our clients and the world we live in.

The BNP Paribas Group was formed by banks that have been deeply embedded in the European and global economies over the last 200 years. They have adapted to the challenges of their times and helped clients and other stakeholders during moments of great change.

BNP Paribas' mission is to contribute to responsible and sustainable growth by financing the economy and advising clients according to the highest ethical standards.

We offer secure, sound and innovative financial solutions to individuals, professional clients, enterprises and institutional investors while striving to address the fundamental challenges of today with regard to the environment, local development and social inclusion.

We are engaged with our clients to create a better future.

We are mobilising resources that have a positive impact.

At BNP Paribas, we want to be a long-term partner for our clients. We want to support their projects, manage their investments and savings, and, through insurance, protect people, their goods and property.

Our employees aim to deliver services that have purpose and relevance for clients and the world around them. They do this most clearly through their daily mission in the Company but also through corporate volunteering.

We are working with stakeholders and have adopted social and environmental goals aligned with global standards such as the United Nations Sustainable Development Goals and those of the financial community such as the Principles for Responsible Banking and the Principles for Responsible Investment.

We ensure that ethics and our commitment to economic, social, civic and environmental responsibility are integrated into our business operations. This commitment is reflected in our organisation and the procedures and policies governing our activities.

We innovate in order to be a leader in sustainable finance.

We take action to support causes by bringing together financial solutions, stakeholder partnerships, employer and procurement initiatives, support for solidarity-based projects, philanthropy, volunteering and intrapreneurship programmes.

We are developing the tools to measure our environmental and social impact and we are focusing on actions that involve all employees.

BNP Paribas. The bank for a changing world."

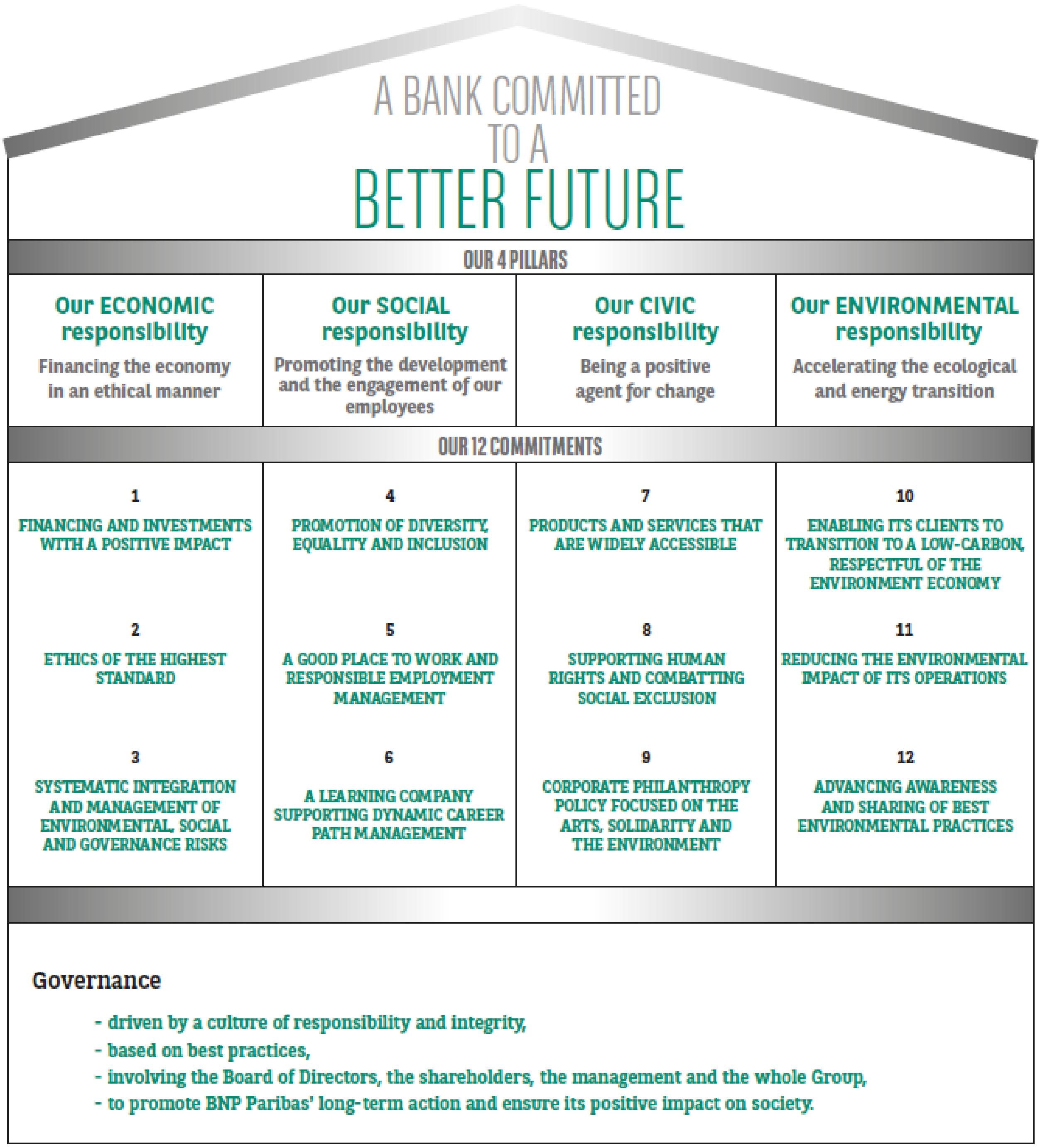
1 *The 100 most sustainable corporations of 2022 | Corporate Knights (https://www.corporateknights.com/rankings/global-100-rankings/2022-global-100-rankings/100-most-sustainablecorporations-of-2022/).*

2 *ShareAction_Banking_Survey_2022-final.pdf.*

3 *Financial Institutions | Forest 500 (https://forest500.org/rankings/financial-institutions).*

THE CORPORATE SOCIAL RESPONSIBILITY (CSR) STRATEGY

In line with the United Nations Sustainable Development Goals, BNP Paribas' social and environmental responsibility policy is structured around four pillars and 12 commitments that reflect its CSR challenges, as well as the Bank's concrete achievements. This strategy, which is part of a process of continuous improvement, aims to contribute to building a more sustainable world while ensuring the Group's stability and performance. This ambition is reflected in the GTS 2025 strategic plan (Growth, Technology, Sustainability), of which Sustainability issues are one of the pillars. Its deployment involves all of the business lines, networks, subsidiaries and countries, under the aegis of a governance organised at the highest level of the Bank (see *CSR, taken to the highest level in the organisation*, section 7.1).



THE CSR POLICY MANAGEMENT DASHBOARD

The GTS 2025 strategic plan defines quantified CSR objectives. The indicators have been renewed in order to reflect a higher ambition and cover new fields. The achievement of the CSR dashboard targets is one of the keys to the plan's success.

The achievement of these 10 objectives is included in the calculation of the three-year retention plan for almost 8,400 key Group employees, where they represent 20% of the award conditions (see *A socially responsible, fair and competitive compensation policy,* Commitment 5). The achievement of these indicators is also included in the calculation of 15% of the variable compensation of the Group's executive corporate officers[1].

Pillar		Indicator	2022 Results	2025 Objectives
Our economic responsibility	1	Amount of sustainable loans	EUR 87 billion	EUR 150 billion
	2	Amount of sustainable bonds	EUR 32 billion	EUR 200 billion
	3	Assets under management of open-ended funds distributed in Europe under article 8 & 9 according to the SFDR	EUR 223 billion	EUR 300 billion
Our social responsibility	4	Share of women among the SMP (Senior Management Position) population	35.2%	40%
	5	Number of solidarity hours performed by employees (#1MillionHours2Help)	1,126,142 hours (in 2021 and 2022)	1 million hours (over two rolling years)
	6	Share of employees who completed at least four training courses during the year	97.4%	90%
Our civic responsibility	7	Number of beneficiaries of products and services supporting financial inclusion	3.3 million beneficiaries	6 million beneficiaries
Our environmental responsibility	8	Amount of the support enabling our clients to transition to a low-carbon economy	EUR 44 billion	EUR 200 billion
	9	Amount of financing to companies contributing to protect terrestrial and marine biodiversity	EUR 1.8 billion[2]	EUR 4 billion
	10	Greenhouse gas emissions (teq CO_2 per FTE) (buildings and business travel)	1.65 teqCO_2/FTE	1.85 teqCO_2/FTE

Dashboard definitions

Amount of sustainable loans: amount of loans at the end of 2022, drawn and undrawn, identified as sustainable by an internal classification system, granted by BNP Paribas to its customers. The Group's transaction classification principles are based on external market standards such as those of the Loan Market Association and the European Taxonomy in Europe.

Amount of sustainable bonds: cumulative amount at the end of 2022 of all types of bonds identified as sustainable according to the guidelines of the ICMA (International Capital Market Association) issued by corporate clients, financial institutions and sovereign clients, and arranged by BNP Paribas (total amount divided by the number of bookrunners).

Amount of assets under management at the end of 2022 in open-ended funds distributed in Europe under articles 8 and 9 according to the SFDR. These are BNP Paribas Asset Management funds.

Rate of women within the Senior Management Position (SMP) population: the Group's Senior Management Position population is composed of employees holding approximately 3,000 positions considered to have the most significant impact from a strategic, commercial, functional and expertise point of view. The percentage is calculated on the basis of SMP positions occupied.

Number of solidarity hours completed by employees: as part of the #1MillionHours2Help programme including the long-term corporate skills volunteering set up under the Diversity and Inclusion Agreement in France.

Share of employees who completed at least four training courses during the year, including mandatory training such as compliance.

[1] See chapter 2.1.3, Compensation and social benefits for directors and corporate officers.

[2] The 2022 amount is estimated for the bond portion, and will be provided in 2023 when the real amounts from the allocation reports for the bonds are known.

Number of beneficiaries of products and services promoting financial inclusion: number of Nickel accounts opened since the creation and number of beneficiaries of microloans distributed by microfinance institutions financed by the Group (*pro rata* of the financing) at the end of 2022.

Amount of support for our clients in the transition to a low-carbon economy: cumulative amount at the end of 2022 of green loans, green bonds and financing identified as contributing to the transition towards a low-carbon economy according to an internal classification system (*e.g.* renewable energies, low-carbon hydrogen, nuclear). This amount covers part of the amounts of indicators 1 (sustainable loans) and 2 (sustainable bonds).

Amount of financing to companies contributing to the protection of terrestrial and marine biodiversity: cumulative amount at the end of 2022 of financial products and services (loans, bonds, *etc.*) that help protect terrestrial and marine biodiversity. The contribution to the protection of biodiversity is identified by an internal classification system. This amount covers part of the amounts of indicators 1 (sustainable loans) and 2 (sustainable bonds).

Greenhouse gas emissions in teqCO_2/FTE (kWh buildings and business travel): greenhouse gas emissions for scope 1 (direct emissions from the combustion of fossil fuels), scope 2 (indirect emissions from the purchase of energy) and, for a part of scope 3 (emissions related to employee business travel), in proportion to the number of Group employees (FTE).

2022 RESULTS

At the end of 2022, a year that was once again marked by economic and geopolitical turbulence, BNP Paribas is in a good position to achieve the targets of its 2022-2025 CSR dashboard, in line with the ambition defined by the GTS 2025 plan.

In terms of sustainable loans (indicator no. 1), the good result in 2022 reflects both BNP Paribas' expertise and the strong appetite of its clients, individual customers and businesses, for the Bank's diversified financing offering that takes into account environmental and social issues.

Despite less favourable conditions on the global bond market, BNP Paribas achieved a good result in terms of sustainable bonds in 2022 (indicator No. 2). The share of sustainable bonds in the total amount of BNP Paribas' structured bonds in 2022 represents 13% worldwide and reached 22% in Europe. BNP Paribas confirms its position among the leaders in the sector: the Bank stands out as the world's leading player in the green bond market and the sixth world player in the sustainable bond market in 2022[1].

Despite a lacklustre environment, the amount of assets under management by BNP Paribas Asset Management's open-ended funds distributed in Europe classed as articles 8 and 9 according to the SFDR regulation (indicator no. 3) increased slightly (+1%) over the last twelve months, with the new inflows in these funds being higher than the new inflows in other funds.

For its three social objectives, BNP Paribas had a very good year in 2022: the Group achieved its target of 35% for women within the SMP population (indicator no. 4). Thanks to the mobilisation of its employees, the milestone of one million solidarity hours was largely achieved (indicator no. 5). Lastly, in terms of training, net progress was made compared to 2021 with more than 97% of employees having completed at least four training sessions during the year.

The strong development of Nickel's inclusive offer, launched in the Belgian and Portuguese markets in 2022, enables the Group to exceed three million beneficiaries of inclusive products since the creation of Nickel (indicator no. 7).

The indicator related to BNP Paribas' support for its clients in their transition to a low carbon economy (indicator no. 8), is supported by the significant deal flow of the Low-Carbon Transition Group which should continue to show results in the coming months. The indicator related to the protection of biodiversity (indicator no. 9) with nearly EUR 2 billion in commitments made at the end of 2022, compared to a target of EUR 4 billion by the end of 2025, reflects the growing number of biodiversity-related indicators in loans related to sustainable objectives (Sustainability-Linked Loans).

Lastly, the level of greenhouse gas emissions per employee in the Bank's operational scope (indicator no. 10) is particularly low in 2022 in a context of a limited recovery in business travel by plane. However, in the context of the current energy crisis, this indicator could be impacted upwards by a higher-carbon energy mix in certain countries in which the Group operates.

PROGRESSES ACKNOWLEDGED BY EXTRA-FINANCIAL RATING AGENCIES AND EXTERNAL STAKEHOLDERS

The following table displays the most recent evaluations from the main extra-financial rating agencies and the inclusion of BNP Paribas in the related extra-financial indexes.

In 2022, the Group maintained or improved its performance in nearly all of its ratings, with scores that were generally far higher than the banking sector average.

Rating agencies	Rating (year of latest rating)	Rating (previous year)	Related indices/Comments
FTSE Russell	4.4/5 (2022)	4.4/5 (2021)	FTSE4Good Global Index Series

[1] *Source: Bloomberg.*

ISS (ESG Corporate Rating)	C+ (2022)	C+ (2021)	Prime (best-in-class status)
MSCI (ESG Rating)	AA (2022)	AA (2021)	-
Standard & Poor's (Corporate Sustainability Assessment)	84/100 (2022)	82/100 (2021)	DJSI World – DJSI Europe
Sustainalytics (ESG Risk Rating)	Medium risk – 25.4/40[(1)] (Nov. 2022)	Medium risk – 25.6/40 (Nov. 2021)	STOXX Global ESG Leaders
Moody's ESG Solutions (ESG Profile)	71/100 (2022) N°. 1 European bank in the ranking	71/100 (2021)	Euronext-Vigeo Eiris: World 120, Europe 120 and France 20
EcoVadis	72/100 (2022)	72/100 (2021)	Top 4% of the rating universe

(1) 0 being the best possible rating.

Moreover, for example on a national level, the Group's Polish subsidiary (BNP Paribas Polska) obtained a score of 10.9 (Low risk) at its first ESG Risk Rating assessment by Sustainalytics in September 2022, ranking among the 4% of banks best rated by this agency.

Furthermore, the Group is also represented in extra-financial indices focusing on social performance, reflecting its commitment to gender equality, diversity and inclusion (see *Our social responsibility, promoting the development and engagement of our employees*, 7.3).

Other entities and specialised magazines have acknowledged the Group's improved CSR performance. Indeed, BNP Paribas:

- was designated in 2022 "Best Bank for Sustainable Finance" in the World and Western Europe categories and "World's Best Bank for ESG Data and Technology" by Euromoney, the leading publication in international finance;
- was awarded the "Best Net-Zero Progression of the Year" by the British analysis and information platform specialising in sustainable finance, Environmental Finance, for the Group's portfolios with trajectories compatible with collective carbon neutrality in 2050;
- was listed as the leading French bank and 4th global bank in the 2023 "Global 100 Most Sustainable Corporations" ranking of the Canadian magazine Corporate Knights, ranking in 71st place;
- took 1st place in the ranking of the 25 major European banks that the NGO ShareAction established in the fight against climate change and preservation of biodiversity;
- positioned itself as the 4th financial institution (and second bank) in the Financial System Benchmark established by the World Benchmarking Alliance, assessing the efforts made by nearly 400 financial institutions to support a fairer and more responsible economy;
- was recognised for its commitments to fight against deforestation by the NGO Global Canopy, which ranked BNP Paribas at the top of 150 financial institutions in its Forest500 ranking for 2021.

A CSR STRATEGY IMPLEMENTED BY REINFORCED GOVERNANCE AND STRONG PUBLIC COMMITMENTS

CSR TAKEN TO THE HIGHEST LEVEL IN THE ORGANISATION

Year after year, BNP Paribas is making progress in implementing its CSR policy, thanks to the commitment of its 193,122 FTE employees as at end-2022. With the launch of the GTS 2025 strategic plan, in which one of the three pillars (S: Sustainability) is dedicated to the integration of environmental and social issues in all of the Group's activities, CSR is more than ever a priority for BNP Paribas.

A strategy driven by the management bodies

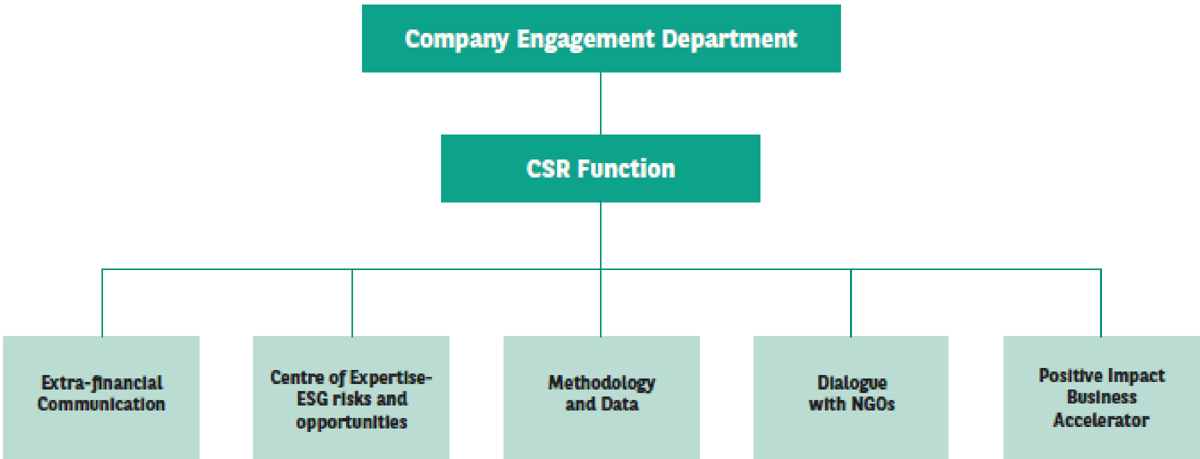
The Board of directors determines BNP Paribas' business orientations and supervises their implementation by the Executive Management, taking the social and environmental challenges of BNP Paribas' activities into consideration. In particular, one of its committees, the Governance, Ethics, Nominations and CSR Committee (CGEN), is particularly responsible for monitoring the Group's contribution to economic sustainable and responsible development. The Internal Control, Risk and Compliance Committee (CCIRC) is in charge of among other topics, reviewing the overall risk strategy, including ESG, as well as monitoring ESG indicators related to the Group's Risk Appetite Statement, *i.e.* its tolerance to the risks to which it is exposed in the execution of its strategy. As such, the Board is regularly informed of the progress made in the implementation of the Group's CSR strategy. In 2022, it addressed ESG topics on 25 occasions, including climate issues, and its members received training in sustainable finance.

Since 2021, three high-level Sustainable Finance Committees have been working to strengthen the integration of these issues into the Group's strategy and within each:

- the **Strategic Committee**, under the direction of the director and Chief Executive Officer, met seven times in 2022, and notably ruled on the Group's commitments in terms of loan portfolio alignment (Oil & Gas, Power Generation, Automotive) and on its participation in the Net-Zero emissions coalitions (NZBA, NZAOA, NZAMI[1]). It also considered the impacts and implementation of new regulations relating to sustainable finance (SFDR, MiFID, IDD[2]) and analysed the expectations of the European Central Bank (ECB) in terms of climate and environmental risks;
- the **Infrastructure Committee**, under the direction of the Group's COO[3], met monthly to monitor the deployment of processes and reports related to sustainable finance, at the methodological, normative and operational levels;
- the **Regulatory Committee**, chaired by the Group General Counsel[4] and by the Corporate Engagement Director, met three times in 2022 to inform its members on the main regulatory texts in preparation (European taxonomy, duty of care, CSRD[5]).

A strategy supported and rolled out by a cross-functional CSR division

A dedicated department is responsible for managing the Bank's CSR commitments, reporting to the Company Engagement Department, represented in the Group Executive Committee. At the Head Office, the CSR Function is structured as follows:



The CSR Department is based on a network created in 2012, which operates in the divisions, business lines, retail networks, departments and subsidiaries in order to facilitate the roll-out of the CSR policy across the whole Group. In total, more than 220 employees spend all or a majority of their time on CSR matters.

Communities of ESG expertise are being created within the Group and its entities to accelerate, streamline and industrialise the consideration of sustainable finance issues in BNP Paribas' activities. For example, the Low-Carbon Transition Group, formed in 2021, is composed of more than 100 fully dedicated bankers, within a network of 160 people (target of 250 in 2025) bringing together several areas of expertise and specialists in the financing of the energy transition, whose mission is to support corporate clients in their decarbonisation.

BNP PARIBAS' PUBLIC POSITIONS

BNP Paribas' approach to corporate social responsibility (CSR) is framed by the thematic and sector-specific public positions it has adopted. With a presence in 65 countries, the Group acts within numerous working groups and platforms, in compliance with and for the operational implementation of numerous commitments.

Universal principles

For many years, BNP Paribas' actions have followed the framework of:

- the United Nations Global Compact (Advanced level);
- the United Nations Women's Empowerment Principles.

[1] NZBA: Net-Zero Banking Alliance, NZAOA: Net-Zero Asset Owner Alliance, NZAMI: Net-Zero Asset Manager Alliance.

[2] SFDR: Sustainable Finance Disclosure Regulation; MFID: Markets in Financial Instruments Directive; IDD: Insurance Distribution Directive.

[3] COO: Chief Operating Officer.

[4] The Group's Legal Director.

[5] CSRD: Corporate Sustainability Reporting Directive.

Sustainable finance initiatives

The Group actively participates in designing and implementing long-term social and environmental solutions within the framework of:

- the Principles for Responsible Banking (PRB);
- the Principles for Responsible Investment (PRI), for BNP Paribas Asset Management, BNP Paribas Real Estate Investment Management, BNP Paribas Cardif, BNP Paribas Securities Services and BNP Paribas Capital Partners;
- the Equator Principles.

Environmental and climate initiatives and commitments

Amongst BNP Paribas' environmental commitments:

- the Net-Zero Banking Alliance, Net-Zero Asset Owner Alliance (BNP Paribas Cardif) and Net-Zero Asset Managers Initiative (BNP Paribas Asset Management);
- the Task Force on Climate-related Financial Disclosures (TCFD) and the Task Force on Nature-related Financial Disclosures (TNFD);
- the Institutional Investors Group on Climate Change (IIGCC);
- the Roundtable on Sustainable Palm Oil (RSPO);
- the act4nature initiative;
- the Afep commitments to the circular economy;
- MEDEF's Business Climate Pledge;
- the Women's Forum's Charter for the commitment and contribution of women to combat global warming;
- the Poseidon Principles.

Social and societal initiatives

BNP Paribas is also supporting other key initiatives which bring together both public and private international stakeholders:

- the *Collectif des entreprises pour une économie plus inclusive en France* (Business collective for a more inclusive economy in France);
- Business for Inclusive Growth (B4IG).

Voluntary commitments defined by BNP Paribas

BNP Paribas has been committed for several years to going further in terms of CSR in several major sensitive sectors by setting itself additional obligations, through:

- its financing and investment policies in the following sectors: agriculture, palm oil, defence, nuclear energy, paper pulp, coal energy, mining, petrol and gas[1];
- its positions on ocean protection, and the preservation of biodiversity;
- a list of excluded goods and activities such as tobacco, drift nets (for fishing), the production of asbestos fibres, products containing PCBs[2], or the trading of any species regulated by the CITES convention (Convention on international trade in endangered species of wild fauna and flora) without the necessary authorisation;
- monitoring and restriction lists grouping businesses which do not meet the Group's CSR requirements;
- a Declaration on Human Rights;
- an Anti-Corruption Policy;
- a Responsible Business Relations Charter;
- a Charter for responsible representation with respect to the public authorities;
- a Responsible Purchasing Charter;
- a tax Code of conduct, intended to inform its stakeholders about the Group's tax practices, whose principles are reflected, throughout the world, in the payment of a significant contribution to the public finances of the various countries in which the Bank operates.

Think tanks

Several members of BNP Paribas' General Management as well as Group experts play an active role in strategic coalitions of active markets on CSR topics, for example:

- Jean-Laurent Bonnafé, director and Chief Executive Officer of the BNP Paribas Group, sits on the Leadership Council of UNEP FI;

[1] These policies are available online: group.bnpparibas/en/our-commitments/transitions/financing-and-investment-policies.

[2] PCB: polychlorobiphenyls.

- Laurence Pessez, CSR Director at BNP Paribas Group, sits on the Banking Board of the Principles for Responsible Banking of the UNEP FI (PRB) and is also Vice-President of the European think tank, *Institut du Développement Durable et des Relations Internationales* (IDDRI);
- Jane Ambachtsheer, Head of Sustainability at BNP Paribas Asset Management, is a member of the Taskforce on Climate-related Financial Disclosure (TCFD);
- Sébastien Soleille, Head of Energy Transition and Environment, is a member of the Taskforce on Nature-related Financial Disclosures (TNFD).

FOSTERING DIALOGUE WITH STAKEHOLDERS

Dialogue with stakeholders is at the heart of BNP Paribas' actions to promote social and environmental responsibility. This dialogue has a three-fold objective: anticipating change in our businesses developments and improving our products and services, optimising Risk Management, and finding innovative solutions which positively impact society.

- Dialogue with the employees or employee representatives are described in the social pillar of this document (see *Listening to employees (Voice of Employees) and Quality social dialogue*, Commitment 5). Employees and external third parties may use the Company's whistleblowing system (see *The whistleblowing system*, Commitment 2).
- Individual and small business clients of all French Commercial & Personal Banking entities have access to a complaint management system (see *Protecting customer interests*, Commitment 2). Numerous entities provide their clients with the opportunity to use an independent ombudsman.
- In the framework of its asset management activities, BNP Paribas Asset Management engages with companies in which the entity invests on ESG topics in order to preserve, or even enhance, the medium and long-term value of the investments made on behalf of its clients. In 2022, discussions focused on energy transition, biodiversity, equality, human rights and Corporate Governance. BNP Paribas Asset Management supports the ESG commitments of these companies through its voting rights policy (see *Integrating ESG criteria into assets management*, Commitment 3).
- BNP Paribas regularly discusses with its main suppliers primarily through business reviews, annual "Partners for Strategic Sourcing" events dedicated to the Group's key suppliers, and satisfaction surveys (SME Pact Barometer). The Group also offers them a redress procedure in case of difficulties. In France, an internal ombudsman, appointed in accordance with the commitments of the BNP Paribas Responsible Procurement Charter and independent of the Procurement & Performance (P&P) function, can be contacted by any supplier in the event of a dispute with a view to resolving it (contact details can be found online at the following website: www.group.bnpparibas/en). 12 referrals were recorded in 2022.
- BNP Paribas presents its CSR strategy to investors several times a year and regularly informs extra-financial analysts. 74 different investors, based in Europe and North America, were met at least once in 2022 to discuss ESG topics.
- The Group pursues a policy and a management process for its relations with advocacy NGOs, in order to ensure a constructive dialogue with them. In 2022, BNP Paribas had 120 different exchanges with these NGOs throughout the world.
- With regard to regulatory organisations, governments and parliamentarians, in November 2012, BNP Paribas adopted a "Charter for responsible representation with respect to the public authorities". This was supplemented in 2022 by a commitment to ensure that BNP Paribas' representation activities are consistent with its global approach and its public commitments relating to the environment and climate change, in particular its support for the targets of the Paris Agreement. The Bank is also registered in the digital register of lobbyists managed by the *Haute Autorité pour la Transparence de la Vie Publique* (HATVP, High Authority for Transparency in Public Life), on the EU transparency register and now in Germany on the new *Bundestag Lobbyregister*. It is also registered in the United States with the Senate and the House of Representatives under the Lobbying Disclosure Act. Lastly, the Group follows the principles of the Transparency International France Joint Declaration on Transparency in Lobbying, signed in February 2014, and its revised version of May 2019, which takes into account the provisions of the Sapin 2 law on the representation of interests. The dedicated website of its Public Affairs France Department details its work in the area of responsible representation[1]. The Group's public positions concerning banking and financial regulations are also available on its website[2].
- The stakeholder mapping and BNP Paribas' dialogue initiatives with each stakeholder are described in detail in the document "How BNP Paribas listens to and takes into account the expectations of its stakeholders"[3], available on the corporate website. A materiality matrix presenting the most important issues for the Group's internal and external stakeholders is also available (see *Vigilance plan*, section 7.7).

CHANGES IN OUR EXTRA-FINANCIAL REPORTING INFORMATION

Part of the management of our ESG risks is now described in section 5.11 *Environmental, social and governance risks* of chapter 5, to meet the regulatory requirements of Pillar 3 of the European Banking Authority.

1 *www.hatvp.fr.*

2 *group.bnpparibas/en/key-public-positions-banking-financial-regulation.*

3 *Listening to and taking into account stakeholder expectations by BNP Paribas (https://cdn group.bnpparibas.com/uploads/file/2021_rse_dialogue_parties_prenantes_fr.pdf).*

7.2 Our economic responsibility: financing the economy in an ethical manner

BNP Paribas' primary mission is to meet its clients' needs, in particular by financing in an ethical manner the projects of individual clients and businesses, drivers of the economic development and jobs' creation. Given its leading positions in financial services in the 65 countries in which it operates, the Group's financing capacity and the way it conducts its business can have a direct impact on local economies. Thus, aware of its economic responsibility, BNP Paribas acts in coherence with its three commitments:

- **Commitment 1:** Financing and investments with a positive impact;
- **Commitment 2:** Ethics of the highest standard;
- **Commitment 3:** Systematic integration and management of environmental, social and governance risks (ESG).

COMMITMENT 1: FINANCING AND INVESTMENTS WITH A POSITIVE IMPACT

ENABLING THE TRANSITION BY OFFERING A WIDE RANGE OF SUSTAINABLE PRODUCTS

The Group's CSR strategy has long been structured to contribute to achieving the United Nations' 17 Sustainable Development Goals (SDG). This strategy involves accompanying all customers, individuals, corporates and institutional clients, in their transition to a low-carbon economy, respectful of the planet's resources and allowing the inclusion of the most vulnerable as well as the respect for human rights.

For several years now, BNP Paribas has been developing a wide range of products indexed to extra-financial indicators, intended to foster the transition of its clients, such as financing (Sustainability-Linked Loans), bond issues (Sustainability-Linked Bonds), deposit solutions (sustainable deposits) or hedges of their foreign exchange risk (cross-currency sustainability-linked swaps). The Group has also rolled out a wide range of green loans and green bonds, which are described in Commitment 10, *Enabling its clients to transition to a low-carbon economy respectful of the environment*. The "impact loans" offering launched in 2022 also makes this financing available to SMEs (Small & Medium-sized Enterprises), mid-sized companies and associations: they can benefit from loans for a period of two to seven years, with margins indexed notably on objectives for improving ESG criteria assessed by an external rating agency.

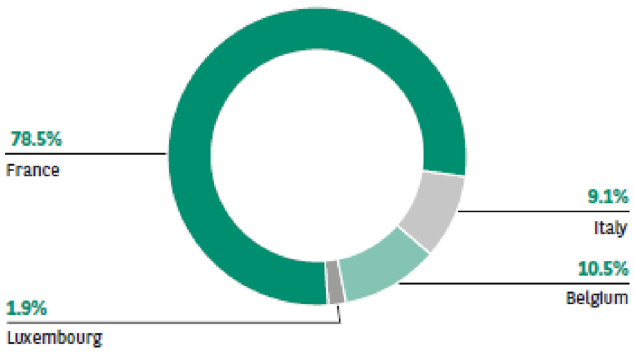
In order to precisely monitor BNP Paribas' activities in supporting the transition of its clients, several indicators have been developed and are included in the Group's CSR policy management dashboard (see section 7.1 *Strategy, CSR policy management dashboard* for the definition of the indicators used):

- amount of sustainable loans. The indicator used includes the sum of sustainable loans granted by BNP Paribas to its clients, related to environmental or social issues. BNP Paribas' target is to reach an amount of sustainable loans of EUR 150 billion by 2025. At end-2022, the amount of sustainable loans was EUR 87 billion;
- amount of sustainable bonds. BNP Paribas' target is to reach a cumulative amount of sustainable bonds of EUR 200 billion by 2025. At end-2022, the amount was EUR 32 billion.

FINANCING IMPACT ENTREPRENEURSHIP

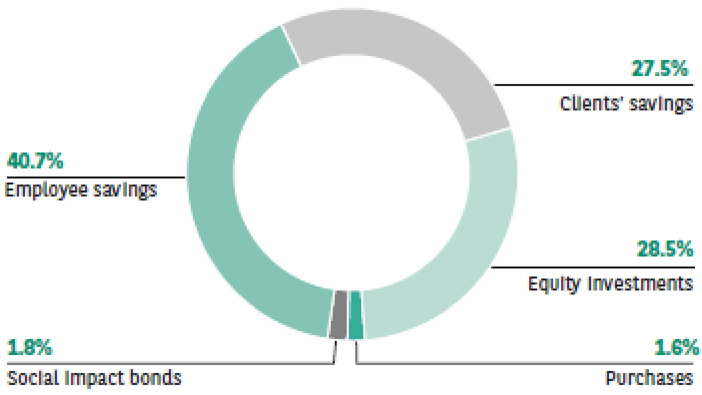
Thanks to their hybrid business model, impact enterprises, which may be start-ups, associations, cooperatives or microfinance institutions (MFIs, see section *An historic support for microfinance institutions,* Commitment 7), aim to generate a strong positive social and/or environmental impact, while seeking economic sustainability, on various themes such as the circular economy, access to health, child protection, professional integration and equal opportunities.

FINANCING FOR IMPACT ENTERPRISES: EUR 1.4 BILLION AT END-2022



The decrease in financing to impact enterprises compared to 2021 (EUR 1.8 billion) is explained by the change in the definition of an impact enterprise used by the Group, in line with market definitions (*Mouvement Impact France*, European Union).

INVESTMENTS AND OTHER SUPPORT FOR IMPACT COMPANIES (IN ADDITION TO FINANCING): EUR 295 MILLION AT END-2022



The Group's commitment to support entrepreneurship for impact amounts to EUR 2 billion

In 2022, total support (loans, investments for the own account of the Group or on behalf of third parties, impact bonds) to impact enterprises, including Microfinance Institutions (MFIs, for EUR 332 million, see Commitment 7, *Products and services that are widely accessible*), amounted to EUR 2 billion, all Group entities combined. The Bank supports over 3,170 impact enterprises (including MFIs and some start-ups) through financing, banking services and investments.

At end-2022, the Commercial & Personal Banking networks count more than 265 banking advisors specialised in supporting impact entrepreneurs through the "Act for Impact" initiative.

In 2022, BNP Paribas also incubated two employees' projects or impact companies as part of People'sLab4Good, the internal incubator for positive impact projects:

- One Step Forward in Luxembourg, supported by Grameen Creative Lab[1], develops a mentoring programme with several companies including BGL BNP Paribas to help refugees in their academic career or their job search, in partnership with SINGA[2];
- In France, an employee's project that aims to identify and implement all actions to avoid domestic economic violence, whose main victims are women. Currently being rolled out, it will be strengthened, in particular, by training for banking advisors and customer information, in collaboration with public authorities and associations.

[1] www.bgl.lu/en/csr/civic-responsibility/one-step-forward.html.

[2] www.singaluxembourg.lu.

Development of the Impact Bond activity

An Impact Bond is a product that enables the financing of innovative projects led by NGOs or impact enterprises. In 2022, BNP Paribas continued the thematic and geographical development and diversification of Impact Bonds as an arranger and investor. Three new contracts were signed for a total amount of EUR 11.6 million in which the BNP Paribas European Impact Bonds Fund, invested EUR 3.5 million, including:

- the very first impact bond with an ecological impact and fair transition in France, led by *Envie Autonomie*, which aims to create a new circular economy sector for medical equipment (wheelchairs, healthcare beds, *etc*.) to make it accessible to the most vulnerable;
- *"Standing Strong"*, BNP Paribas' first Impact Bond in the Netherlands, which aims to prevent falls by the elderly, to improve their health and autonomy.

At end-2022, 11 impact bonds supported by BNP Paribas (as arranger or investor, sometimes both) had been signed representing more than EUR 32 million in total.

Impact investments

In 2022, the Group continued to deploy its impact investments on its own behalf and for third parties (BNP Paribas Solar Impulse and BNP Paribas Social Business Impact funds, managed by BNP Paribas Asset Management) by favouring direct equity investment in companies with a strong social and/or environmental impact. 14 new investments (excluding reinvestments) were made for a total of EUR 59 million, including:

- Phenix, which fights against waste (food and non-food) and the precariousness of vulnerable people by facilitating the logistics of donations to associations;
- Printemps des Terres, which supports the transition to sustainable agriculture restoring agricultural land, forests and marshes in France for a more sustainable agriculture that fosters biodiversity;
- SAS Minimum, which recycles plastic waste into sustainable materials for the construction sector.

Sharing products to combine help for the underprivileged and investment

In Belgium, the new Impact Together fund will be financed by a portion of BNP Paribas Fortis' revenues from client investments in several responsible funds. It will centralise all BNP Paribas Fortis' charitable commissions, with an annual budget of more than EUR 3 million. Managed by the King Baudouin Foundation, Impact Together will support organisations that work alongside the most disadvantaged.

In 2022, BNP Paribas issued its first Social Bond, whose proceeds are used to finance or refinance projects that have a positive social impact on financial inclusion and access to employment, housing, education and health. A portion of the amount invested is donated to associations supported by the Group that work for equal opportunities, social inclusion and humanitarian aid.

DESIGNING AND PROMOTING SUSTAINABLE INVESTMENT FUNDS

BNP Paribas is a major player in sustainable finance through its various subsidiaries in asset management and distribution. As part of the GTS 2025 strategic plan (Growth, Technology, Sustainability), BNP Paribas Asset Management aims to reach EUR 300 billion in assets under management in open-ended funds distributed in Europe and classified in article 8 or 9 categories of the "Sustainable Finance Disclosure Regulation" (SFDR) that entered into force in March 2021 (indicator 3 of the CSR policy management dashboard, see 7.1). At the end of 2022, this amount was EUR 223 billion.

In addition, BNP Paribas Asset Management offers solutions that are recognised and audited by independent labels in Europe, representing more than EUR 121 billion in assets under management, or nearly 25% of total assets under management at 31 December 2022.

	SRI label	**Greenfin label**	**Finansol label**	**Towards Sustainability label**	**FNG label**	**Luxflag label**	**Funds with at least one label**	**TOTAL LABELLED ASSETS** *(in millions of euros)*
Shares	56			58	9	1	86	**49,161**
Bonds	12	2	2	33	4		35	**21,335**
Monetary	3			2			3	**22,337**
Real estate funds	1			2			2	**282**

Diversified	2	6	27		1	35	**28,820**
							121,935

FEDERATING FINANCIAL INSTITUTIONS IN COALITIONS AROUND AMBITIOUS OBJECTIVES AND THE DEVELOPMENT OF SHARED METHODOLOGIES

In order to maximise the impact of the Group's actions for a massive and rapid transition, it is important that a large number of financial institutions engage in this movement. It is for this reason that BNP Paribas has chosen to initiate or play a leading role in coalitions that work to promote the Sustainable Development Goals and the transition to a low-carbon economy.

Strong involvement in the work of the United Nations Principles for Responsible Banking

As signatory of the United Nations "Principles for Responsible Banking" (PRB) from their launch in 2019, BNP Paribas has been actively involved in the deployment of this major sustainable finance initiative. This is demonstrated by the election of the Group Global Head of CSR to the PRB's Banking Board, the participation of numerous BNP Paribas experts in the working groups set up by the initiative (financial inclusion, circular economy, biodiversity), as well as the publication of the Group's PRB report (see also *GRI, ISO 26000, Global Compact, Sustainable Development Goals, Principles for Responsible Banking and TCFD cross-reference table*, section 7.8).

Net-Zero alliances, coalitions to accelerate the alignment of financial flows with the target of carbon neutrality by 2050

To achieve the banking sector's ambition to align its climate commitments with the objectives of the Paris Agreement and to pursue the objective of collective carbon neutrality by 2050, BNP Paribas is a member of the Net-Zero alliances promoted at the COP (Conference of Parties) 26 in Glasgow. BNP Paribas Asset Management joined the Net-Zero Asset Managers initiative (NZAMi), BNP Paribas Cardif the Net-Zero Asset Owner Alliance (NZAO) and the Group is one of the founding members of the Net-Zero Banking Alliance (NZBA) launched by UN Environment in April 2021. With 126 signatory banks at the end of 2022, the NZBA is a powerful tool to strengthen and accelerate banks' decarbonisation strategies.

Since the announcement of its commitment to align its activities with a target of Net-Zero emissions by 2050, BNP Paribas has published its first Climate Analytics and Alignment Report[1]. In September 2022, the magazine Environmental Finance awarded BNP Paribas its "Net-Zero progression of the year in EMEA[2]" award[3]. This distinction recognises the commitment of the Group's business lines to accompanying its clients in their transition to carbon neutrality.

In 2022, the UNEP-FI (United Nations Environment Programme Financial Initiative) and the PRI (Principles for Responsible Investment) merged to offer a joint project to the 4,000 member investors. In the latest PRI assessment report, BNP Paribas Asset Management received the best scores (four or five stars) in 10 of the 11 categories and obtained a score above the median of its peers in all categories.

TAILORED ADVICE AND SUPPORT

Accelerating female entrepreneurship

Women play a key role in economic and social development. This is why BNP Paribas has made supporting female entrepreneurship a major issue for several years, as shown in the following initiatives:

In France, since 2017, the *ConnectHers* programme gives more than 90,000 women entrepreneurs access to a network of referent contacts thanks to 200 banking advisors throughout France. It also includes a financing enveloppe of EUR 3 billion in loans in 2022 as well as support tools.

In addition, in order to reduce inequalities in access to financing between women and men entrepreneurs, BNP Paribas took part in the first closing of SistaFund, the first venture capital fund to finance start-ups founded or co-founded by women entrepreneurs in the fields of healthcare, finance, software as a service and consumer goods.

Lastly, to showcase women entrepreneurs, BNP Paribas has partnered with the French Women Entrepreneurs 40 (FWE40), the first annual ranking of the 40 growing French companies headed by women. This ranking, launched under the patronage of the Ministry of the Economy and Finance, will enable 40 women leaders to benefit from tailor-made support to accelerate the growth of their companies.

Start-ups and innovative companies

BNP Paribas continues to strengthen its ecosystem designed to promote the development and support of innovative companies.

[1] *Climate Analytics and Alignment Report. https://group.bnpparibas/uploads/file/bnpp_climateanalytics_alignmentreport_final.pdf.*

[2] *Europe, Middle-East, Africa.*

[3] *group.bnpparibas/en/news/net-zero-progression-of-the-year-emea-award-imene-ben-rejeb-mzah-explains-our-data-centric-approach.*

Under the WAI label for “We Are Innovation”, BNP Paribas brought together all the offers, employees and places dedicated to innovation. With 3,800 start-up clients, EUR 200 million invested and 100 specialised banking advisors, BNP Paribas advises 87% of the companies in the Next40 and accompanies 75% of companies in the FrenchTech120. The Group is developing the same strategy in other European countries: in Germany, the Scandinavian countries and the United Kingdom, by prioritising investments in technological solutions enabling to accelerate the ecological transition.

To support innovative companies in their growth, BNP Paribas participates as a founding member in the *Scale-Up Europe Initiative*. This group counts more than 300 start-up and scale-up founders, investors, researchers and companies committed to the development of European technology. It supports companies in their growth until their IPO.

COMMITMENT 2: ETHICS OF THE HIGHEST STANDARD

The respect of the most rigorous ethical standards is a prerequisite at BNP Paribas. All Group employees are required to strictly respect all laws, rules and regulations in effect in all domains, as well as all professional standards that apply to their activities. In the event of conflict between the laws of a country and BNP Paribas’ ethical rules, employees are required to respect local legislation while at the same time looking for ways to apply and respect internal ethical rules.

ETHICS OF THE HIGHEST STANDARD

Code of conduct

The BNP Paribas Code of conduct, published in 2016 and enhanced in 2022, is translated into 20 languages and is published on the Group’s website[1]. It covers the following topics:

- customer’s interest;
- financial security;
- market integrity;
- conflicts of interests;
- professional ethics;
- respect for colleagues;
- protection of the Group;
- commitment to society;
- the fight against corruption and influence peddling.

The whistleblowing system

All employees have the right to signal an alert.

Deployed in all BNP Paribas entities, the whistleblowing[2] system is based on dedicated channels under the responsibility of “alert officers” within the Compliance Function, ensuring independent and confidential processing of alerts.

Initially open to the Group’s employees, since the beginning of 2023 it has now been extended to external stakeholders and is accessible *via* the Group’s website[3].

The protection of whistleblowers against the risk of retaliation was strengthened in 2022, in line with the transposition of the European Directive 2019-1937. Any person that needs to know of an alert during its processing is formally committed to respecting the confidentiality of the information relating to the whistleblower and any person involved. In addition, the Group guarantees the protection of whistleblowers against the risk of retaliation, and any person considering themselves the victim of retaliation may issue an alert that will be dealt with according to the standards defined by the Human Resources Department. This protection applies regardless of the channel used by the whistleblower.

The whistleblowing system is presented in the mandatory biennial training course on the Code of conduct.

Executive Management and the Board of directors are regularly informed of its use.

	2020	2021	2022
Number of alerts	299	296	**306**

1 *BNP Paribas Group Code of conduct (https://group.bnpparibas/uploads/file/220204_bnpp_compliance_codeofconduct_2022_eng.pdf).*

2 *Summary of BNP Paribas’ internal whistleblowing framework (https://cdn-group.bnpparibas.com/uploads/file/summary_of_bnp_paribas_wb_framework_eng_june_2022.pdf).*

3 *Whistleblowing form (https://group.bnpparibas/acces-directs/dispositif-dalerte).*

In 2022, 85 out of 306 alerts appeared to be justified, including 41 relating to respect for colleagues, *i.e.* 48%, and 44 other alerts relating to conduct matters.

The fight against corruption, money laundering and the financing of terrorism and asset freezing

In all of its entities, BNP Paribas maintains mechanisms for detecting money laundering and terrorist financing operations, which are based on a set of standards and controls, on employee vigilance, maintained through mandatory training programmes, and on constantly evolving computerised tools. A strengthened system for the prevention and detection of corruption has also been generalised (see section *Compliance activity in 2022*, chapter 2).

Training

All ethics topics are subject to mandatory training courses rolled out over several years.

A training course on all the topics of the Code of conduct (Conduct Journey) is mandatory for new employees in the Group, and every two years for all employees. After a first training campaign assigned in 2021 with a completion rate of 96.5%; a second component was assigned to all employees in 2022 with an achievement rate of 97.2%.

In addition, employees particularly exposed to certain risks must undergo advanced training in their respective areas of expertise.

A reinforced Personal Data Protection Awareness module was initiated and completed by 96% of employees, giving them a better understanding of their data protection responsibilities. This e-learning module continues to be taken by newcomers. A new campaign will be launched in the second half of 2023, with a new awareness module.

Lastly, to promote the protection of personal data within external teams during their assignments for BNP Paribas and third parties, a training module has been offered since December 2021. These populations are thus informed of the standards and obligations in terms of personal data protection within the Group.

The fight against tax evasion

Compliance with all tax obligations is one of the Group's commitments in terms of economic, social, civic and environmental responsibility. The tax compliance of operations intended to meet its needs or those of its clients is thus a major objective of its governance. To this end, principles and procedures have been defined and are applicable to all operations in which the Group is involved. These elements are included in the BNP Paribas Code of Tax conduct published in 2020 and currently being updated.

The Group's fiscally responsible behaviour is reflected in the fair contribution it makes to the revenues of the countries or territories in which it operates.

Each year, the Group is fully transparent by publishing a table presenting, country by country, net banking revenue, workforce and income, as well as corporate income tax paid (See *Information on locations and businesses*, part 8.6).

The Group's tax principles

The decisions taken by BNP Paribas are guided by the will to meet the needs of the real economy, and not by tax considerations.

The choice of location results from the Group's will to provide its customers with the best possible service. BNP Paribas entities have real economic substance. BNP Paribas avoids setting up in countries or territories considered as non-cooperative by France, the European Union or the OECD.

In all the jurisdictions in which it operates, the Group undertakes to comply not only with the letter but also with the spirit of the tax laws and fiscal regulations in force. The Group ensures compliance with tax rules pursuant to treaties, laws and regulations, as well as the payment of all corresponding taxes whatsoever.

The transfer pricing policy applicable to intra-group cross-border transactions excludes any search for tax optimisation.

All around the world, BNP Paribas seeks to establish and maintain a cooperative relationship with tax authorities.

The Group takes the greatest care in ensuring the tax compliance of its clients.

BNP Paribas ensures the proper application of all provisions governing withholding taxes as well as the transfer of these funds to the budgets of the countries or territories concerned.

The Group also ensures the quality and completeness of information it transmits automatically, on request, or spontaneously, to public authorities.

Mandatory deductions payable by BNP Paribas

Globally, the amount of taxes and levies owed by the Group reached EUR 7.2 billion in 2022. In France, the Group paid taxes and duties of EUR 2.8 billion in respect of the same year.

In addition, it plays an essential tax collector role on behalf of public authorities, by withholding taxes relating to both transactions carried out by its clients and the income paid to them, and its employees' salaries.

All of these elements are included in the BNP Paribas Group's tax Code of conduct.

PROTECTING CLIENTS' INTERESTS

Protecting clients' interests is a major concern for the Group. For this reason, it has chosen to place this issue at the heart of its Code of conduct and has set up a dedicated expert group within Compliance function.

A global Group-wide policy

The clients' interest protection policy defines the rules of organisation and conduct that must be applied throughout the relationship with the client and at all stages of the product and service life cycle, in order to ensure that:

- **products and services offered to clients** meet their needs and situation;
- **information provided to clients** is clear and honest, and enable them to make informed decisions;
- **conflicts of interest** are managed in such a way as to favour the interests of the clients and not those of the Group, its employees, its partners or other customers;
- **complaints** are handled promptly and rigorously.

The protection of clients' interests is the subject of trainings for the employees concerned, in particular the teams in charge of customer relations and management.

Compliance with the Code of conduct and the clients' interest protection policy is verified by all internal control players: the first line of defence, Compliance and General Inspection.

These rules are translated into concrete practices deployed in all Group business lines and entities, depending on their specific characteristics:

- **dialogue with consumer associations** and other stakeholders is encouraged to gather their opinions on new ways to improve the protection of clients' interests;
- **approval procedures for new products and services** include the protection of clients' interests;
- **questionnaires to identify needs** and the situation of clients are gradually being enriched with environmental, social and governance (ESG) criteria, in order to integrate their preferences in the context of advice and portfolio management;
- **compensation of sales teams** is structured so as not to encourage operations that would be contrary to clients' interests.

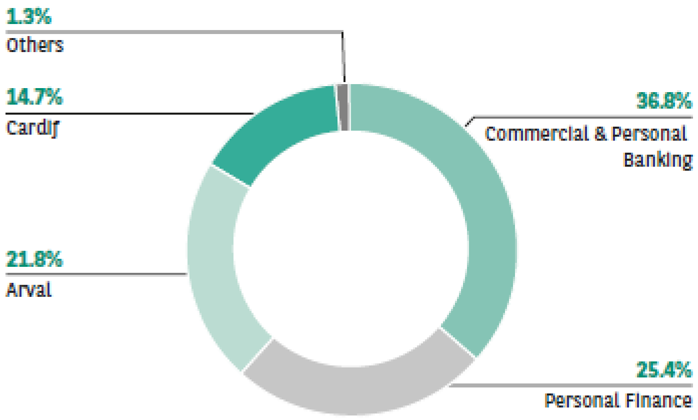
  For Commercial & Personal Banking in France (CPBF), for example, the variable compensation system for sales teams is structured around four aspects of its job, illustrating the performance that is expected from the employee: the quality of the customer relationship, commercial development, the management of risks and compliance, as well as the management (for the employees concerned). In Belgium, part of the variable compensation of sales teams is linked to customer satisfaction;
- **support for vulnerable customers** and more generally, the fight against exclusion is an integral part of the values held by BNP Paribas (see *Products and services that are widely accessible,* Commitment 7);
- the Group is committed to being exemplary in **the protection of customers' personal data** (see *Promoting respect for human rights and combatting social exclusion,* Commitment 8).

Complaints management and mediation

The processing of complaints is a key element of the client interest protection policy, and is subject to specific operational procedures. The complaints statistics are an indicator monitored at Group level.

	2020	**2021**	**2022**
Number of complaints received	1,172,655	1,161,270	1,150,098

BREAKDOWN OF COMPLAINTS (2022)



The nature of the activity is the dominant factor and explains the preponderance of retail activities in these statistics.

- BNP Paribas Personal Finance deploys a system for handling customer complaints in all its entities with a specific governance that brings together all the players concerned in order to implement the necessary corrective actions. Thus, the entire "Termination" process, for example, has been revised from pre-sale to litigation, to better meet customers' expectations.
- BNP Paribas Cardif has developed a dedicated indicator to measure customer perception on the one hand, and to analyse and address the causes behind any shortfalls on the other hand. More specifically in France, the "Comité Cœur Clients" studies the requests (credit protection insurance, protection insurance) of customers for whom coverage is refused on the grounds of applying the general conditions of the contract, but which deserve to be reconsidered in view of the specific situation of the customer and in the context of the insurer's social responsibility. This approach leads to improvements in management processes, customer journeys and insurance products.

  Many Group entities offer the services of independent ombudsmen customers can call on. In France, Italy and Belgium, customers contact the national ombudsman service organised by the regulatory bodies.
- BNP Paribas Personal Finance uses external ombudsmen in most countries. In France, an independent ombudsman studies the requests and provides proposed responses.
- In 2022, BNP Paribas Cardif strengthened its relationship with the Insurance Ombudsman in order to take into account the mediator's perspective on the cases submitted to it as soon as possible, while improving the products and services offered. This initiative complements the continuous improvement system based on complaints.

Transparency and accessibility of the offer

In the objective of protecting clients' interests, their understanding of banking products as well as the transparency and accessibility of the offer are more than ever at the heart of the Group's concerns.

- As part of the "*Mystery Shopper France*" programme, BNP Paribas Personal Finance continued surveys in 2022 to assess how its partners market its products. 60 mystery visits to four partner distributors were conducted to check the quality of service, compliance with responsible credit rules and compliance with regulation. The analysis of the results made it possible to establish a diagnosis and an action plan shared with these partners.
- BNP Paribas Cardif takes into account medical research and the improvement of treatment strategies to offer insurance coverage and pricing better suited to the situation of individuals. In 2022, 99% of credit insurance applications were accepted thanks to the "Atout Emprunteur" policy applied by BNP Paribas' branches.
- In Italy, bank card pricing was reviewed in 2022 so that all costs are taken into account. This price transparency is unique in the Italian market and is accompanied by communication ensuring that customers have a good understanding of the products.

Monitoring customer satisfaction

Measuring customers' satisfaction enables to adapt product and service offerings to their demands, in order to always best serve their interests by analysing their complaints and areas of dissatisfaction. In 2022, overall, average customer satisfaction scores remained relatively stable in the Domestic Markets, in a difficult economic context:

- Commercial & Personal Banking In France: 7.54/10 (7.57 in 2021);
- BNP Paribas BGL: 7.5/10 (7.2 in 2021);
- BNP Paribas Fortis: 7.3/10 (7.4 in 2021).

At CPBF, a centre of expertise called *Voices* ensures continuous improvement at the service of customers and employees: a team of experts listens to and analyses feedbacks from both customers and employees in order to detect the main causes of dissatisfaction (known as irritants). Based on these reports, *Voices* supports the teams concerned in launching projects to improve processes, products or services.

For example, in 2022, at the end of a listening mission conducted with CPBF employees, 40 major irritants were identified and at the end of the year, more than 50% had been corrected or were on track to being resolved.

The *Advocacy* programme and the Net Promoter System

More generally, at the level of the BNP Paribas Group, monitoring of customer satisfaction is part of the *Advocacy* programme, rolled out since 2017, in order to listen to the voice of customers and employees throughout the relationship with them and improve their experience. Thus, customer expectations and perceptions are better understood and the Group's decisions are guided at all levels (strategy, offering, distribution, customer experience, *etc*.).

Operational for all types of customers, the programme is rolled out by the "Client & Employee Advocacy" teams through the Net Promoter Score (NPS) methodology, which measures the level of recommendation of BNP Paribas customers and compares it with competitors each year.

Within the CPBS division (Commercial, Personal Banking & Services), the NPS covers all Domestic Markets, EM (Europe-Mediterranean) and all the business lines and countries of the IPS division (Investment & Protection Services). The Group's objective is to ensure that these entities improve their rankings year-on-year in comparison with their competitors in the countries in which they are based.

The main achievements and changes in 2022 are as follows:

In the four Domestic Markets (France, Belgium, Italy and Luxembourg), 7.2 million surveys by e-mail were sent to customers to collect their feedback, with a return rate of 10%. In addition, nearly 720,000 feedback items were collected *via* live surveys on digital channels (pop-in, pop-up).

Regarding our market positioning:

- out of the Group's 26 banking entities, a total of 54% have an NPS score at or above the NPS average for their market in 2022 and the teams are building on the Agile organisations being deployed to prioritise and resolve the irritants even more effectively in a process of continuous improvement. Among the most significant progress, we note:
  - in Commercial & Personal Banking: BNL (Banca Nazionale del Lavoro) positioned itself as the leading traditional bank in Italy this year and was above the NPS average of its entire market for the second consecutive year; CPBF is positioned at the average of traditional banks in France with an NPS score that has increased significantly and steadily since 2017 (+20 points); TEB (Türk Ekonomi Bankasi) ranks third in Türkiye,
  - in Private Banking: BNP Paribas Fortis Wealth Management is the leader among private banks in Belgium for the third consecutive year; Private Banking France and BNL have increased significantly since 2017 (+29 points and +27 points respectively),
  - for professional clients: CPBF's NPS score has increased by +41 points since 2018 for professionals and by +13 points for both SME and large corporate clients;
- within Personal Finance, 100% of countries and businesses are in the NPS Programme. Customers and partners satisfaction is improving in all countries. The volume of claims is decreasing. Significant dissatisfaction is reduced and is better dealt with: corrective actions are implemented on an ongoing basis. Overall, the NPS of Personal Finance follows the market trend (+12 points since 2017). More structural initiatives (brand, value proposition, journey) have been launched with a view to accelerating the improvement of the NPS;
- BNP Paribas Cardif has set a target of customer NPS in its 2025 strategic plan. In 2022, 96% of BNP Paribas Cardif entities in France and abroad achieved an *Advanced/Best Practice* level in the deployment of the Customer Advocacy programme. Systematic listening and in-depth analysis of customer needs and expectations are thus deployed at the service of the continuous improvement of all components of the offer and the customer journey.

ETHICS AT THE HEART OF SUPPLIER RELATIONS

In 2022, the Group's purchases amounted to over EUR 10 billion in expenditure globally. BNP Paribas strives to develop balanced relationships with its suppliers. With this in mind, the Group has adopted a Responsible Procurement Charter which sets out commitments that apply to both the Bank and its suppliers.

In addition, the Procurement division abides by strict deontological principles, in order to manage the risks of mutual dependency, adapt its practices to allow small and medium-size suppliers to compete in its call for tenders, implement processes for faster payment of supplier invoices, and offer suppliers an appeal dedicated process through an internal ombudsman (see *Fostering dialogue with stakeholders*, 7.1).

In France, under its Diversity & Inclusion policy, the Group undertakes a committed policy to develop its business relations with suppliers from suppliers working with vulnerable and disabled employees (STPA). The company agreement on the professional integration of people with disabilities includes the objective of reaching EUR 2 million in revenue excluding tax by 2025 with the STPA, for the BNP Paribas SA entity in France. This agreement was renewed in 2022 by BNP Paribas with all trade unions, for a period of three years (2022-2025), and approved by the French Ministry of Labour, Employment and Economic Inclusion. This commitment to diversity in procurement is gradually being extended to the entire social entrepreneurship sector.

COMMITMENT 3: SYSTEMATIC INTEGRATION AND MANAGEMENT OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE RISKS

A COMPREHENSIVE ESG RISK MANAGEMENT APPROACH

Since 2011, BNP Paribas has gradually deepened and broadened its framework to manage the ESG risks that may affect its activities. Initially focused on the most sensitive sectors from an ESG point of view (with the development of sectoral policies), the framework has now become more exhaustive as it covers all the sectors of the economy in which the Group has customers. At the same time, sectoral policies are regularly adapted to better take into account the new challenges of the sectors covered by increasing the level of ambition.

Binding financing and investment policies

As part of the implementation of its strategy to combat climate change and align its activities with a carbon neutrality target by 2050, as a priority, since 2011, BNP Paribas has developed ESG policies covering today eight major sectors[1]. They also cover fundamental issues such as biodiversity and human rights.

Since the announcement in 2020 of the total exit from the thermal coal value chain by 2030 in the European Union and OECD (Organisation for Economic Co-operation and Development) countries, and by 2040 in the rest of the world, BNP Paribas has conducted an analysis of its clients' portfolio in the electricity production sector and those active in the mining and dedicated infrastructure sectors. A withdrawal from clients not aligned with the Group's strategy[2] was carried out.

Since the end of 2017, the Bank has regulated the oil and gas sector and has adopted a very restrictive policy with regard to players in the exploration, production and export of shale oil and gas, tar sands and offshore oil and gas in the Arctic. Since the end of 2021, BNP Paribas has no longer had outstanding loans with players who generate the majority of their revenues from unconventional oil and gas (shale gas and oil, tar sands). In 2022, BNP Paribas updated its policy[3] relating to oil and gas. It strengthens the criteria governing the financing of oil and gas by lowering the exclusion threshold for unconventional reserves to 10% of the activity for diversified companies (compared to 30% previously). In addition, this new policy includes restrictions on two particularly sensitive areas from the point of view of biodiversity: the Arctic (as defined by the AMAP[4]) and the Amazon[5].

The eight sectoral policies published by BNP Paribas are applicable at project and company level as specified in each of these policies. Each year, the Group ensures that corporate clients comply with the policy criteria. The sectoral policies are controlled, in the same way as all the Group's policies, as part of the organisation of the first and second lines of defence: the implementation is, therefore, the responsibility of the business lines, and the control, the responsibility of the RISK Function.

Respect of the Equator Principles in project financing

As a signatory to the Equator Principles alongside 137 other financial institutions worldwide, and in its role as a financial service provider and adviser, BNP Paribas works with its clients to identify, assess, and manage the risks and environmental and social impacts linked with major industrial and infrastructure projects. According to these principles, the negative impacts of these projects on communities, ecosystems or the climate must be avoided or minimised, mitigated and/or offset. Projects graded A present significant risks and systematically involve an external review; those graded B present more limited risks; and those graded C present minimal or no risks.

	2018	2019	2020	2021	2022
Number of transactions concerned in the year	17	8	8	17	15
Number of grade A transactions in the year	3	2	2	3	2
Number of grade B transactions in the year	14	6	6	13	11
Number of grade C transactions in the year	0	0	0	1	2

Internal ESG analysis tools for clients and transactions

An internal ESG performance and risk assessment tool: the ESG Assessment

Gradually developed and then rolled out since 2021, the ESG Assessment has become the preferred tool for monitoring the ESG performance and associated risks of the Group's corporate clients. The assessment is a systematic ESG analysis that

1 *group.bnpparibas/publications.*
2 *Sector policy - Coal-fired Power Generation (https://cdn-group.bnpparibas.com/uploads/file/bnpparibas_csr_sector_policy_coal_fired_power_generation.pdf).*
3 *Sector policy – Oil & Gas (https://cdn-group.bnpparibas.com/uploads/file/bnpparibas_csr_sector_policy_oil_gas.pdf).*
4 *Arctic Monitoring and Assessment Programme. More details on page 774.*
5 *Definition on page 774.*

applies as part of the credit process, and is being rolled out in the KYC (Know Your Client) system. Like other criteria (financial, strategic), ESG criteria are taken into account in the assessment of the counterparty’s credit profile.

The ESG Assessment covers the environmental (climate and biodiversity), social (health and safety at work and impact on communities) and governance (business ethics) dimensions through numerous questions divided according to these five themes. It is supplemented by an analysis of controversies affecting clients. The questionnaires developed in this context are specific to each sector in order to better integrate the challenges and issues specific to their activities. Aware that ESG issues are changing rapidly and that the quality of responses will gradually improve, the Group plans to adjust these questionnaires, as necessary, taking into account feedbacks from clients and relationship managers (RMs), the RISK and CSR teams.

The ESG Assessment also enables to assess clients’ compliance with the Bank’s sectoral policies, as well as the maturity of their ESG strategy and its implementation. The ESG Assessment, therefore, enables the bank to deepen and document its ESG knowledge of clients.

In order to assess and contribute to reducing its clients’ impact in terms of ESG risks, 18 sectoral questionnaires were finalised in 2022, and 1,500 analyses of very large and large corporate clients were carried out.

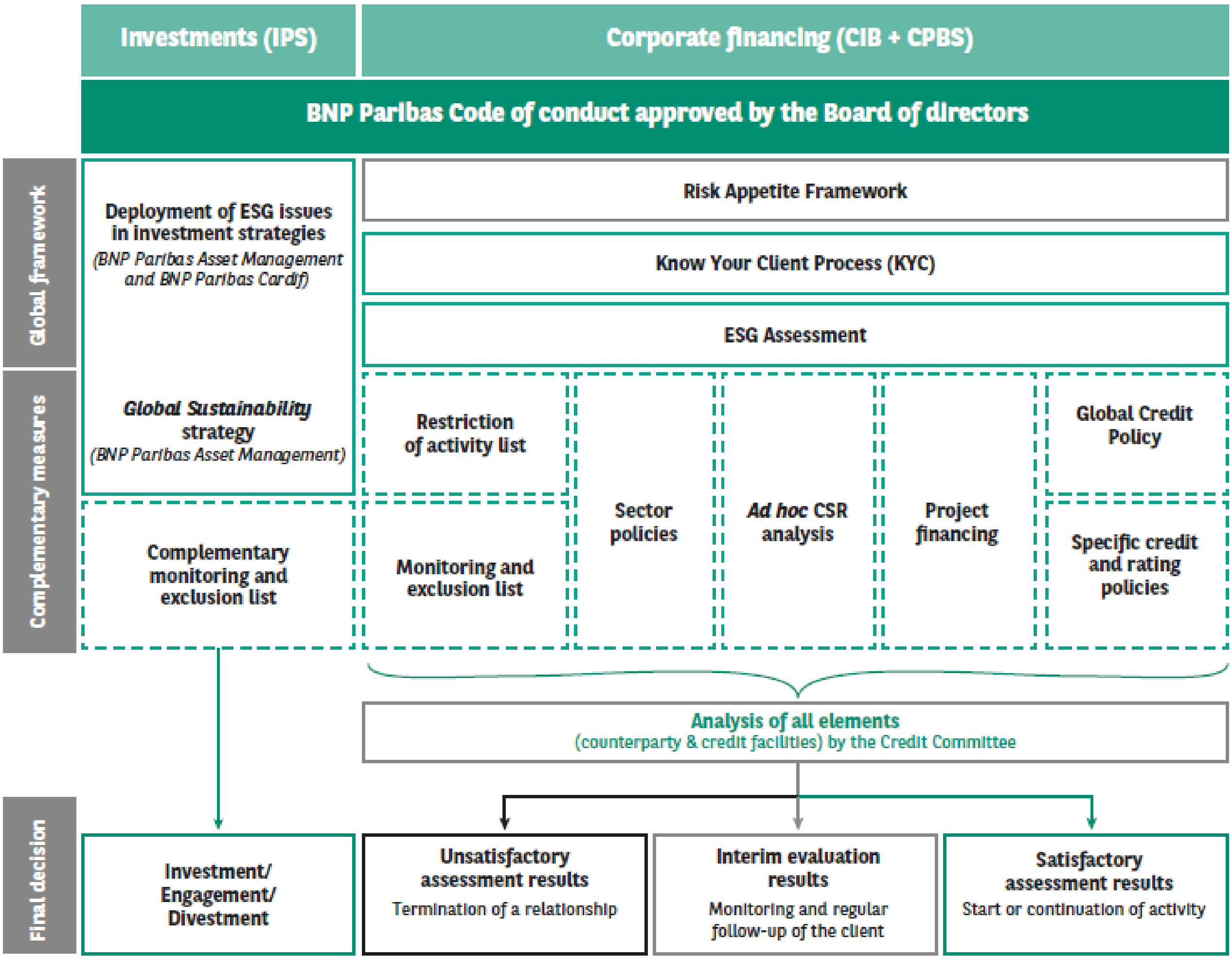
This analysis will gradually be extended to all corporate and financial institution clients, according to appropriate approaches.

IMPLEMENTATION OF FINANCING AND INVESTMENT POLICIES

Restriction of activity lists

In order to identify the companies presenting the highest environmental and social risks, in addition to financing and investment policies, the Group manages activity restriction lists according to the level of ESG risks observed. Following their update in 2022, these lists included 1,490 companies, of which 1,369 companies under restrictions and 121 under monitoring. Those under monitoring are subject to engagement measures by the Group, in order to monitor that they make lasting changes to their practices and reduce their ESG risks. For companies under restrictions, the Group prohibits any new financing or investment relationship. Lastly, BNP Paribas has compiled an exclusion list of specific goods and activities that the Group is unwilling to finance, such as tobacco. These lists, implemented at the level of legal entities and groups, are periodically updated using data supplied by clients and external sources, and by analysing the key controversies involving corporate clients accused of serious violations of respect for the environment or human rights. The implementation of clients’ exit strategies or amounts invested is regularly monitored internally.

The overall ESG Risk Management system is therefore evolving and can be represented as follows:



The detail of this table appears in the Group Vigilance Plan, in 7.7 *Duty of Care*.

ESG risk portfolio vision

Information on portfolios is published in accordance with the rules prescribed by the European Banking Authority (EBA), by deploying the recommendations of the ESG Pillar 3 from the Basel Committee. This information is detailed in section 5.11 *ESG risks*, chapter 5.

OTHER ESG RISK MANAGEMENT TOOLS

Integration of ESG criteria into supply chain management

The Group expects its suppliers to conduct their activities in compliance with its environmental, social and governance requirements (see *Ethics at the heart of relationship with suppliers*, Commitment 2). Within its scope of operations, the Procurement & Performance (P&P) business line applies ESG criteria at several different levels:

- at the central level, with the inclusion of a central ESG risk mapping relating to the products or services purchased. This mapping helps identify high-risk purchasing categories according to 13 issues related to ethics (corruption, data protection, *etc*.), environmental (pollution, biodiversity, greenhouse gases, *etc*.) and social issues (human rights, working conditions, discrimination, *etc*.);
- *via* ESG assessments of suppliers, carried out during the selection process. These assessments, which are based on ESG questionnaires, include confirmation by the supplier of its compliance with the principles of the BNP Paribas Responsible Procurement Charter or its local version. The procurement standards provide that ESG criteria account for a minimum of 5% and up to 25% in the assessment of calls for tender;
- the system was supplemented in 2020 by conducting on-site CSR audits with several suppliers in two different purchasing categories, as part of an approach shared with three other banks and a third-party assessor. This exercise led to the emergence of action plans as part of a sectoral progress approach.

5,188 ESG assessments were completed in 2022 (compared with 3,705 in 2021) and nearly 2,292 Responsible Procurement Charters were signed by Group suppliers (compared with 1,433 in 2021).

Integrating ESG criteria into asset management

BNP Paribas Asset Management and BNP Paribas Cardif implement their ESG strategies, which include, among other things, the application of the Group's sector policies. Thus:

- the Global Sustainability strategy[1] of BNP Paribas Asset Management, launched in 2019, details the way in which ESG issues are deployed in investment strategies. It is based on the exclusion of certain sectors, the engagement and dialogue with invested companies (stewardship) as well as responsible business conduct and a long-term perspective;
- in 2022, 95% of BNP Paribas Cardif's general assets in euros in France were subject to an ESG analysis.

In order to promote best ESG practices within the companies in which the asset management company and its clients have invested, BNP Paribas Asset Management systematically exercises its voting rights as a shareholder, voting this year at 1,976 Annual General Meetings (2,098 in 2021) on 27,223 resolutions (28,276 in 2021). BNP Paribas Asset Management abstained or opposed about 33% of these resolutions. In 2022, BNP Paribas Asset Management supported 90% of shareholder proposals on climate change and filed four shareholders' resolutions on the alignment of climate lobbying with the objectives of the Paris Agreement at Annual General Meetings. In 2022, BNP Paribas Asset Management objected to 1,391 resolutions proposed by companies due to these environmental or social considerations.

In addition, BNP Paribas Asset Management and BNP Paribas Cardif use collaborative dialogue (working groups or coalitions whose members cooperate to act jointly with companies) to encourage improvements in practices. For example, these two entities are members of the Climate Action 100+ Initiative and, as such, regularly engage in dialogue with companies ranked among the world's top greenhouse gas emitters to improve their climate change governance and strategy. They are also founding members of Nature Action 100[2].

Globally, BNP Paribas Asset Management is recognised as one of the most proactive asset managers in terms of stewardship. Thus, the 2022 edition of the "Voting Matters" study by the British NGO ShareAction places BNP Paribas Asset Management in 3rd place in the ranking of asset managers most active in the use of voting to promote environmental and social issues, with a rate of 99% in favour of the ESG resolutions assessed.

Operational control plan

In order to verify the strict application of ESG risk management tools, BNP Paribas has rolled out a CSR operational control plan which establishes a continuous improvement process necessary for the effective management of ESG risks. This control plan incorporates ESG Risk Management systems (related to the application of sectoral policies, exclusion and monitoring lists, and questionnaires on the duty of vigilance). It is then rolled out across its businesses and functions.

In order to ensure the proper implementation of the aforementioned controls, the Group relies on its internal control system covering all types of risks to which it may be exposed, including environmental and social risks, organised around three lines of defence (see *Our system's controls*, section 7.7).

[1] *The Age of sustainable transformation (https://www.bnpparibas-am.com/en/blog/pushing-ahead-in-the-age-of-sustainable-transformation/).*

[2] *Nature Action 100 – Driving greater corporate ambition and action on tackling nature loss and biodiversity decline.*

Ambitious training objectives thanks to new tools

In 2022, BNP Paribas continued to enhance its ESG training offering. The Bank launched its Sustainability Academy (see *Our social responsibility: promoting the development and engagement of our employees,* section 7.3). At the same time, the Bank has strengthened its specific training actions in terms of ESG risk management as part of the deployment of the ESG Assessment for relationship managers and analysts, who form the first line of defence, and Risk Officers & Senior Credit Officers, who constitute the second line of defence. In 2022, nearly 97,000 Group employees attended an average of 4.3 training courses on sustainable development topics.

ALIGNMENT OF THE LOAN PORTFOLIO WITH THE NET-ZERO BY 2050 OBJECTIVE

Partnerships and loan portfolio measurement and alignment methodologies

BNP Paribas has committed to aligning its activities with the objectives of the Paris Agreement, then financing a carbon neutral world by 2050. Thus, the Group has joined various initiatives and coalitions, including:

- the Task Force on Climate-related Financial Disclosures (TCFD) whose recommendations are followed and presented in the cross-reference table (see *GRI, ISO 26000, Global Compact, Sustainable Development Goals, Principles for Responsible Banking and TCFD cross-reference table*, section 7.8) and compiled in a dedicated report[1];
- the Net-Zero Banking Alliance (NZBA) (see *Financing and investments with a positive impact*, Commitment 1) by which the Group undertook to apply its alignment strategy to the sectors that emit the most greenhouse gases.

In 2022, BNP Paribas published its first *Climate Analytics and Alignment report*[2] in which the steps of aligning the loan portfolio are presented in detail. In particular, this report explains what data is used, details of the calculation methodologies, including the calculation of the alignment trajectory and the strategy implemented by the Group, and specifies the methods for managing the portfolio. It covers three sectors: power generation, oil and gas, and automotive. The objectives set have a horizon of 2025 in order to mark an immediate commitment to the energy transition. They may be supplemented by targets for 2030, as the Group has already done for the oil and gas sector.

Progress update on the intermediate targets announced in May 2022

In its Climate Analytics and Alignment report published in May 2022, BNP Paribas has committed to using the International Energy Agency's Net-Zero Emissions (by 2050) scenario (IEA NZE) as a reference. For each sector, indicators and objectives have been defined. The progress for 2022 is detailed below.

Electricity production: a loan portfolio aligned with the Net-Zero 2050 objectives

The electricity mix is calculated in capacity, according to the PACTA methodology. It is representative of the Group's customer base as 99% of credit exposures to electricity producer customers are taken into account in this calculation. It shows a less carbon-intensive loan portfolio, that is more oriented towards renewable energies both in 2022 and by 2025 when compared to the IEA's NZE 2050 scenario.

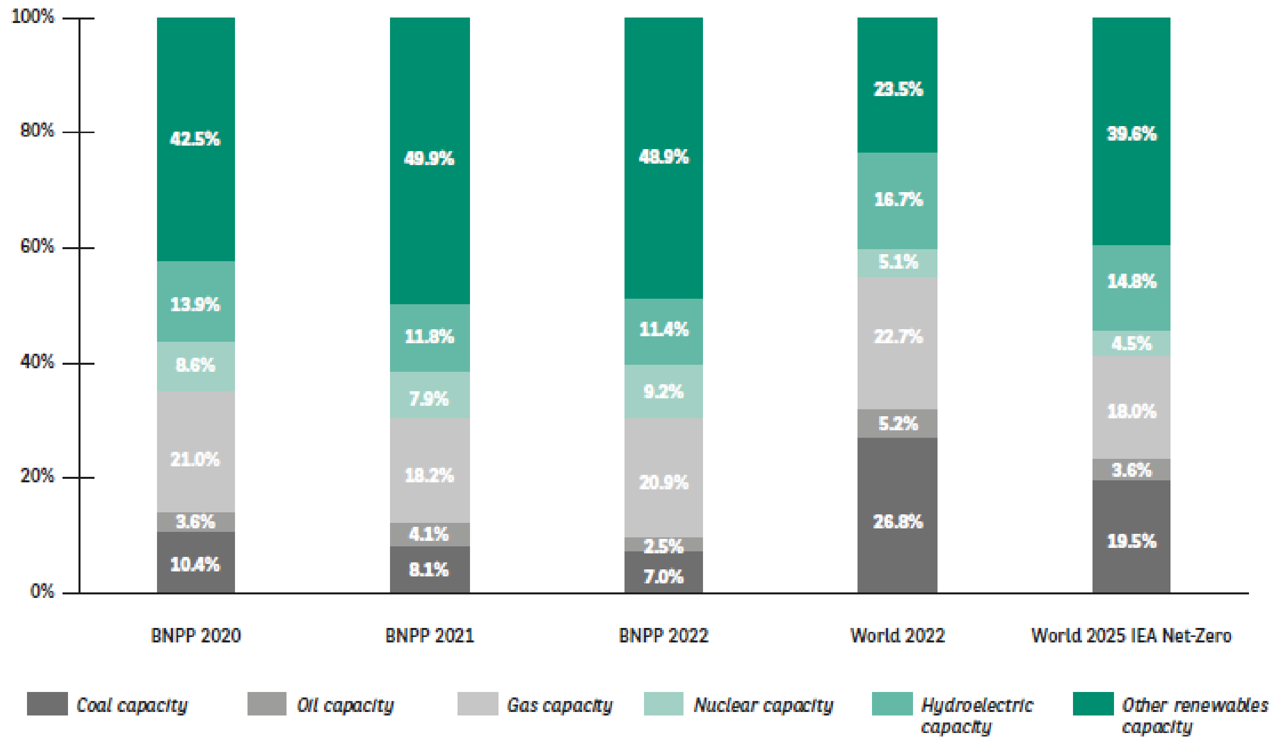
	2020	**2021**	**2022**	**2025 Objectives**
Share of renewables	57%	62%	60%	>66%
Share of coal	10%	8%	7%	<5%
gCO_2 intensity/kWh	208	182	179	<146

At 31 December 2022, low-carbon capacities (*i.e.* renewable and nuclear) were constant at 70% compared to 2021, while coal and oil capacities were down by 1% and nearly 2% respectively. This reduction is notably linked to the implementation of the Group's commitment to fully exit the coal value chain by 2030 for Europe and the OECD countries and 2040 for the rest of the world[3].

1 *TCFD 2021 (https://cdn-group.bnpparibas.com/uploads/file/tcfd_report_2021_eng.pdf).*

2 Climate Analytics and Alignment Report (https://group.bnpparibas/uploads/file/bnpp_climateanalytics_alignmentreport_final.pdf).

3 *Sector policy on Coal-fired Power Generation (https://cdn-group.bnpparibas.com/uploads/file/bnpparibas_csr_sector_policy_coal_fired_power_generation.pdf).*



At 31 December 2022, the intensity of the electricity portfolio amounted to 179 gCO_2/kWh compared to 182 gCO_2/kWh at 31 December 2021 and 208 gCO_2/kWh at 31 December 2020. This reduction is due to a decrease in the share of coal and oil in our clients' mix, as these two energy sources emit the most CO_2.

The intensity of direct CO_2 emissions of the portfolio at 31 December 2022 and projected in 2025 is significantly lower than the global average and the IEA's NZE 2050 scenario by 2025.

The fossil fuel extraction sector

The extraction sector is a key player in the decarbonisation of the economy: it is the first chain link, being at the same time essential to the economy, a condition of the proper functioning of the transport, electricty sectors and others such as chemicals and the source of future emissions. As part of the monitoring of this sector, BNP Paribas has committed to reducing its credit exposure to oil and gas exploration and production activities by 12% by 2025 compared to that at the end of 2020, and by 25% for oil only, over the same time period.

	At 31 December 2022	**At 31 December 2025**
Credit exposure, oil exploration and production	**-15%**	Target of -25%
Credit exposure, oil and gas exploration and production	**-12%**	Target of -12%
The percentages relate to 31 December 2020.		

In January 2023, this ambition was strengthened and BNP Paribas set itself the objective of reducing its credit exposure related to the financing of oil extraction and production to less than EUR 1 billion by 2030, *i.e.* a decrease of more than 80% compared to the current exposure of EUR 5 billion at end-September 2022. This reduction will be pursued through the discontinuation of indirect financing as well as the financing of specialised activities associated with this sector. BNP Paribas has also undertaken to focus its financing in the gas sector primarily for new-generation thermal power plants with low emission rates as well as security of supply, gas terminals and gas transportation fleets. Credit exposure to gas extraction and production (EUR 5.3 billion at end-September 2022) should, therefore, be reduced by more than 30% by 2030. The carbon intensity of the oil and gas portfolio was 67 gCO_2e/MJ; it is in line with our intensity reduction commitments to less than 61 gCO_2e/MJ in 2025.

	2020	**2022**	**2025 Objectives**
Portfolio intensity (gCO_2e/MJ)	68	**67**	< 61

The automotive sector

The automotive industry sector is a very sensitive area in terms of energy transition given the emissions it generates (approximately 16% of total emissions worldwide[1]). Since 2022, and in order to better accompany our clients in the transformation of their offer towards low- or zero-emission vehicles, BNP Paribas calculates the share of electrified vehicles[2] and the emission intensity measured in grams of CO_2 per kilometre in WLTP standard[3], for its portfolio each year, focusing on "tank-to-wheel" emissions. These calculations are currently carried out on light vehicles and take into account credit exposure to manufacturers and their financing captives. Financing related to this activity includes all financing dedicated to automotive manufacturers and their financing captives, for light vehicles only, carried out by BNP Paribas.

	2020	**2021**	**2022**	**2025 target**
Share of electrified vehicles	4%	7%	14%	>25%
Portfolio emission intensity in gCO_2/km (WLTP)	183	176	167	<137

The results at the end of 2022 show that BNP Paribas is in line to have a share of electrified vehicles in its portfolio, as well as a CO_2 intensity, consistent with the IEA's NZE 2050 scenario.

Maritime transport

In 2022, for the 3rd consecutive year, BNP Paribas participated in the update of the measurement of the carbon intensity of the portfolio in the maritime transport sector according to the Poseidon Principles[4]. The objective of the Principles is to meet the ambition of the International Maritime Organisation (IMO) to reduce shipping's greenhouse gas emissions by at least 50% by 2050, in comparison with 2008. At 31 December 2021, the alignment score of the BNP Paribas loan portfolio in terms of carbon intensity was therefore 12.2 points above the alignment score. This situation is the consequence of the lasting impact of the Covid-19 crisis on maritime traffic, and particularly on cruise operators whose vessels have travelled less but whose engines have continued to operate for maintenance reasons, with the methodology strongly penalising these conditions. BNP Paribas continues to be involved in the analysis and management of CO_2 intensities of its shipping finance portfolios, thanks to this common methodology.

The next steps

In 2023, the Group will publish intermediate targets for the alignment with Net-Zero by 2050 for its financing in the steel, aluminum, cement and French residential real estate sectors. In accordance with its NZBA commitment, it will cover the remaining sectors, residential real estate outside France and commercial real estate, agriculture, aviation and maritime transportation in 2024.

[1] *www.iea.org/reports/world-energy-outlook-2021.*

[2] *Electrified vehicles: plug-in hybrid vehicles, battery electric vehicles, vehicles equipped with fuel cells.*

[3] *"World Harmonised Light Vehicle Test Procedure" defined by the United Nations Economic Commission for Europe.*

[4] *poseidonprinciples.org.*

7.3 Our social responsibility: promoting the development and the engagement of our employees[1]

People are at the heart of the priorities of the Growth, Technology, Sustainability 2025 (GTS) strategic plan presented by the Group in February 2022, with the aim of developing the potential and engagement of all employees. This ambition is driven by the People Strategy, whose aim is to ensure our collective performance and our position as a leader in sustainable finance. Supported by Human Resources, it is at the heart of the activities, business lines and functions and is based on three pillars:

- **Ethics and Inclusion: Anchoring the culture of ethics and inclusion in our actions – Commitment 4;**
- **Employee experience: Reinforcing the focus on employees – Commitment 5;**
- **Human Capital: Constantly anticipating and adapting our resources – Commitment 6.**

To deal with the current major environmental and social challenges, BNP Paribas has a responsibility to support its clients in their transitions to sustainable solutions. This approach, which commits all its activities, business lines and functions, requires the involvement of all employees. Thus, in 2022, the Group decided to launch the Sustainability Academy to give employees the opportunity to acquire the necessary knowledge and skills in sustainable finance at all stages of their career.

2022 was marked by new tangible contributions to promote diversity, equality and inclusion:

- the Group participates in pioneering initiatives to guarantee the inclusion of all its employees, in particular a pilot project on diversity of social and ethnocultural origins *via* the "Diversity and Inclusion Index" experiment, at the initiative of the French Ministry for Gender Equality, Diversity and Equal Opportunities;
- it has set itself ambitious objectives in terms of gender equality, in particular for increasing the number of women in governing bodies and the gender diversity of professions, exceeding those imposed in France by the "Rixain Act".

At the same time, the Group's actions in favour of the health and well-being of employees continued to be strengthened with the health situation and the HR transformation to guarantee a "good place to work":

- the Group maintained the individual, collective and safety measures put in place at the start of the pandemic in 2020 and strengthened prevention actions through awareness-raising, training and psychological support;
- in 2022, it showed strong solidarity and mobilisation with its Ukrainian employees in view of the current conflict;
- it has introduced new ways of working, such as the development of remote working which is a part of the "Smart working" programme. This makes it possible to promote both a better work-life balance and greater autonomy for employees in accomplishing missions.

EXTERNAL RECOGNITION

In 2022, BNP Paribas continues to demonstrate its commitment to social responsibility through very good scores obtained from the main extra-financial organisations (see chapter 7.1 *Progress recognised by extra-financial rating agencies*) internationally and in France:

- **S&P** agency: overall score of **84/100** in the **CSA** (Corporate Sustainability Assessment), compared to 82/100 in 2021, well above the average for the banking sector (46/100). These very good results are mainly due to the recognition of the Group's actions in terms of "talent attractiveness and retention" (from 75/100 in 2021 to 88/100 in 2022) and "training and development" (from 75/100 to 100/100);
- **Moody's ESG Solutions** agency: a score of 71/100 obtained at the end of its 4th rating thanks to the measures to combat discrimination and promote diversity and inclusion.

BNP Paribas is also included in specific indices for gender equality issues such as the **Bloomberg Financial Services Gender Equality Index** (BFGEI), for which a score of 82/100 was obtained in 2022 compared to 80/100 in 2021.

At the European level, for the ninth consecutive year, BNP Paribas was awarded "**Top Employer Europe 2022**" **label granted by the Top Employers Institute**, with an overall score of 90.58%, up compared to 2021.

In 2022, **BNP Paribas renewed its Diversity (since 2009) and Gender equality (since 2018) labels awarded in France by AFNOR** (*Association Française de Normalisation* – French Standards Association), now grouped under the name "Alliance" and carried out under the aegis of the French State for a period of four years. The Group is the first and only bank in France to have obtained this double label, demonstrating its long-term commitment to gender equality and the fight against discrimination.

Lastly, BNP Paribas occupies **first place in the *2022 ranking of preferred companies in France for students and young graduates*** produced by Epoka/Harris Interactive in the banking and consumer credit sector.

[1] *All information published in this chapter refers to the calendar year between 1 January 2022 and 31 December 2022. To monitor the proper implementation of the measures undertaken, particularly with respect to the three CSR social commitments and their objectives, Group Human Resources compiles a social report to which Human Resources from entities in 62 countries contribute (the "Social Reporting Entities"). This represents 94% of the Full-Time Equivalent workforce (FTEs) managed by the Group at 31 December 2022, hereinafter referred to as the "Social Reporting Workforce".*

COMMITMENT 4: PROMOTION OF DIVERSITY, EQUALITY AND INCLUSION

A SOLID FRAMEWORK, A MULTI-ACTOR COMMITMENT

Effective and cross-functional Diversity & Inclusion governance with a constant commitment of Executive Management

The Global diversity and inclusion Committee is made up of **40 members from throughout the Group**. It meets twice a year and is rolled out at the country, business line and function levels. During these meetings, the participants focus on two main objectives: sharing information and best practices and co-constructing on key issues. Since 2021, this community has been extended to the Compliance, LEGAL and RISK Functions. The Group Head of Diversity, Equality and Inclusion reports to the Group Head of Human Resources, and is a **member of the HR Executive Committee** and of the **Executive Committee for Company Engagement**.

Promoting diversity and inclusion also requires the mobilisation and active support of Executive Management. The personal commitment of the Group Chief Executive Officer is also regularly recognised with regard to the diversity of professions, the greater representation of women on governing bodies, and the inclusion of LGBT+ people (Lesbian, Gay, Bisexual and Transgender).

A constantly evolving, increasingly inclusive framework around the world

Since the signature of the first Diversity Agreement within BNP Paribas SA in 2004, the mechanisms have been enhanced with each renegotiation to cover all stages of employees' career paths.

Having entered into force on 1 October 2020 for four years, the **5th agreement on Diversity and Inclusion** within BNP Paribas SA in France introduces new ambitious mechanisms that complement previous commitments. Very innovative with regard to professional gender equality, it reinforces the monitoring of actions carried out under the specific budget for gender equality. In terms of parenthood, it gives employees the right to paid parental leave (30 calendar days) for the employees who do not benefit from any statutory maternity or adoption leave. It sets up working time arrangements to support seniors in their transition to retirement and includes the issue of domestic violence.

The Group's companies in France take the same proactive approach to defining initiatives to promote diversity as part of social dialogue. Agreements have been signed in this area: professional gender equality, integration and retention in employment of employees with disabilities, employment of seniors, and the situation of employees holding employee representative mandates in the context of negotiations on trade union rights. This negotiated approach is periodically renewed in order to track progress, as well as updating and setting new quantified targets.

The **2014 European Agreement on gender equality** includes all the key elements of the Group's policy in this area. The **BNP Paribas Fundamental Rights and Global Social Foundation Agreement**[1] (the "Global agreement") has also been **extended until 30 September 2023** (see chapter 7.7 *Duty of vigilance*).

These agreements are supplemented by the signing of numerous commitments such as the United Nations Women's Empowerment Principles (WEP) (2011), the charter of the International Labour Organization and Disability Network (2016) and the United Nations LGBT Standards (2017).

Numerous and active employee networks, that are constantly growing

The internal employee networks continue to grow, develop synergies and strengthen their role as key players in the promotion of diversity and inclusion. For two years now, they have benefited from a "World Network Day" which takes place during the Diversity & Inclusion Week in October.

In 2022, over **80,000 employees from 32 countries** came together to talk about topics as varied as gender equality, sexual orientation, inter-generational harmony, parenting, ethnocultural origins, disability, inter-faith dialogue and veterans. In addition, the number of networks continues to expand, with the CulturALL network[2] launched in 2021, which saw the launch in 2022 of its Asian and Italian branches. At the same time, the Latamigos network was launched in 2022 to promote ethnocultural diversity and contribute to the professional development of its members through meetings and discussions, open to all employees who are "friends" of the Latin American countries.

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1 *https://cdn-group.bnpparibas.com/uploads/file/accord_monde_18_09_2018_fr_1.pdf.*

2 *Global network made up of various local BNP Paribas networks (including Afrinity in France, Friends of Africa in Belgium, UK Multicultural Network and Black Heritage ERG [Employee Resource Group] in Canada) that aims to create a fair and inclusive environment in which all employees of ethnocultural diversity can excel. The aim of this network is to raise awareness among all Group employees about systemic discrimination and the obstacles they may encounter.*

PROMOTING AN INCLUSIVE CULTURE

Training and developing

59 countries (or almost all of the Social Reporting workforce) **offer training and awareness-raising actions on the fight against discrimination and the promotion of diversity and inclusion**. Some countries and entities systematically include awareness-raising modules on diversity in their manager training courses, as in Portugal, at CPBF (Commercial & Personal Banking in France), at CIB (Corporate & Institutional Banking) in Brazil and at BNP Paribas Cardif.

In addition, several inclusive personal development and leadership programmes focus on women's career paths[1].

Communicating and raising awareness among employees and managers

Awareness-raising campaigns are continuing and are based on a wide range of formats (interactive conferences, round tables, podcasts, screenings, workshops, discussion cafes, *etc*.) in order to attract more employees either face-to-face, online, or thanks to replay. **During Diversity and Inclusion Week 2022**, the many events organised by local Human Resources teams and employee networks brought together **more than 18,400 employees connected worldwide**. The series of "In My Shoes" podcasts was enriched by four new episodes this year and now has more than 19,000 listeners.

In addition, inclusion is now anchored in the Group's new Leadership profile, which is built around **six key skills including two related to diversity and inclusion issues**: "Act ethically in all circumstances" and "Build a culture of responsibility and inclusion".

Implementation of targeted actions following the very good results of the Pulse survey on Diversity and Inclusion

Following the *Pulse* survey conducted in October 2021 (the next survey will be carried out in October 2023), which collected the opinions of 80,000 respondents, the various Group entities have set up targeted action plans in 2022 or strengthened existing initiatives, in particular on the following three themes:

- intergenerations, with the signing of a Commitment Act in France bringing together more than thirty signatory organisations and based on ten concrete principles;
- professional gender equality, with the signing of the *#JamaisSansElles* Charter by new local entities such as BNP Paribas Portugal;
- diversity of ethnocultural origins, through the organisation of awareness-raising conferences during Diversity & Inclusion Week.

OUTSTANDING ACTIONS IN THE AREA OF PROFESSIONAL GENDER EQUALITY

Greater representation of women on governing bodies: strong ambitions for 2025 and acceleration strategy

As a pioneer in this area, from 2021 the Group wanted to adapt its organisation and develop its management team, while continuing to increase the number of women in its governing bodies, by setting more ambitious gender equality targets than the law: 40% women by 2025 within the Group Executive Committee (Comex), G100[2], Leaders for Change[3] and Senior Management Positions[4] (SMP), as well as 50% women among the Leaders for Tomorrow ("Talents[5]").

Significant progress has already been noted in 2022. By way of illustration, among the members of the G100, the Group has **37 women in management positions in the Group's strategic business lines** such as CPBF in France, BNL in Italy, BNP Paribas Cardif, Personal Finance (also members of the Executive Committee), BNP Paribas Leasing Solutions, in country Management (Spain, United Kingdom, Switzerland, Canada, Australia) and in the Executive Management of BGL in Luxembourg. Women are also Heads of the Human Resources, Compliance, CSR and Communication Departments.

Within the SMP population, the action plans that made it possible to increase from 26% women in 2015 to 32% in 2021 were reviewed at the beginning of 2022 at each level of the organisation, to set a target of 40% women by 2025. In 2022, the Group

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1 *"She Leads" (Portugal), "Women Leadership Program" (Canada and Switzerland), "Women Up" (Poland), "Mentoring Program" (Fortis), "ALL Equal" (BNP Paribas Cardif) and "Women in action" (Arval).*

2 *The G100 brings together around a hundred people, corporate officers and senior managers holding key responsibilities within the Group. The members of the G100 include, among others, the Heads of the Operating divisions, of the major Business Lines, of Commercial Banking networks, of Group Functions, of geographical areas and of strategic countries in which the Group is present.*

3 *The Leaders for Change (LfC) population is composed of the members of the main Group-level cross-functional Executive Committees considered as making a major contribution to its operations and its development.*

4 *The Group's Senior Management Position (SMP) population is composed of employees holding approximately 3,000 positions considered to have the most significant impact from a strategic, commercial, functional and expertise point of view. This rate is calculated based on the number of women holding SMP positions as a proportion of the total number of SMP positions filled at 31 December 2022 (based on 100% of the Group's SMP workforce).*

5 *The Leaders for Tomorrow (LfT) programme includes both women and men who have a unique combination of skills, experiences, motivations and personal attributes ("Leadership Profile"), which the Group considers necessary to drive transformation in the future.*

has already achieved its target of 35% women thanks to the mobilisation of Executive Committee members and the active involvement of HR teams through eight cross-functional projects[1].

Proportion of women	31/12/2021	31/12/2022	2025 Objectives
Board of directors	Seven women out of 15 members, including one elected by employees and one representing employee shareholders(1)	Eight women out of 15 members, including one elected by employees and one representing employee shareholders(1)	
Executive Committee	32% (6/19)	33% (6/18)	40%
G100	34%	37%	40%
Leadership for Change (Top 500)	32%	32%	40%
Senior Management Position	32%	35%	40%
Talents – Leaders for Tomorrow	48%	50%	50%
Top	42%	46%	50%
Advanced	45%	48%	50%
Emerging	52%	52%	50%

(1) 41.7% in 2021 and 50% in 2022 according to the rules of the Copé-Zimmermann law. This ratio is calculated by excluding the three directors representing the employees or the employee shareholders. This information complies with the requirements of article L.22-10-10 2° of the French Commercial Code relating to the balanced representation of women and men on the Committee established, where appropriate, by Executive Management to assist it regularly in the performance of its general duties and on the results in terms of gender diversity in the top 10% of positions with the highest responsibilities.

In France, the "Rixain" law of 24 December 2021 includes several measures to improve gender equality in companies, by requiring balanced representation between women and men among senior managers and members of the governing bodies of large companies. The objectives set by law are to be achieved gradually: 30% by 1 March 2026 and 40% by 1 March 2029. BNP Paribas SA published the following items for the 2022 financial year:

- senior management population: 39% women / 61% men;
- members of the governing bodies corresponding to the BNP Paribas Group Executive Committee: 32%[2] women / 68% men.

New Group commitments as part of the Generation Equality Forum

In order to accelerate this movement towards gender balance at all levels of the Company, BNP Paribas is continuing and expanding its actions by partnering with the **Generation Equality Forum**, the global assembly for gender equality, organised by UN Women.

Since 2021, the Group has committed to taking part in a series of significant concrete actions, by becoming **a member of two coalitions**:

- "**gender-based violence**": the Group undertakes by 2025 to develop, strengthen and internationalise its actions and systems internally, with its employees that are victims and to convince at least 50 private sector organisations to join the cause, alongside the other members of the OneInThreeWomen network;
- "**technology and innovation for gender equality**", which commits the Group to reaching 37% women in IT by the end of 2025, to help associations supporting women in technology and innovation, and to continue to work for financial commitment and advocacy related to Agrifed programme[3].

Gender equality: developing and spotlighting women's professional paths

In line with the GTS 2025 strategic plan and in accordance with the Group's desire to promote the career paths of women, BNP Paribas has chosen to **anticipate and identify their skills needs**, in particular those relating to IT and digital technology:

- as an historical partner of the **Women's Forum** and a member of its Strategic Committee since May 2018, BNP Paribas has been actively involved since 2020 in the **five Daring Circles** (discussion and action circles bringing together various stakeholders) and in particular in those dedicated to the roles of women in the professions of **Artificial Intelligence and**

1 In particular, a quarterly dashboard shared within the Group Executive Committee and awareness-raising actions dedicated to SMP managers: "Being an inclusive leader".

2 Percentage calculated under the Rixain law based on the attendance time during the year in question.

3 Since 2018, the Group has been associated with the Agrifed programme in line with the UN Sustainable Development Goals, whose aim is to promote and strengthen food security in Senegal by promoting female entrepreneurship.

Science, Technology, Engineering and Mathematics (STEM). By signing the Women & AI Forum in 2020, BNP Paribas is committed to preventing the risks of bias in algorithms and to developing AI for the advancement of women in society;

- in 2021, the Group launched the **Women in IT global program**. Based on four pillars, its target is to increase the percentage of women in this sector from 32% to 37% by 2025;
- in France, a partnership was signed in early 2022 with the start-up 50inTech to increase the visibility of the Group's IT job offers to women through their job sites. This year, the start-up awarded the Group a score of 83/100 (50inTech Gender Score) for the impact of its actions to promote the integration of women in the digital sector. In France, the **Digital Ladies & Allies** initiative of BNP Paribas organises **intergenerational** "Women & Girls In Tech" events to encourage female employees and young women around them to discover digital jobs;
- internationally, BNP Paribas Portugal became a member of the Portuguese Alliance for Equality in Information and Communication Technologies (ICT) through the project "*Engenheiras por 1 dia*" ("Engineers for a day"). Its aim is to promote the digital inclusion of women and their participation in IT-related fields.

A pioneer among CAC 40 companies and the financial sector by signing the ***#jamaisSansElles*** **Charter**, in 2019, BNP Paribas continues to strengthen its mobilisation, and now has more than **700 signatories** (of which 73% men), from management bodies in **25 countries** that undertake not to participate in forums, round tables, panels open to the public or juries with at least three speakers that do not include the presence of at least one woman**. In November 2022, BNP Paribas Portugal's top management (30 people) joined the community of signatories.** BNP Paribas is the company with the largest number of *#JamaisSansElles* signatories in France and around the world.

Fight against gender-based violence and its impacts at work

BNP Paribas has been a member of **OneInThreeWomen**, an European network of companies committed to combating violence against women, since 2018, and joined the network's Executive Committee on 1 January 2021. The network's aim is to help colleagues and managers welcome the testimonies and detect weak signals of this violence, which is a factor of inequality at work and an obstacle to gender equality. The network continues to strengthen its awareness-raising system (e-learning available in eight languages, podcast series, *etc*.) and in 2022, welcomed ten new companies signatories to the OneInThreeWomen Charter.

2022 was notably marked by the **creation of an intranet page accessible to all employees** worldwide, bringing together resources, testimonials from female victims and key contacts **on the subject of violences**.

The fight against sexism is the subject of numerous actions within the Group. For example, the awareness-raising e-learning module, "Preventing and combating ordinary sexism in the workplace", available to all Group employees, was taken by more than 8,200 employees. At the same time, the Group's business lines and entities in France strengthened their actions and awareness-raising systems in 2022 following the ordinary corporate sexism barometer carried out in 2021.

In France, BNP Paribas joined the ***#StOpE*** (Stop everyday sexism in the workplace) initiative from its creation in 2018, by signing an undertaking comprising eight principles. This collective now includes 160 member organisations.

360° parenting and work-life balance

The Group implements numerous actions to promote gender equality around 360° parenting. **In France**, the 10th Parenthood Week[1] was organised digitally, followed live and in replay by nearly **2,200 employees**.

Likewise, multiple systems exist internationally to support parenthood, particularly in Germany, Poland, Belgium, Italy and Brazil. For example, BNL has rolled out the "Lifeed" interactive training programme, which aims to use parenting skills in professional life. At the same time, nearly **80% of the Social Reporting workforce receive childcare assistance**, either in the form of financial assistance or childcare. In addition, **90 Social Reporting entities** (out of 103 Social Reporting entities) **which cover 51 countries**, grant rights for parental leave to couples who adopt and/or to same-sex couples in a similar way to maternity and paternity leave. **Almost 2/3 of the Social Reporting entities** encourage their employees to take their paternity leave (second parent) through communication and awareness-raising actions.

CONSTANT PROGRESS, PIONEERING INITIATIVES FOR GREATER DIVERSITY

Promoting the employment and insertion of people with disabilities

NUMBER OF EMPLOYEES RECOGNISED AS HAVING A DISABILITY(1)

	Employees with disabilities(2)			Of which hires		
	2020	**2021**	**2022**	**2020**	**2021**	**2022**
France	2,733	2,850(3)	2,876(4)	49	81	73

1 *The following were addressed: in particular, single-parent families, cyberbullying among young people, gender and sexuality of adolescents, coming out in the family and the loss of autonomy of elderly parents.*

Belgium	61	68	76	0	0	2
Italy	833	829	742[(5)]	29	21	22
Luxembourg	12	11	10	0	0	0
Europe (excluding Domestic Markets)	906	933	976	83	71	59
Rest of the world	247	274	265	76	75	34
TOTAL	**4,792**	**4,965**	**4,945[(6)]**	**237**	**248**	**190**

(1) Physical workforce taking into account 94% of the Group's workforce.
(2) Permanent contracts, fixed-term contracts, work-study students, apprentices and interns.
(3) The definitive results for 2021 known in June 2022 for France amount to 2,850 compared to 2,804 declared in February 2022.
(4) As the annual declaration is postponed to March 2023, the data communicated for France in 2022 are not definitive.
(5) The reduction in the number of employees recognised as disabled in Italy is due to the sharp decrease in the BNL entity's headcount in Italy.
(6) 4,403 Full-Time Equivalents worldwide.

At 31 December 2022, there were **4,945 employees with disabilities in 32 countries**, representing an employment rate of employees with disabilities for the Group of 2.5%[1] compared to the total workforce, slightly down compared to the previous year (2.7% in 2021).

As part of a continuous improvement approach, in accordance with the International Labour Organization's Company and Disability Charter, BNP Paribas carries out numerous actions, notably in Germany with the "My Ability" programme that offers coaching and training to facilitate access to employment.

In France, in this last year of the 4th disability agreement (2020-2022), BNP Paribas SA carried out 54 new hires. 1,791 job retention and 184 awareness-raising actions were also recorded in 2022. The direct employment rate of employees with disabilities rose to 5.38% in 2021, from 5.18% in 2020.

Diversity of social and ethnocultural origins: strong actions carried out in 2022

With **172 nationalities** present within the Group, including **12[2] within the G100**, BNP Paribas has been working for several years to promote diversity of origins and gender equity.

In March 2022, the Group joined the International Day for the Elimination of Racial Discrimination, outstanding its commitment to the fight against all forms of origin-based discrimination.

In France, under the leadership of the Minister responsible for gender equality, **BNP Paribas SA is one of the nine pilot organisations that tested the Diversity and Inclusion Index in January 2022**. The result of the joint work of the Ministry, specialised associations, the Defender of Rights and the CNIL (National Commission for Information Technology and Liberties), this unprecedented index in France aims to measure the diversity of social, geographical and ethnocultural origins in companies – while collecting this information securely and in accordance with the legislation. This Index made it possible to determine that 75% of employees consider that BNP Paribas acts in the areas of diversity and inclusion and 69% believe that their origins have had no impact on their recruitment. The results of the survey are detailed on the Group's website[3]**. These results can be explained by an open and inclusive recruitment policy conducted for many years by Human Resources.**

Also in France, the Group contributes to several major programmes that have a positive impact on the professional integration of people excluded from employment due to their social, geographical or ethnocultural origins and supports nearly 300 associations (See sections *Products and services that are widely accessible, C*ommitment 7 *and Combatting social exclusion*, Commitment 8). Lastly, the Group cooperates with *"Le Club 21e Siècle*", which carries out numerous initiatives to promote diversity and restore equal opportunities for all citizens in France.

As a responsible employer, BNP Paribas is a forerunner in France, having adopted since 2014 **the structured interview method,** which is a more objective and reliable recruitment method. All RHG Staffing Conseils & Solutions teams as well as "hiring managers" are also trained in bias and stereotypes.

Outside France, in Canada, a partnership with an association is helping to set up awareness-raising and training sessions for Top Management, focusing on indigenous groups.

At the meantime, around fifteen internal professional networks have developed and actively contribute to raising awareness and promoting diversity of social and ethnocultural origins, in several countries (Brazil, United States of America, Canada, France, Belgium, United Kingdom, Scandinavian countries, Portugal), including BOLD, Latamigos and CulturALL.

1 In 2022, the employment rate in entities that report that they specifically monitor the number of employees with disabilities in their workforce is approximately 2.7%.

2 Including French.

3 https://group.bnpparibas/actualite/diversite-des-origines-nos-collaboratrices-et-collaborateurs-reconnaissent-que-la-diversite-et-linclusion-sont-des-preoccupations-majeures-de-lentreprise.

LGBT+: international engagement and reach, pioneering initiatives

During the 4th edition of the "LGBT+ role models and allies at work" organised by *"L'Autre Cercle"* in France in 2022, with its English counterpart OUTstanding, the Group once again distinguished itself this year with two employees being nominated for awards in the categories of **LGBT + Leaders role models and Allied Leaders role models**.

In June 2022, the Group renewed, for a period of three years**, the signature of the *l'Autre Cercle* Charter**, whose objective is to commit to creating an inclusive working environment and ensure equal treatment.

In 2022, BNP Paribas took part in the drafting of the white paper "Odyssey for Equality", an international initiative led by *L'Autre Cercle*, which brought together members of the non-profit and business world. The purpose of this white paper is to constitute a best practice guide for employers to help them develop LGBT+ inclusion and diversity within their structure.

In France, for the second consecutive year, **BNP Paribas has partnered with *Têtu* magazine** to produce a short film featuring the micro-attacks and insults that are commonplace, but nonetheless violent, that punctuate the daily lives of LGBT+ people. On the occasion of the international day against homophobia, transphobia and biphobia[1], BNP Paribas and Pride France organised on 17 May the screening of the short film "**Sensitive Boys**" by Sébastien Lifshitz in the presence of committed employees and associations. More broadly, numerous initiatives marked this day, supported by the Pride network or initiated by the business lines and functions in Italy, Germany and the United Kingdom. At the meantime, the Group's Pride networks organised the 3rd Global LGBT+ Business Conference in Madrid[2].

In addition, BNP Paribas Poland was elected Employer of the Year for its support for LGBT+ people at the end of the 2022 Diamonds Awards competition.

Intergenerational

Intergenerational issues are also the subject of conferences and workshops every year, notably during Diversity and Inclusion Week.

Despite the health crisis, in France in 2022, the Group maintained its commitments to training and integrating young people by recruiting more than 2,500 new work-study students and more than 1,500 interns along with nearly 300 on International Volunteer Programme (VIE) missions. Moreover, two-thirds of the offers offered on permanent contracts are accessible to young people entering the job market. As soon as it was launched, BNP Paribas joined the French Government's *"un jeune, une solution"* (One young person, one solution) plan, then the *"Les entreprises s'engagent en France"* (Companies committed in France) community. **In 2022, more than 23,000 employees under the age of 30**, including all contract types, **were recruited by the Group worldwide** (permanent, fixed-term contracts, work-study students, interns).

Following the Pulse survey conducted in October 2021, t**he Group signed an Act of Commitment in France, bringing together more than thirty signatory organisations**, based on 10 concrete principles, and initiated the Solutions Gen50+ programme, aimed at strengthening Human Resources support for the employees concerned throughout their career. In Italy, at BNL, the new Senior Experts Network project focused on skills development and intergenerational aspects aims to promote the knowledge of the most experienced people, by allowing them to train their colleagues. In Portugal, a development programme entitled Build to Shift was set up for employees with more than 15 years of experience to create a common platform of knowledge shaping the banking sector and the associated working environment.

Within BNP Paribas SA in France, the new Diversity and Inclusion agreement brings to 150 the number of employees benefiting every year from the end-of-career corporate volunteering scheme, while broadening the circle of partner associations (see *Corporate Volunteering and other solidarity activities*, Commitment 5).

RESPECT FOR HUMAN RIGHTS AND CODE OF CONDUCT

Promoting and complying with the International Labour Organization fundamental conventions on Human Rights

BNP Paribas does not tolerate any form of slavery or human trafficking. In its Code of conduct, the Group has, in particular, committed itself to **promoting the respect for human rights** in its sphere of influence and to treat all employees in a dignified manner.

BNP Paribas carries out an annual review of countries that are classed as high-risk in terms of human rights[3] (see chapter 7.7 *Duty of vigilance*). Present in 24 countries of concern representing 20.3% of its total workforce but in no country at risk, the Group had no employees under the age of 18 at the end of December 2022.

1 *IDAHOT: International Day Against HOmophobia, biphobia, and Transphobia.*

2 *On the theme "How to drive a more inclusive business?".*

3 *Source: Verisk Maplecroft (Human Rights Risk Index) identifies 22 high-risk countries and 90 countries of concern. Out of the four categories of countries identified, high-risk countries are rated between 0 and 2.5/10 whilst countries of concern are rated between 2.5 and 5/10.*

Preventing discrimination, harassment and violence at work and dealing with inappropriate behaviour

The Group is continuing its policy of combating inappropriate behaviour by fully integrating the "Respect for Colleagues" section of the Code of conduct into the Group's actions and decisions.

To this end, **new governance rules were defined for the entire Group in 2021 and supplemented in 2022** around the main areas: broadening the range of behaviours covered by the policy, including those that may be discriminatory, developing prevention and common Group principles for analysing and processing alerts.

In terms of prevention, awareness-raising and professionalisation actions were begun for employees, managers and the Human Resources business line in order to better detect psychosocial risks.

Following the legal and regulatory changes relating to the protection of whistleblowers, **the system for collecting and processing alerts was strengthened in 2022**, on the one hand to facilitate the reporting of alerts and on the other hand to ensure the impartiality and fairness of the measures taken to respect the confidentiality of the information collected with the implementation of HR Conduct Respect for individuals contact persons (see chapter 7.7 *Duty of vigilance*).

In 2021, throughout the Group, 60 sanctions for inappropriate behaviour were imposed, including 16 dismissals for sexual or moral harassment, two demotions, seven reprimands, 32 warnings and three deductions from wages. For the 1st half-year 2022, 33 sanctions for inappropriate behaviour were imposed, including 11 dismissals for sexual or moral harassment, two demotions, seven reprimands, 11 warnings and two deductions from wages.

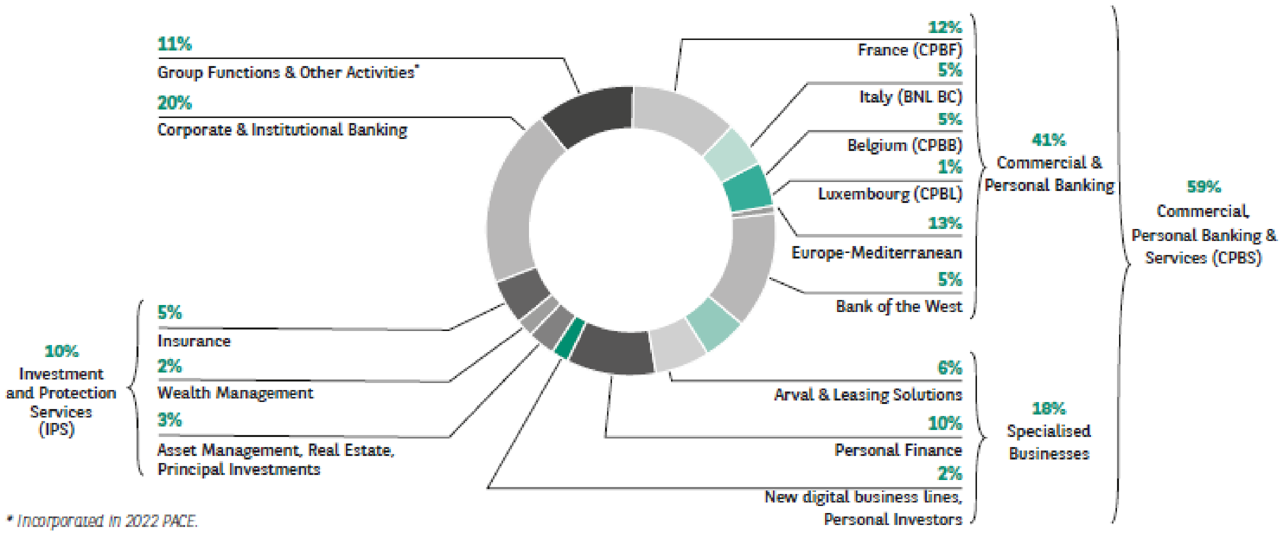
COMMITMENT 5: "A GOOD PLACE TO WORK" AND RESPONSIBLE EMPLOYMENT MANAGEMENT

OUR EMPLOYEES AROUND THE WORLD

Workforce evolution

At the end of 2022, the number of employees managed by the Group is **193,122 FTE** (Full-Time Equivalent – 185,467 Financial FTE[1] including Bank of the West), up by **1.8%[2]** compared to 2021 (189,765), in **65 countries**.

BREAKDOWN OF THE TOTAL WORKFORCE BY BUSINESS LINES[3] AT 31/12/2022



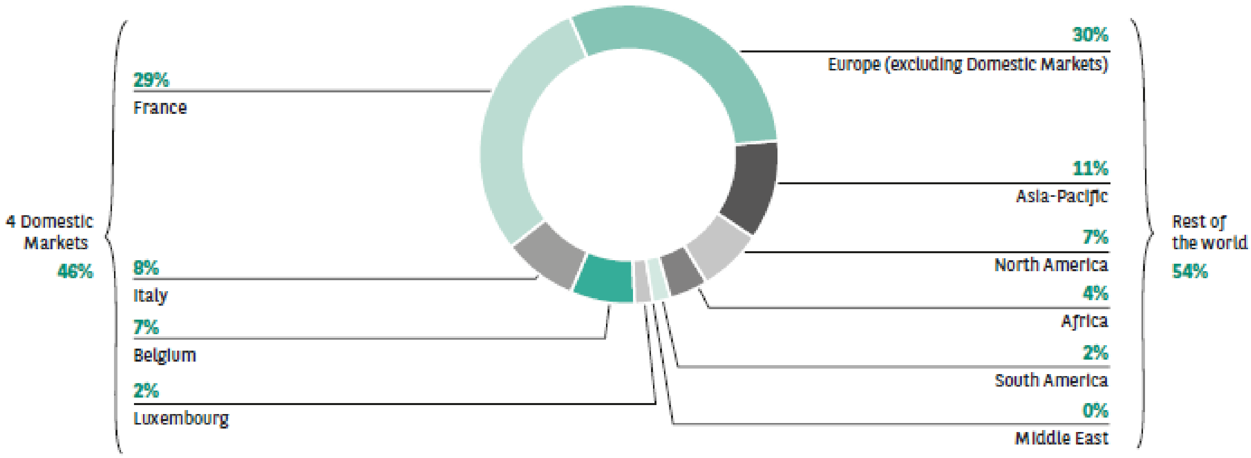
* Incorporated in 2022 PACE.

1 *Financial workforce: Full-Time Equivalents (FTE) at 31 December 2022 in wholly controlled, fully consolidated entities.*

2 *Up 1.7% at constant scope.*

3 *FTE out of 100% of the Group's workforce (permanent + fixed-term contracts).*

BREAKDOWN OF THE TOTAL WORKFORCE BY GEOGRAPHICAL AREA[3] AT 31/12/2022

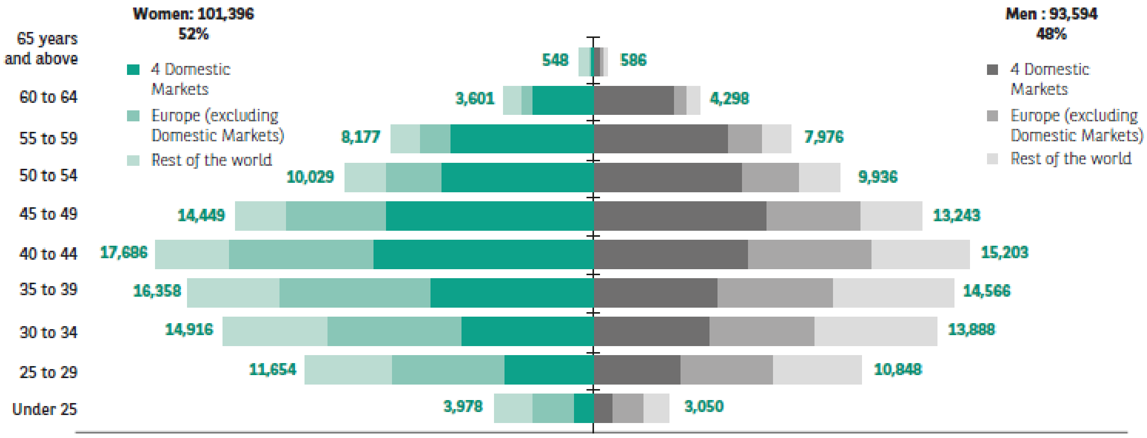


CHANGE IN WORKFORCE OVER THE LAST TEN YEARS[1]

	2012	2017	2022		
France	58,544	58,309	56,136	4 Domestic Markets **88,658**	Europe **147,148**
Italy	18,583	18,673	16,102		
Belgium	18,184	15,236	12,847		
Luxembourg	3,984	3,493	3,573		
Europe (excluding Domestic Markets)	45,954	53,265	58,490		
Asia-Pacific	14,128	16,707	20,263		Rest of the world **45,974**
North America	14,913	16,163	13,599		
Africa	8,597	9,885	6,952		
South America	3,589	3,882	4,656		
Middle East	2,074	515	504		
TOTAL	**188,551**	**196,128**	**193,122**		

(1) FTE out of 100% of the Group's workforce (permanent + fixed-term contracts).

BREAKDOWN OF GROUP WORKFORCE BY AGE, GENDER AND GEOGRAPHICAL AREA(5) AT 31/12/2022



(1) This breakdown takes into account 99% of the Group workforce (permanent + fixed-term contracts) whose age and gender are indicated and which is composed of a total of 197,157 employees expressed in physical headcounts.

The overall average age **is 41.7 years in 2022**, the same as in 2021, and average seniority **is 11.7 years in 2022** (11.9 years in 2021). In 2022, the average age is 42 years for men and 41.5 years for women and the average seniority is 11.2 years for men and 12.2 years for women.

Recruitment/Employee turnover

In 2022, the Group recruited 28,892 people on permanent contracts worldwide (+38% compared to 2021), including 5,348 in France. With 61% of the hires in Europe (58% in 2021), BNP Paribas reaffirms its status as a leading European bank.

For the 5th consecutive year, France is the top recruiting country with 18.5% of the total. India (16.4%) and the United States (10.1%) remain very dynamic, ahead of Portugal (7.5%) and Türkiye (5.8%).

At Group level, the turnover[1] is 11.7% in 2022 (10.8% in 2021) and the departure rate[2] is 13.5%. The Group records a **voluntary turnover rate[3] of 8.5%** in 2022, mainly because of the high rates of voluntary departures in India (20.1%), the United States (15.3%), Canada (13.5%), in Asian countries such as Singapore (18.2%), Hong Kong (14.3%), and Taiwan (11%), and Eastern European countries such as Romania (16.5%) Bulgaria (15.3%), Slovakia (12.7%), Czech Republic (11.5%) partly due to local employment trends in those markets. Outside those markets, the Group's voluntary departure rate is 6.4%. In the Domestic Markets, this rate is 4.3% for Luxembourg, 4.1% for France, 4% for Italy and 3.1% for Belgium.

Changes in workforce

CHANGES IN WORKFORCE: NEW RECRUITS ON PERMANENT CONTRACTS AND GEOGRAPHICAL DISTRIBUTION(1)

	Men	Women	Total 2021	Men	Women	Total 2022(2)
TOTAL	**10,543**	**10,306**	**20,849**	**15,028**	**13,745**	**28,773**
4 Domestic Markets	54%	46%	4,139	53%	47%	7,413
Europe (excluding Domestic Markets)	46%	54%	8,028	48%	52%	10,222
Rest of the world	53%	47%	8,682	55%	45%	11,138
TOTAL	**51%**	**49%**	**20,849**	**52%**	**48%**	**28,773**

(1) Physical workforce.
(2) This breakdown takes into account 99.6% of the Group's permanent contract hires, whose gender is indicated, out of a total of 28,892 permanent contract hires (28,556 FTE).

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1 *Calculation method: based on permanent contracts and in FTE: [Employees definitively leaving during year N]/[Workforce present at 31 December in year N-1 + Hires of employees during year N].*

2 *Calculation method: based on permanent contracts and in FTE: [Employees definitively leaving during year N]/[Workforce present at 31 December in year N-1].*

3 *Calculation method: based on permanent contracts and in FTE: [Resignations of employees and mutually agreed departures during year N]/[Workforce present at 31 December in year N-1 + Hires of employees during year N].*

CHANGES IN WORKFORCE: REASONS FOR EMPLOYEES WITH PERMANENT CONTRACTS LEAVING THE GROUP(1)

	Men	Women	Total 2021	Men	Women	Total 2022
Retirement/early retirement	1,262	1,104	2,366	902	943	1,845
Resignation	7,631	7,575	15,206	8,741	7,797	16,538
Dismissals(2)	882	848	1,730	773	791	1,564
Mutually agreed departures and equivalent	615	902	1,517	651	1,083	1,734
Assisted departure plans	394	505	899	314	433	747
Other ends of permanent contracts (unspecified, end of trial period, death)	745	712	1,457	1,592	1,433	3,025
TOTAL	**11,529**	**11,646**	**23,175**	**12,973**	**12,480**	**25,453(3)**

(1) Physical workforce.
(2) In France, the reasons for the 463 dismissals (462 in 2021) are due to physical and professional shortcomings, incapacity and misconduct.
(3) This breakdown takes into account 99.9% of the Group's permanent contract departures, for which gender is indicated, out of a total of 25,467 (25,022 FTE).

26% of the departures are in Domestic Markets as in 2021, 36% in the rest of Europe (35% in 2021) and 38% in the rest of the world (39% in 2021).

Organisation of working hours

TYPE OF CONTRACT(1)

	Men	Women	Total 2021	%	Men	Women	Total 2022(2)	%
Number of permanent contracts	90,133	94,896	185,030	98%	92,037	96,047	188,084	97%
Number of fixed-term contracts	1,792	2,943	4,736	2%	1,933	3,043	4,975	3%
TOTAL	**91,926**	**97,840**	**189,765**	**100%**	**93,969**	**99,090**	**193,059**	**100%**

(1) Full-time equivalent.
(2) This breakdown takes into account employees for whom gender has been entered in the HR tools.

PART-TIME(1)

In 2022, 14,967 employees worked part-time, representing 8% of the Group's workforce, the same as in 2021. 2% of men and 13% of women work part-time.

	Men	Women	Total 2021	%	Men	Women	Total 2022	%
Number of part-time employees	1,943	13,472	15,415		1,950	13,017	14,967	
Of which part-time at 80% or more	1,204	9,232	10,436	68%	1,222	8,803	10,025	67%
% of part-time employees by gender	13%	87%			13%	87%		

(1) Physical workforce taking into account 99% of the Group's workforce, for which the gender and part-time status have been indicated in the HR tools.
2021 data reviewed according to the new methodology applied for calculating part-time work in 2022.

Absenteeism

The Group's absenteeism rate[1], calculated for 62 countries, is **3.6%**, plus 2.2% for maternity/paternity/parental leave[1].

[1] *The absenteeism rate includes illness, work-related accidents and occupational illness, excluding travel-related accidents and authorised absences. It is calculated with reference to the method used locally by each entity, weighted by workforce.*

In %	2021 Absenteeism rate	2021 Maternity/Paternity/ Parental leave	2022[(1)] Absenteeism rate	2022[(1)] Maternity/Paternity/ Parental leave
France	4.8%	2.1%	5.0%	1.9%
Belgium	4.5%	0.7%	8.8%[(2)]	0.7%
Italy	2.6%	1.9%	3.8%	1.9%
Luxembourg	1.9%	0.9%	2.6%	1.1%
Europe (excluding Domestic Markets)	2.6%	4.6%	2.7%	3.8%
Rest of the world	1.5%	1.3%	1.4%	1.2%
TOTAL	**3.2%**	**2.5%**	**3.6%**	**2.2%**

(1) FTE for 94% of the Group's workforce. The absenteeism rate takes into account the number of paid and unpaid days of absence by the Group, compared to the average number of paid and unpaid employees.

(2) The increase in the absenteeism rate in Belgium is explained by the change in calculation methodology in 2022. On a like-for-like basis, the absenteeism rate for Belgium in 2021 would have been 8.6% (compared to 4.5% reported in 2021).

Work-related accidents

598 work-related accidents, to which can be added 666 commuting accidents (including 1 fatal accident), were reported by 27 countries.

The frequency rate[2] for work-related accidents amounts to 1.09 and increases to 2.30 if commuting accidents are added. The severity rate is 0.04 excluding commuting accidents, and 0.08 if days lost due to commuting accidents are added.

FOCUS ON EMPLOYEES

Health & safety and prevention at work policies

Structurally, the Group has developed a solid occupational health and safety framework.

Employees receive assistance in their business and private travel and 24/7 telephone support in the case of traumatic events (terrorist attack, weather events, *etc*.). In addition, the Occupational Health and Prevention Service supports the HR line and managers in France by opening an external hotline in the case of serious events within a team (death of an employee, assault, robbery, *etc*.).

The European agreement on **preventing stress in the workplace**, signed in January 2017, outlines the principles and common framework and also stipulates the means to be implemented (information, awareness-raising, evaluation, training, support, communication). In France, BNP Paribas measures the level of stress and well-being of its employees, through a regular survey. The rates measured in 2022, which are an improvement on the previous two years, show the positive impact of the action plans put in place (training, transparent sharing of organisational changes, prospects for development, *etc*.).

Worldwide, **almost all employees benefit from training initiatives related to the prevention of stress at work**, some specifically dedicated to managers, others accessible to all employees.

In **59 countries** (almost all of the Social Reporting workforce), **entities have taken steps to improve the work environment, prevent occupational risks or musculoskeletal disorders and offer advice on ergonomics**.

In France, all employees are monitored by an **Occupational Health and Prevention Service** (OHPS) and benefit from a social assistance service. As part of its missions renewed by the approval of the DRIEETS (Regional and Interdepartmental Directorate for the Economy, Employment, Labour and Solidarity, a supervisory body in France) in August 2022, the OHPS implements numerous prevention and health actions at work for its employees (anti-Covid and anti-flu vaccination campaigns[3], awareness of breast cancer screening during the annual "Pink October" campaign, screening session for diabetes, cardiovascular risk, sleep apnea and tobacco dependency).

1 *The maternity/paternity/parental absence rate includes maternity and paternity leave, parental leave as well as adoption leave.*

2 *The frequency rate corresponds to the number of accidents per 1 million hours worked and the severity rate corresponds to the number of days lost per 1,000 hours.*

3 *3,000 vaccines were made available to employees from the end of November 2022.*

In terms of prevention of the mental health of Group employees in France, a psychological assistance system allows them to benefit from permanent listening and psychological support in the event of professional or personal difficulties. In addition, information materials on specific topics[1] related to health and well-being are available.

In 50 countries (92% of the Social Reporting workforce), **entities have developed or improved health awareness campaigns**. Free vaccination programmes are offered in several countries on different continents.

Also a signatory of the **Cancer and Employment Charter**, the Group aims at improving employee support, retention and providing help on returning to work, including reorganising workstations, where necessary.

We Care: BNP Paribas health and well-being programme

The "We Care" programme was created to bring together the entire health and well-being offering around three areas that are regularly enriched with new content such as health conferences, practical sheets or dedicated communications:

1. **I take care of myself and others**: information, awareness and training;
2. **I identify risk situations**: identification of weak signals and monitoring of indicators;
3. **I act**: orientation towards the right tools or personalised support.

The work to promote and improve the appropriation of "We Care", which began in 2021 within the BNP Paribas SA scope in France, continued in 2022, notably with the distribution of health advice sheets and awareness-raising actions on cancer prevention. In France, "We Care" was enhanced in June 2022 with a new mobile health application powered by the Occupational Health and Prevention Service (OHPS).

At the end of 2022, the Group began work to expand "We Care" to the entire Group and became more organised with a dedicated community, with the aim of promoting initiatives to employees and to other Group entities around the world. An inventory was launched to identify the programmes already in place such as actions to prevent medical risks accompanied by the establishment of assistance units for employees, health and sports promotion programmes and training and sharing workshops on the prevention of psychosocial risks.

Mobilisation and support in a context of health and political crisis

The first half of 2022 was marked by the emergence of waves of the new Covid-19 variant called Omicron. During this period, the **measures put in place at the start of the pandemic in 2020 within the Group were maintained** in order to ensure a high level of protection and safety (provision of surgical and FFP2 masks, hydroalcoholic gel, antigenic tests, instructions to be followed for vulnerable employees). The health state of emergency ended in France on 31 July 2022, and at the global level, health measures were eased. Nevertheless, the crisis unit, set up and supervised by the Group Executive Committee, maintained a health watch and safety system in order to be able to take the necessary and proportionate measures that a resumption of the epidemic may require. Thus, **the Occupational Health and Prevention Service remained mobilised, in particular by continuing anti-Covid vaccinations** for Group employees. At the end of 2022, 1,528 vaccinations had been carried out. The partnership with a company specialising in supporting business health and safety risks was renewed in 2022, in particular for local entities in India, Ukraine and Latin America.

Faced with the **conflict in Ukraine, regular crisis coordination committees have been set up at different levels** and dedicated communication channels developed. In order to support its 5,000 employees in Ukraine, Ukrsibbank launched **the "People First" programme, focused on employees' needs, in order to preserve physical, psychological and social security, while maintaining them with the Bank as far as possible.** Human Resources teams were mobilised to support internal mobility, both in Ukraine, for example by transferring employees to open branches or *upskilling* employees for remote customer service, or in other Group countries. Several provisions were initiated with the unprecedented "Managing the team in a war situation" programme to support the managers affected by the situation.

At the same time, Ukrsibbank relied on the expertise of a company specialising in **psychosocial risk support**, in order to take appropriate measures to limit as much as possible the psychological impact of this conflict on its Ukrainian employees and their families, as well as on any other employees made aware of this situation (particularly those who have taken in refugees). Webinars specifically dedicated to post-traumatic stress in children were also offered to parents of children affected by the conflict.

The **very strong mobilisation of the Group's entities and their employees** (particularly in Poland and Romania) made it possible to offer hosting and support solutions. Dedicated reception units were set up within the Group's entities to coordinate the monitoring of the employees concerned and their families (language courses, loan of computer equipment, social assistance, assistance in finding accommodation, *etc*.). A 24/7 hotline was launched by employees in neighbouring countries to be in contact with their Ukrsibbank colleagues wishing to cross the border. In addition, accommodation proposals were initiated by employees through the "Our Community" platform for Ukrainian refugees (platform available worldwide). See also *Helping the integration of refugees* in section 7.4 *Our civic responsibility: Being a positive agent for change*.

[1] *Topics of the information materials: remote working, diet, mental disorders, sleep, management of the risk of alcohol in companies, support during the return to work after a long absence, prevention of professional burnout. All these themes address the subject of stress.*

Caregiver support measures

BNP Paribas has implemented a set of **measures to support caregiver employees**, in particular an agreement on the donation of days of leave to employees helping a child or spouse, awareness-raising actions (communication, regular collective events, practical guides), as well as training and partnerships with experts and discussion groups.

TRANSFORMING WORKING PRACTICES AND MAINTAINING THE STRONG CORPORATE CULTURE

Sustainable finance at the heart of the employee journey

To implement the GTS 2025 strategic plan and the Group's ambition to be a leader in sustainable finance, a change support plan has been defined, with the aim of anchoring and disseminating the sustainable finance culture in the employee journey (see chapter 7 *Summary*). This plan is based on the key moments of this journey, including recruitment, onboarding, professional assessments, mobility and training.

In order to cover the challenges of finance and sustainable development, **eight new skills** (including six business skills and two cross-functional skills[1]) have been included in the Group's skills catalogue and are accessible to all employees in order to support this transformation.

BNP Paribas has also updated the **Management Principle**s[2] common to the entire Group, by reaffirming the pivotal role of the manager as a relay for its strategy. These principles have been defined with the entities taking into account the diversity of business lines, functions and geographies, by integrating the challenges of the GTS 2025 strategic plan and the major changes that impact the ways of working and managing teams.

Smart working and team project

BNP Paribas aims to continue to develop its working methods based on a model of trust, autonomy and collaboration. This is evidenced by the **Group France remote working agreement** signed in July 2021, which covers 90% of the workforce and 26 entities. Developed on the basis of the experience acquired during the health crisis, the analysis of market practices and above all, feedback from employees and managers, Smart Working integrates four dimensions:

- **working methods:** the Group continued its discussions on new ways of working[3] in order to better respond to the challenges of employee attractiveness, retention and commitment, while maintaining a sense of community and a sense of belonging to the company. The locations and eligibility, equipment and compensation conditions have been extended. The working hours and remote working arrangements have been opened up to ensure the development of remote working, taking into account the diversity of activities and employee expectations. At end-September 2022, 73.8% of employees in France were working remotely (on average 1.9 days per week);
- **workspaces:** the hybrid organisation of the teams, the emphasis on collaborative work and its real estate strategy have led the Group to change the configuration of its office spaces to give more meaning to work on site;
- **digital tools:** the constant development and adaptation of collaborative tools, applications or IT equipment allowing flexible, hybrid collaborative work;
- **People care:** the Group continues to support its employees towards a hybrid way of working by adapting managerial practices and developing preventive actions around the health and well-being of employees (maintaining social ties, combating physical inactivity and digital fatigue, work-life balance) (See *Focus on employees*, Commitment 5).

Agile Transformation at scale, progress report

To respond effectively to the challenges of its environment, the Group has chosen Agile, with two major challenges: the appropriation of new working methods and the adoption of a new way of thinking through **five fundamental and widely communicated values[4]**. In 2022, 10 CPBS (Commercial, Personal Banking & Services) entities initiated an Agile transformation at scale with nearly 51 Tribes and 26 Expertise Centres. The transformation also extends to other functions (RISK, Compliance, GHR) and IPS (Investment & Protection Services) entities such as Wealth Management.

The HR function is fully contributing to this transformation and made it possible in 2022 to provide job descriptions for the target model, new Agile skills and an e-learning module[5] on acculturation to Agile accessible to all employees. The communication plan continued throughout the year, with the publication of three testimonials from operational Agile employees interviewed by their Chief Executive Officers. This innovative format made it possible to carry out more than **10,000 views** per interview.

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[1] Six business line skills: Savings, sustainable investments and financing, Transition to a low-carbon economy, Circular economy, Natural capital and Biodiversity, Social inclusion, Integration of ESG issues. Two cross-functional skills: Ability to understand, explain and integrate sustainable development issues into my daily work and Ability to embody Diversity, Equality and Inclusion within the Group.

[2] Five Management Principles: the manager unites and gives meaning, he/she is customer-oriented, he/she promotes inclusion and compliance with the Code of conduct, he/she supports and empowers in awareness of risks and promotes cross-functionality and agility.

[3] Balance between remote working and on-site presence, with a maximum of 50% remote working per employee for activities that allow it.

[4] Five fundamental values: customer focus, openness, responsiveness, discipline and courage.

[5] Since its launch in December 2021, 8,203 employees have been enrolled in the Agile Essentials module. At end-December 2022, 5,022 had completed the training in its entirety, i.e. 61%.

Corporate volunteering and other solidarity activities

Since 2020, the **#1MillionHours2Help** programme structures the ambition stated in the Global agreement to do more for civil society (NGOs, associations) by promoting the skills of employees. Through this initiative, BNP Paribas aims to foster more sustainable, shared growth by allowing all employees to use working time to help charitable organisations build a more inclusive, eco-friendly world. In 2022, more than **46,000 employees** stated that they had been involved in **solidarity initiatives in favour of civil society** as part of this programme totalling over **616,500 hours** either during working hours or outside of working hours with compensatory leave[1].

Integrated into the BNP Paribas SA Diversity Agreement in France, the **corporate volunteering system was renewed for four years** from 1 October 2020. The French subsidiaries BNP Paribas Personal Finance, Leasing Solutions, BNP Paribas Cardif, BNP Paribas Asset Management, BNP Paribas Arbitrage and Arval have implemented similar systems since 2017. In 2022, **313 employees[2]** (of whom 127 started during the year) **were able to participate in work with general interest or public utility non-profit associations lasting 6 to 24 months**.

QUALITY SOCIAL DIALOGUE

In 2022, the presentation of the Group's strategic orientations as part of the **GTS 2025 plan** as well as the employment forecasts for 2025 were a highlight in the context of social dialogue within the Group. During these presentations, the challenges and resources associated with CSR in the Group were discussed and supplemented by dedicated interventions. They will continue in 2023 within each entity.

Corporate social responsibility taken to the highest level in the organisation

The **Group Head of Human Ressources** carries the Company's social responsibility towards its employees, in particular in terms of health, safety at work, social dialogue, freedom of association, the fight against harassment and discrimination, diversity and inclusion, career management and compensation. She is a member of the Group Executive Committee. On a regular basis, she reports on the HR strategy and results to the **Board of directors**, in particular to the **Governance, Ethics, Nominations and CSR Committee (CGEN) and the Remuneration Committee**.

BNP Paribas SA's **Central Social and Economic Committee** (CSEC) is regularly informed of the Group's CSR policy. In June 2022, the Head of Engagement and member of the Group Executive Committee presented the commitments made as part of the GTS 2025 strategic plan to the CSEC.

Global agreement

The BNP Paribas Global agreement signed in 2018 with UNI Global Union[3] **was extended until 30 September 2023**, with the aim of broadening the provisions of this global framework, particularly in terms of health and quality of life at work (see chapter 7.7 *Duty of vigilance*).

As part of the Global agreement, all employees concerned benefited in 2022 **from paid maternity leave of at least 14 weeks. Paid paternity leave of a minimum of six days** was implemented in **51 countries** covering more than **148,000 employees**.

European Works Council and European social dialogue

At the end of 2022, the **European Works Council[4] covered 22 countries** and around 68% of the total workforce.

In 2022, the GTS 2025 strategic plan and the associated People Strategy were presented to the European Works Council. The Group's Environment Social Governance (ESG) plan as well as the social and civic challenges of CSR (Corporate Social Responsibility) as part of the Group's new GTS 2025 strategic plan were also on the agenda of the plenary sessions of the European Works Council.

The European Works Council contributes significantly to the implementation of the **European Social Charter,** including the European agreements on **employment management** (2012), **gender equality** (2014) and on **stress prevention** (2017), supplemented in 2021 by the **Remote Working Charter**.

The Remote Working Charter was negotiated within a group composed of representatives of the European Works Council Bureau, the two European trade union federations[5] and Management. Approved in 2022 by all parties, it defines a **common framework for the deployment and strengthening of remote working in the 22 countries covered by the BNP Paribas European Works Council** for activities where this form of work organisation is possible. This common framework may be supplemented, where appropriate, by agreements specific to Group companies in order to meet specific requirements, provided that the provisions of the European Remote Working Charter are complied with.

1 Number of hours declared in HR tools as part of the #1MillionHours2Help programme including the long-term corporate volunteering set up in application of the Diversity and Inclusion Agreement in France (determined on 100% of permanent and fixed-term Group employees).

2 On a like-for-like basis (long-term sponsorship in the middle and end of their career) in 2021, 304 employees were able to get involved in these missions.

3 Consolidating fundamental rights at work and setting up a global social foundation that applies to all Group employees in all its regions.

4 European Works Council comprising the employee representatives from entities based in all countries within the European Economic Area, excluding entities that are not majority-owned.

5 The European Federation of Credit Institutions (FECEC) and UNI Europa Finance.

In 2022, the European Works Council renewed its members as well as its Bureau for the period from 2022 to 2026. Nearly 50% of the members are new and the proportion of men/women is balanced. The Bureau is composed of 10 members and comprises eight different nationalities. In this context, a two-day training session was organised in the autumn of 2022 for the 100 members of the European Works Council.

In France

In 2022, **141 collective agreements** were signed (including amendments) **in the BNP Paribas Group in France** of which 8 Group-level agreements relating to the Employment and Career Paths Management, the taking of leave and the time savings account, employee savings and the creation and operation of the Group Works Council in France. **133 collective agreements were signed at Group company level**, including 81 agreements related to compensation, employee savings and retirement savings. Given the changing social and economic context, most of the mandatory annual negotiation meetings (NAOs) within the Group's entities in France, notably concerning compensation for 2023, began earlier than in previous years.

In October 2022, the first assessment of the Group agreement in France on **remote working** was communicated to the three representative trade unions within the scope of the agreement, including in particular: the main updated figures on remote working, a summary of the support measures deployed, the prevention of psychosocial risks (PSR), changes of functionalities of IT tools and employee equipment. This first assessment was qualified as positive by all participants.

NUMBER OF COLLECTIVE AGREEMENTS SIGNED AND OFFICIAL MEETINGS

	Collective agreements		Number of formal meetings	
	2021	**2022**	**2021**	**2022**
France	108	141	1,149	1,453
Belgium	7	2	144	143
Italy	39	38	201	122
Luxembourg	0	0	10	18
Europe (excluding Domestic Markets)	131	99	449	371
Rest of the world	8	7	44	60
TOTAL	**293**	**287**	**1,997**	**2,167**

Employment management

BNP Paribas practices **responsible employment management** by anticipating changes necessary to maintain its economic performance, its capacity for development and therefore employment over time. It relies on **dynamic internal mobility**, a source of skills enhancement, supported by **significant investments in training**. This mobility is also facilitated by the widespread use of the **digital HR platform** "About Me", that enables a better understanding of employees' skills and their wishes.

Employment is managed under collective agreements concluded at different levels: Global, European and French. In France, in 2022, the new agreement signed on the Employment and Career Paths Management renews and strengthens the commitments made by the Group as part of its employment policy for the next four years. This agreement includes, in particular, the social pact and the employment management principles that enable it to be respected. It is the **4th agreement** signed at Group level in France on this topic since 2013. In this context, the Group in France does not carry out any forced redundancies, favouring internal mobility and voluntary solutions for its projects impacting employment. In the other countries around the world, redundancies are exceptional, in line with the commitments of the European Agreement on Employment Management of 2012 (renewed by tacit agreement every three years) and of the *Employment Management* section of the Global agreement of 2018.

In **France**, the Group's headcount increased by more than 1.3% excluding the scope effect and by 2.7%[1] including the scope effect with the consolidation of the entities, BP2I and Floa, in particular.

In **Belgium**, 2022 was marked by the preparation of the implementation of the "New Commercial Organisation" plan from 1 January 2023. This plan, impacting the work content and/or positions in the organisation of nearly 4,500 employees, aims to strengthen the service provided to customers *via* an approach based, on the one hand, on the needs and profiles of the customers, and on the other hand, on inter-segment collaboration optimised to leverage specific skills and expertise.

For the employees concerned, this approach enriches their career paths as well as providing new learning opportunities through training and change management.

[1] *Change in FTE.*

The net reduction in the workforce in Belgium in 2022 amounted to 116 Full-Time Equivalents, and 500 employees were also recruited during the period. This change is part of the GTS 2025 strategic plan, which plans to reduce the workforce by 450 people and recruit 2,200 employees from 2022 to 2025.

In **Poland**, an agreement was signed with the trade unions concerning a social plan providing for the loss of a maximum of 800 jobs over the period 2021-2023, aimed at supporting the Company's industrial plan. This agreement integrates support measures including the reinforcement of internal mobility, the increase in benefits, the introduction of social protection guarantees and a voluntary departure plan. Within this framework, there were 86 departures in 2021 and 261 in 2022.

In **Italy**, BNL plans to set up two partnerships on IT and back-offices. These partnerships involve the outsourcing of 820 job positions (260 for IT and 560 for back offices) in 2022, as part of a system provided for in the National Labour Contract (CCNL) for the banking sector, with guarantees provided in terms of employment and maintained working conditions for the employees concerned.

A COMPETITIVE COMPENSATION POLICY

BNP Paribas' compensation policy is founded upon **principles of fairness, notably with regard to gender, and transparency**, which are notably supported by a single annual compensation review process of all employees. The principles on the composition of compensation and its evolution are common throughout the Group and consistent with the objectives of Risk Management.

Compensation policy that complies with regulations

The Group's compensation policy, which applies to all branches and subsidiaries, aims to ensure consistency between the behaviour of employees whose professional activities have a significant impact on the Group's risk profile, and its long-term objectives in terms of Risk Management in accordance with CRD regulatory provision[1]. Since 2009, the implementation of this policy has helped to improve governance, identify employees that are "**Material Risk Takers" (MRT)**, and to apply provisions on the award and terms of payment applicable to their variable compensation. The compensation policy and principles of employees identified as MRTs are published annually in a report posted on the BNP Paribas website[2].

The compensation policy also complies with all applicable regulations, in particular (i) **customer protection regulations** (MiFID II[3] or European Banking Authority guidelines on compensation practices related to the sale of products in Retail Banking for employees in direct or indirect relationships with customers), (ii) sectoral provisions (asset management) with AIFMD and UCITS and insurance with Solvency II) and (iii) regulations related to the business with the application of the provisions relating to the French banking law and the Volcker rule applicable to market operators and SFDR. More broadly, it also complies with the laws and regulations in force and the requirements of regulators (ECB, FED, *etc*.), both at the local and consolidated level, including in terms of **minimum wages** when they exist in the countries where the Group operates.

A socially responsible, fair and competitive compensation policy

In the majority of the countries in which it operates, BNP Paribas applies a salary scale for hiring as part of its recruitment process, as well as a review of market compensation during the annual review process. This ensures that the **proposed wage levels are living wages** in relation to the local standard of living and are **consistent** with local market practices (based on local benchmark studies or analyses made by external consultants). This salary level is supplemented by **a set of social benefits** to which all Group employees have access under the Global agreement. The data on the **average compensation and the median compensation of employees** are available in chapter 2 *Table Compensation multiples and changes* based on employees of BNP Paribas SA (France and branches) in accordance with applicable laws.

In the current economic context, the Group endeavours to integrate local specificities within the framework of the budgets allocated in terms of compensation, in all its locations, in particular concerning the collective measures – company or sectoral – that may be negotiated, taking into account local government measures for each country/entity. The annual compensation review process has incorporated these elements, with particular attention paid to the first salary levels that may be most impacted by the current economic context.

In France, following discussions within the framework of the mandatory annual negotiations, a certain number of decisions were taken, in particular in terms of collective increases and exceptional bonuses paid in 2022.

Since 2019, BNP Paribas SA and its various entities in France have published their Gender Equality Index. The scores earned by the banking and insurance entities[4], which represent more than 48,000 employees, are above the statutory minimum, demonstrating the Group's long-term commitment to professional equality. All Group entities in the United Kingdom also publish their gender equality index.

1 European Directive CRD 5 of 20 May 2019, amending European Directive CRD 4 of 26 June 2019, as transposed into French law in the French Monetary and Financial Code, as well as Delegated Regulation 2021/923 on the criteria for identifying risk-taking employees (MRTs) and the European Banking Authority guidelines on prudent compensation policies of 2 July 2021.

2 http://invest.bnpparibas.com. Publication date: before the Shareholders' Annual General Meeting.

3 Markets in Financial Instruments Directive.

4 Scope: Entities with more than 1,000 employees.

BNP Paribas is continuing to increase its attention to **equal treatment for all**, particularly when it comes to gender equality. Since 2016, the consistent allocation of compensation between women and men has been monitored by indicators included in **the annual compensation review process**, for all the Group's businesses and functions, under the supervision of Executive Management.

For a number of years, measures are taken locally to reduce any pay gap between men and women. Thus, as part of this year's mandatory annual negotiations, a dedicated budget of **EUR 10 million to be divided equally over the next two years** was granted by BNP Paribas SA. This amount will be dedicated to the company's actions to promote gender diversity in career paths and the promotion of women, and to correct any discrepancies in annual compensation. Each year, the other entities also have the option of requesting dedicated budgets as part of the budget discussions on the annual compensation review process.

For retention purposes, in 2022, the Group awarded to over 8,400 key employees[1] a retention plan (maturing in June 2025), known as the **Group Sustainability and Incentive Scheme (GSIS)**. 20% of the initial award is related to the Group's CSR performance objectives, based on achievement of the CSR criteria[2], while the rest is indexed to the Group's operational performance[3].

Social benefits relating to retirement and savings

The BNP Paribas Group has set up **employee pension plans**, for which the specificities are defined according to local legislation as well as the HR practices and policies defined locally. These plans, set up and financed by the Group, complement the mandatory and legal plans to which the entities contribute for employees, and can be of two different types (defined-benefit plans or defined-contribution plans), as presented in chapter 4 *Financial statements – Salaries and employee benefits*.

Over the past few years, the BNP Paribas Group has implemented a wide campaign of converting defined-benefit plans into defined-contribution plans.

In France, employees benefit from defined-contribution retirement savings schemes under the conditions set out in chapter 4 *Financial statements – Salaries and employee benefits*. Several other countries have set up defined-contribution pension plans (Belgium, Switzerland, Italy, *etc*.). In the United Kingdom and the United States, defined-benefit pension plans, closed to new entrants, co-exist with defined-contribution plans.

In **France**, employees are **involved in the Group's performance through profit-sharing and incentive schemes**.

With regard to profit-sharing, almost all Group employees in France (nearly 99%) are covered by a profit-sharing agreement at the end of 2022. A **new profit-sharing agreement between BNP Paribas SA, BNP Paribas Arbitrage and Exane** was signed on 29 June 2022. The latter includes **new CSR criteria[4]**. The amount related to these criteria has more than doubled compared to the previous agreement, confirming BNP Paribas' commitment to CSR. Under this agreement, an amount of EUR 164 million will be divided between 46,314 beneficiaries for the 2022 financial year (compared to EUR 134 million to 41,811 beneficiaries in 2021). The amounts paid in respect of the 2022 under the profit-sharing agreements of the Group's other companies in France will be known at the end of the first quarter of 2023.

Elsewhere in the world, similar schemes exist. At BNP Paribas Fortis in Belgium, part of the so-called "collective" variable compensation is linked to the achievement of CSR objectives. The 2022 objectives were met, and a total of EUR 21.9 million was paid to all employees. In Luxembourg, in 2022, the Group's entities paid non-managerial employees an incentive bonus with respect to 2021, which amounted to nearly EUR 3.4 million.

In respect of the 2022 financial year, EUR 201 million will be distributed to the 63,264 beneficiaries of entities that are members of the **Group profit-sharing agreement** (compared with EUR 187 million to 62,026 beneficiaries in 2021). This amount, calculated on the basis of a special formula, is significantly higher than the legal formula.

In addition, most of the Group's companies support **employees' voluntary savings efforts through savings plans (PEE and PERECO) with a matching cumulative contribution** of EUR 77 million paid in 2022.

Lastly, on 30 March 2022, a **new Group-level agreement in France** was signed on the **effective taking of leave and saving it for use during working life, and for preparing retirement**. Through this agreement, the Group is changing the provisions on employee leave and on saving it in the Time Savings Account (CET). These new provisions contribute to a better work-life balance and to creating a new dynamic in the use that employees can make of their CET throughout their professional life, including in the context of retirement preparation and end-of-career arrangements.

Employee benefits relating to social protection

In addition to the legal and contractual arrangements, depending on the regulations and practices of the countries in which the Group operates, employees may benefit from supplementary social protection and/or health insurance.

In accordance with the **Global agreement, almost all of the Group's employees** benefit from **additional social protection at the end of 2022 through health insurance, incapacity, disability, and life insurance.**

1 *Key employees: SMP, high-potential employees or key local resources.*

2 *For the 2019 plan, payable in 2022, the achievement of the nine CSR criteria defined when the plan was allocated triggers the payment of the amount initially allocated for CSR to the plan beneficiaries, in accordance with the plan's regulations.*

3 *For employees subject to special regulatory frameworks, this loyalty scheme is adjusted in accordance with the CRD European Directive.*

4 *An environmental criterion for the annual reduction of greenhouse gas emissions per employee and a societal criterion linked to the number of solidarity hours completed by employees.*

Depending on the situation, this coverage comes either from a government plan, an insurance plan, or a combination of both. Particularly attentive to the protection of employee health, in accordance with its regulatory environment, each business/country determines what coverage is provided, the specific applicability conditions and the terms of financing.

In France, the Group offers **comprehensive supplementary social protection coverage** through mandatory employee health insurance schemes and incapacity, disability and life insurance, enabling employees to adapt their level of protection to their personal situation.

Flexible employee benefits enable employees to select, to a certain extent, their level of coverage from a range of benefits offered aiming at long-term employability and offering sustainable choices. These benefits are available at BNL in Italy, at BNP Paribas Fortis in Belgium and at BNP Paribas in the United Kingdom.

COMMITMENT 6: A LEARNING COMPANY SUPPORTING DYNAMIC CAREER PATH MANAGEMENT

ATTRACTING CANDIDATES AND RETAINING EMPLOYEES

In 2022, BNP Paribas is still seen as a top employer

The Group maintains its visibility on social networks. Nearly 1.2 million subscribers follow the BNP Paribas page and 95% of the Group's employees have an account on LinkedIn. For the ninth consecutive year, BNP Paribas was awarded the **"Top Employer Europe 2022"** label by Top Employers Institute **with an overall score of 90.58%[1]** (89% in 2021) thanks to the certification of eight of the Group's European countries[2]. Other Group countries[3] and entities also benefit from "Top Employer" certification.

For 25 years, Top Employers Institute has certified the quality of candidate companies' Human Resources practices. To do this, it carries out an audit covering 19 topics.

Nearly 90,000 students from business schools around the world expressed themselves as part of the Universum 2022 ranking "World's Most Attractive Employers": They position BNP Paribas as 1st French bank and 3rd French company, demonstrating its daily commitment to students and young people entering the job market.

France, for its part, has renewed its Happy Trainees survey of students who have had professional experience at BNP Paribas. Some 89% recommend the Group.

Several initiatives to attract the best candidates

To reinforce its attractiveness to candidates and employees, BNP Paribas is committed to a process of constantly improving its employer brand:

- following the health crisis, the Group adapted its Employer Promise to better match the new expectations of candidates and employees. Structured around BNP Paribas' purpose of being a **leader in sustainable finance, the Employer Promise highlights three main pillars: Sustainability & Impact, Development & Career Perspectives and Good place to work**. This new promise brings consistency and clarity to the way BNP Paribas is positioned as an employer around the world;
- in conjunction with Universum, the Group renewed a study to measure the perception and effectiveness of its Employer Promise with more than 40,000 students from business schools in eight of its priority markets (France, Italy, Germany, Spain, the United States, Hong Kong, China, the United Kingdom).

Faced with its recruitment challenges, in order to promote its employer brand and job offers, the Group has also redesigned the Career pages of its Corporate website. Centred around the candidate and meeting their new expectations, these pages now offer a simplified experience, enhanced by a personalised navigation by profile and a revisited graphic identity.

At the same time, in order to strengthen its appeal to young people, **BNP Paribas is continuing its commitment to work-study programmes** in France, with the hosting of more than 2,500 work-study students in 2022 (2,000 in 2021) and the creation in 2022 of its own Apprenticeship Training Centre, "B-School by BNP Paribas". A first cohort of 60 students benefited from work-study immersion and daily educational support. Building on this initial success, the Group plans to expand its offer of diplomas to two new cohorts next year.

A company that listens to its employees (Voice of Employees)

Since 2021, **the Group's "closer to local" strategy** has been based on steering using the Pulse survey, completed at the entity level. The analysis of verbatim reports collected *via* virtual Focus Groups and from local Pulse surveys contributed to the Group's People Strategy. **In 2022, 70 Pulses surveys were carried out in 63 Group countries: more than**

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[1] *The score of 90% obtained by BNP Paribas means that the Group applies at least 90% of best practices in the field of Human Resources.*

[2] *Belgium, France, Italy, Luxembourg, Poland, Türkiye, Ukraine and Spain, which is certified Top Employer for the first year.*

[3] *Latin America (Argentina, Brazil, Colombia, Mexico), BNP Paribas Personal Finance (United Kingdom, Italy, Belgium, Spain, Portugal and South Africa), as well as BNP Paribas Real Estate Germany.*

170,000 employees were interviewed during this period. The entities regularly share their results and action plans with employees on local priority topics *via* their own communication channels.

In 2022, the strategy was refined with the implementation of a listening system to get closer to employees and collect their feedback at key moments in their professional career through transactional surveys.

DEVELOPING SKILLS AND IMPROVING EMPLOYABILITY

Anticipating the skills needs of the future

The skills anticipation exercise, also called Strategic Workforce Planning (SWP) is a joint approach between Human Resources and the business lines. Its aim is to **identify, in advance, the skills needs required for the different business lines** over the next three years in order to offer employees appropriate career paths (upskilling or reskilling), particularly towards the jobs with a shortage of workers and the skills of tomorrow.

More than 30 business lines and functions were involved and 130 members of the Group's Executive Committees were asked about their vision of the roles of the future and the related skills, in light of issues such as technologies, inclusion, CSR and artificial intelligence. **1,400 future roles have been described in skills**. The aim is to compare the current skills of employees (declared in the internal "About Me" tool) with those necessary for the future, in order to identify those to be developed or strengthened as a priority on an individual or collective level.

This exercise provides HR contacts with a discussion tool to support employees and managers in their mobility and recruitment choices.

The results of the exercise give each business line and HR manager concerned a precise visibility on the jobs with a shortage of workers (for which it is necessary to train employees or implement a recruitment plan) and on future skills needs in particular in the IT sector and Data-related jobs.

The personalised digital platform, "About Me", rolled out to all Group entities, responds to the desire to create a real employee journey by focusing on their development, mobility and strengthening their commitment. It enables the Group to have detailed knowledge of the skills of each employee in real time. **10 new skills[1] in sustainable finance and Agile** were added to the Group's skills catalogue in 2022.

On-the-job development: the importance of discussions between employees and managers

At the heart of career management and at the service of employees, managers and HR, the "About Me" platform aims to:

- identify the skills of all employees: at Group level, in October 2022, approximately 133,000 employees (of which approximately 53% were women) declared a range of nearly 900 different skills for a cumulative total of 2.2 million skills;
- help employees implement their development plan and pursue their professional growth;
- streamline interactions between employees, managers and HR, thus promoting cross-functional mobility;
- carry out the annual performance review process.

The performance review process, which is systematic for all employees, is digitised and simplified in "About Me": it starts at the beginning of the year with the **definition of individual, collective and/or cross-functional objectives**, followed by feedback on an ongoing basis. This feedback helps to identify skills development needs throughout the year and to enrich the **Personal Development Plan. The annual performance review interview is an important time for discussion between the employee and their manager**: it enables to make an assessment of the past year, to define development opportunities and to look ahead to the year to come. Employees are also invited to express themselves freely about their working environment and the continuous improvement of the organisation and/or processes.

Managers must apply a certain number of performance review principles established to guide their actions, with regard to the objectives set for the year. The objectives defined during the performance review must be clear, achievable, defined in time, measurable and adapted to the nature of the activity and the responsibility of the position (European Agreement on the prevention of stress at work).

Mobility, essential for developing skills

Mobility is embedded in the culture of BNP Paribas. It is an **essential vector for developing "on the job" skills**, particularly as part of the GTS 2025 strategic plan. The Group had a total of **24,911 transfers in 2022** (24,156 in 2021), **up by 3%**. In France, 10,452 transfers were carried out compared to 9,438 in 2021. Of these transfers, 5,384 were cross-functional (inter-entity and inter-business), up by 17% (4,608 in 2021). There were 2,735 in France (+8% compared to 2021).

The global mobility management tool has been deployed to 180,243 employees in 61 countries.

In order to better meet the needs of the business lines/functions and the Group's transformation challenges, a single centre of expertise manages all of the Group's internal and external recruitments in France and other countries (Portugal, India) for all types of contracts. Thanks to their expertise, their proximity to the business lines and their global and cross-functional vision of the internal job market, these teams strive to optimise the candidate mobility experience.

[1] *Including 8 skills related to sustainable finance detailed above in "Sustainable finance at the heart of the employee journey" and two cross-functional skills concerning Agile: Ability to adopt and promote the Agile mindset and Ability to work with Agile methods.*

For the 9th consecutive year, BNP Paribas organised "Mobility Days" which took place over one month in 46 countries. Hybrid or digital formats brought together more than 10,400 participants in conferences, workshops and trainings. This year, to support employees in developing their skills, 13 Master Classes were organised in seven countries on the theme "How to boost your profile" in "About Me" to encourage employees to make better use of their profile.

International mobility was also showcased at eight events open to all Group employees organised in five countries. For the first time, an NPS (Net Promoter Score) was set up to measure participant satisfaction, and this score was found to be high (+50).

In France, Mobility Days were structured around four key moments: resources made available for mobility, position or job presentations, interviews with HR, and a focus on professional development.

TOTAL NUMBER OF POSITIONS PUBLISHED AND JOBS FILLED INTERNALLY(1)

			2021			2022
	Number of positions published	Internally filled positions	% of positions filled internally	Number of positions published	Internally filled positions	% of positions filled internally
France	7,139	3,038	43%	8,257	3,671	44%
Belgium (BNP Paribas Fortis)	1,401	3,321	237%(2)	1,501	1,073	71%
Italy	429	210	49%	409	164	40%
Luxembourg (BGL BNP Paribas)	297	197	66%	337	165	49%
United-Kingdom	1,696	362	21%	2,026	439	22%
Ukraine	1,713	831	49%	1,083	603	56%
Portugal	2,216	1,701	77%	3,243	2,980	92%
Türkiye (TEB)	454	69	15%	656	54	8%
United States(3)	4,473	1,247	28%	4,446	1,269	29%
Other countries	8,687	863	10%	10,906	1,201	11%
TOTAL	**28,505**	**11,839**	**42%**	**32,864**	**11,619**	**35%**

Source: Extract from Taleo and the complementary declarations of the countries/entities.
(1) Based on 92% of the Group's workforce.
(2) The rate is higher than 100% because some adverts are for several vacancies.
(3) Including Bank of the West.

Training offer

TRAINING: TOTAL NUMBER OF HOURS AND EMPLOYEES(1)

	2020	2021	2022
Total number of employees who completed at least one training course (including mandatory training courses)	194,976	189,511	193,211
Total number of employees who completed at least four training courses (including mandatory training courses)	178,893	188,103	191,131(2)
Total number of training hours	3,673,001	3,978,469	4,207,220

(1) Source: My Development HR reporting tool, of which the coverage rate is 99% of Group's physical workforce on permanent or fixed-term contracts in 65 countries, although other employees (apprentices, employees on vocational training or qualification contracts, interns and casual workers) also receive trainings.
(2) Of which 51.9% are women, 37.4% are employees over the age of 45 and 2.5% are on fixed-term contracts, testifying to the accessibility of training to all these categories.

2022 was rich in terms of training, with a return to pre-Covid activity levels. The number of hours and employees trained substantially increased compared to 2021. The main learning format remains distance learning (68.5% of the volume of hours). The average number of training hours per employee is 21.8 hours in 2022. Business line trainings is still the most popular training course, supplemented by risk and compliance training.

The number of employees who obtained a certification or diploma decrease slightly in 2022 (over 16,000 employees compared to 17,500 in 2021).

TRAINING: OVERVIEW BY METHOD AND CONTENT[(1)]

	Training method[(2)]			Training content[(3)]			
	Face-to-face[(4)]	**Distance[(5)]**	**Others[(6)]**	**Business techniques & functions**	**Risks & compliance**	**Culture & awareness of the Group**	**Individual skills & management**
France	2.92%	97.03%	0.05%	61%	25%	9%	4%
Belgium	15.22%	84.74%	0.04%	45%	39%	6%	11%
Italy	3.67%	96.33%	0.00%	63%	12%	14%	10%
Luxembourg	9.29%	89.59%	1.12%	46%	35%	7%	11%
Europe (excluding Domestic Markets)	6.94%	93.04%	0.02%	38%	41%	15%	5%
Rest of the world	4.86%	95.12%	0.02%	39%	38%	20%	4%
TOTAL	**4.80%**	**95.17%**	**0.04%**	**52%**	**29%**	**14%**	**6%**

(1) Proportion of training courses by method and subject compared to all training courses attended in the Group by scope.
Source: My Development HR reporting tool, of which the coverage rate is 99% of Group's physical workforce on permanent or fixed-term contracts in 65 coutries.
(2) % interns per method out of the total number of training sessions.
(3) % interns per subject out of the total number of training sessions. An employee/beneficiary may attend several training sessions. The total is less than 100% since undetermined training sessions are not included in the report.
(4) Face-to-face (sessions/events organised within companies, inter-companies or internally).
(5) Distance (virtual classes, Webcast and Digital, videos, serious game, MOOC,SPOOC, podcast, etc.).
(6) The "Other" category includes the experience-based training method (On the Job Training, mentoring, tutoring, reverse mentoring, peer-to-peer training) and the event-based method (co-development workshops, conferences, discussion workshops, etc.).

Forging a culture of continuous development

The training strategy is based on two major pillars to support the Group's new GTS plan and the People Strategy: **strengthening of the Learning culture and improving the Learning experience**, to enable everyone to quickly and easily access the right resource at the right time with simplified and accelerated access. As such, the "Learning festivals" conducted by the entities enabled a better appropriation of existing offers and a strengthened mobilisation in the service of career paths.

All Learning & Development professionals were brought together in a community to accelerate the sharing of best practices and the promotion of cross-functional content. Lastly, offers *via* the Group's training tool were regularly promoted in 2022, to enable employees to better target the skills worked on and the career paths available. In France, a set of digital modules are accessible to all employees to work on essential future, behavioural and cross-functional skills.

Two academies to support the Group's GTS 2025 strategic plan

The GTS 2025 plan has positioned technology and sustainable finance as pillars of the strategy. The Group has implemented a transformation programme in all its business lines, and will continue to put technology and industrialisation at the heart of its model. At the same time, sustainable finance is establishing itself as an approach that must apply to all activities, business lines and functions, at all levels.

In supporting the deployment of the GTS 2025 plan, training contributed:

- to the "Technology" focus *via* the creation of new content through the **Digital, Data & Agile Academy** (DDAA), and *via* specific programmes launched by the business lines. The DDAA continues to offer training paths to develop skills associated with the key roles of Digital, Data and Agile; to provide managers with the levers to accelerate the Group's transformation. Thus trained, employees can access the jobs of tomorrow and more easily prepare for their professional development within the Group. The DDAA includes 59 upskilling courses, 21 reskilling courses and 63 reskilling boost courses. **Since its launch, nearly 4,850 employees have followed the DDAA pathways, including 40% women** (26% during the pilot phase in 2018, 41% in 2022).

In 2022, the DDAA also carried out a comprehensive review of the roles for the Data, Agile and IT professions which led to the creation of seven upskilling and one reskilling courses. It is also starting to diversify the formats offered within its courses to meet the specific needs of the business lines to be supported. In partnership with the Group's IT Function, a specific reskilling training course on the Business Analyst role was launched in December 2022 and offers functioning by cohort for remote and face-to-face modules, as well as individual mentoring. The aim is to improve the employability of employees in jobs with a shortage of workers.

Other provisions contribute to the "Technology" focus. For example, the Group IT Function has designed the IT Academy portal, which centralises training content on the Group's technologies in a single place, available to all employees. The transformation hub, Bivwak! also offers thematic packs and workshops in the fields of Data and new technologies. Overall, in 2022, 16,548 Group employees (8.4%) attended at least 7 hours of training in the technological field (new dedicated indicator now monitored by the Training teams, thus contributing to the management of skills development in this area);

- to the "Sustainability" focus *via* the development of the **Sustainability Academy**. To support employees in this strategic transformation and ensure that everyone has the necessary knowledge and skills around major environmental and civic issues, in November 2022, the Group launched the Sustainability Academy. Co-constructed with the Group's entities, it provides access to a **set of selected resources on sustainable development and finance** (training courses, articles, videos, interviews, practical sheets, news, support modules for managers, *etc*.). These will enable employees to learn about the fundamentals of the environmental and social challenges of sustainable finance as well as to enter more in-depth into the **five priority areas of actions for the Group** (namely the circular economy, transition to carbon neutrality, biodiversity conservation, social inclusion and the development of sustainable savings, finance and investments). The Sustainability Academy is organised into four different areas:
  - a "common base" for all employees comprising the foundations, definitions and strategy of the Group's Engagement relating to the five priority areas of actions indicated previously;
  - specific content for the Group's business lines and functions with specialised trainings;
  - a set of tools through the "Mobilise your team" module made available to managers to enable them to engage and strengthen the mobilisation of their teams around the challenges of sustainable finance;
  - a dedicated space to prepare for the future targeting specific "Talent" populations and members of the Executive Committees of the business lines and functions.

The Sustainability Academy was **developed in an agile mode** with different teams involved such as Engagement, Human Resources, business lines and functions. Ambassadors of the academy have been appointed to facilitate the regular sharing of feedback on the training content and offering, as part of a continuous improvement approach.

Dedicated programmes strengthening the Group's culture

A platform dedicated to Leaders (Top Executives, Senior Managers, Talent population), the **Leadership Corner**, is a space for community and publication of development offers. It is also an academy of rich and varied resources to build and strengthen a culture of leadership, including, for example:

- a webinar series "Preparing for Tomorrow", observing, from a leadership perspective, future trends in positive innovation technology and business development with positive impact;
- certification programmes: Navigating Digital Technologies (NDT) in the field of new technologies, Harvard Manage Mentor Spark *via* a platform on leadership, Centrale Sup Elec in the field of transformations;
- programmes to accelerate understanding of BNP Paribas' challenges and ambitions in terms of sustainable finance, adapted to each level of leadership.

In line with the GTS 2025 strategic plan, the certifying training course on "Positive Impact Business" co-developed between BNP Paribas and the University of Cambridge was once again a resounding success this year among pioneers in the Positive impact field: fully digital since 2020, it has trained and certified 400 sustainable development pioneers in order to integrate this dimension into their discussions and solutions with their customers.

The "Shape The Future" programme saw ambitious developments in 2022. The Top Executives took part in a diagnostic of the behaviours to be developed to implement the GTS 2025 strategic plan and gradually integrate sustainable finance into the operational strategy of their entities. They then co-developed the training programme dedicated to them within the Sustainability Academy, thus making it possible to send a call for tenders to the six largest universities in the world with expertise in positive impact and to select two. Four modules of this programme, including the first dedicated to understanding the plan's five strategic pillars, were completed in 2022.

News from the Talents programme "Leaders for Tomorrow"

At the end of 2015, the Group launched the "Leaders for Tomorrow'' initiative, aimed at identifying, developing and promoting high potential employees in order to ensure the succession of the members of the Group's cross-functional Executive Committees for business, functions and regions (Leadership for Change, hereafter "LFC").

These “Leadership Talents” were selected according to a rigorous Group process by their managers and HR managers on the basis of their skills, experience, sources of motivation and personal predisposition to become leaders. **At the end of 2022, the programme brought together nearly 7,000 “Leadership Talents”** belonging to the three levels (Emerging, Advanced or Top).

Over the past year, the development offer has been adapted to take into account the Group’s strategic challenges reflected in the GTS plan. More than 4,500 “Leadership Talents” of some forty nationalities from all professions/functions have benefited from dedicated support and development systems. The system proposed at Group level, grouped under themes (My Positive Impact, Me and Change, Me with my team) adds to the initiatives proposed locally either by their business line or by the function to which they belong.

7.4 Our civic responsibility: being a positive agent for change

BNP Paribas’ commitment as a committed player in society is broken down into three pillars:

- **Commitment 7** – Products and services that are widely accessible;
- **Commitment 8** – Combatting social exclusion and supporting human rights;
- **Commitment 9** – Corporate philanthropy policy focused on the arts, solidarity and the environment.

COMMITMENT 7: PRODUCTS AND SERVICES THAT ARE WIDELY ACCESSIBLE

THE GROUP’S ACTION TO PROMOTE THE INCLUSION AND FINANCIAL HEALTH OF ITS CLIENTS

The Group has set itself a target of 6 million beneficiaries by 2025 of products and services promoting financial inclusion (indicator 7 of the CSR policy management dashboard, see section 7.1), bringing together the number of Nickel accounts opened since its creation and the number of beneficiaries of microloans distributed by the microfinance institutions financed by the Group (*pro rata* to the financing).

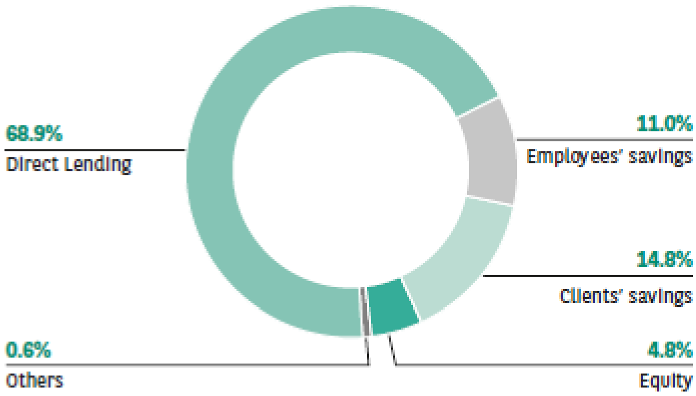
The strong development of the Nickel inclusive offer, launched in the Belgian and Portuguese markets in 2022, allows the Group to exceed three million beneficiaries of inclusive products by the end of 2022.

Historical support for microfinance institutions

For more than 30 years, BNP Paribas has been committed to inclusive finance, through the financing of 85 Microfinance Institutions (MFIs) in 34 countries including ADIE in France, for a cumulative amount EUR 1.2 billion. BNP Paribas’ support for microfinance has historically benefited more than 2.9 million people, of which 83% are women. The Group uses different levers to promote the deployment of microfinance and have a positive impact on society: direct financing of MFIs, investment in funds specialising in financial inclusion, distribution of savings products dedicated to microfinance and completion of technical assistance missions.

In 2022, this support reached EUR 332 million thereby directly financing 22 MFIs in more than 15 countries and indirectly more than 100 MFIs around the world, *via* 18 dedicated funds in which various Group entities invest and benefiting over 250,000 people. New commitments were taken with regard to these institutions, particularly in Côte d’Ivoire, Morocco, Indonesia and Brazil, and BNP Paribas completed its first financing in Romania with the microfinance company, Omro.

FINANCING AND INVESTMENTS FOR MICROFINANCE INSTITUTIONS IN 2022: EUR 332 MILLION



Financial and social performance at the heart of the microfinance development strategy

BNP Paribas has published its first microfinance social performance report[1] for 2021 which takes stock of the actions carried out by the Group, and highlights in particular that micro-loans distributed by the partner MFIs have contributed to creating or maintaining more than 1.3 million jobs.

The report also illustrates the strength of the commitment of the Group's employees who provided more than 13,000 hours of support in *pro bono* with MFI partners within the framework of skills sponsorship.

Reconciling financial inclusion with environmental issues

The materialisation of climate risk is a factor that can create significant difficulties for certain small producers and rural communities, and therefore drastically reduce their financial inclusion. BNP Paribas supports and trains suppliers of inclusive financial products and services to better understand this risk so that they can contribute to the adaptation of their customers.

To this end, in 2022, BNP Paribas created the JuST (Just Sustainability Transitions) Institute[2]. Its mission is to provide local financial institutions with dedicated tools allowing them to increase the amount and quality of financing which specifically benefit the populations most vulnerable to climate change and biodiversity deterioration. The JuST Institute offers analyses and certifications of agricultural practices, skills development across the financial value chain and operational advice to design products.

Nickel, a powerful tool for financial inclusion

Nickel, a Group subsidiary, proposes an offer based on four strong values of financial inclusion: universality, simplicity, usefulness and benevolence. Opening an account with an IBAN and a payment card without conditions allows everyone, including people who have been banned from banking, to pay and be able to be paid freely. At the end of 2022, nearly 3 million Nickel accounts had been opened since the creation by customers of 190 different nationalities, with the following profiles: income of less than EUR 1,500 per month (75%); unemployed, with no regular income or living on benefits (30%); without a personal address (30%). Since its creation, Nickel has collaborated with associations and public organisations such as the French Red Cross, Crésus, Action Against Hunger and the France Relance public plan programme, *#1jeune1solution* (1 young person, 1 solution). Nickel distributes its products through a network of more than 8,000 tobacconists and points of sale (national lottery distribution networks) in France, Spain, Belgium and Portugal – deployment in the latter two countries was initiated in 2022. Nickel has also been very active since the start of the conflict in Ukraine, opening 4,500 accounts for Ukrainian nationals.

Nickel participates strongly in the achievement of our indicator aimed at increasing financial inclusion, composed of the number of Nickel account holders and the number of beneficiaries of microfinance institutions supported by BNP Paribas. The target is to reach 6 million beneficiaries in total by 2025.

Support for customers experiencing financial difficulties

The Group acts both to facilitate access to credit and to prevent over-indebtedness. It considers that the role of a responsible bank is to support its customers, even in the most difficult times.

With this in mind, in 2019, CPBF launched the AXELLE platform for customers experiencing financial difficulties, to present solutions (advice, information, tips) offered by associations such as Crésus or ADIE, by social enterprises supported as part of BNP Paribas' Act for Impact system, or by companies of the Collective of companies for an inclusive economy such as Orange

[1] *2021 microfinance social performance report (https://cdn-group.bnpparibas.com/uploads/file/2021_bnp_paribas_microfinance_social_performance_report.pdf).*

[2] *justinstitute.org.*

or Danone. This system was offered in 2022 to 300,000 financially vulnerable customers of CPBF through the *"MesComptes"* (My Accounts) application and the advisors of the Specific Budgetary Solutions Centre.

In France, BNP Paribas Personal Finance was selected by FASTT (*Fonds d'Action Sociale du Travail Temporaire* – Temporary Work Social Action Fund) as a lender for temporary workers. This fund facilitates projects such as access to housing, obtaining a driving licence or purchasing a vehicle.

Finally, in 2022, the entity signed a partnership with Saretec, a specialist in pre- and post-disaster support, to develop a solution that will make it possible to identify the municipalities affected by a natural disaster, within 12 hours, in order to activate a support system in a reactive and targeted manner.

Financial issues training, an effective prevention tool

Financial education has proven to be effective in combating over-indebtedness, promoting economic development and improving the financial health of the beneficiaries. The majority of Group entities therefore deploy numerous training programmes, such as the following examples:

- In Italy, in 2022 BNP Paribas Personal Finance enhanced the "My responsible credit" website with educational content on financial education for adults, and also rolled out financial education workshops for young women who are victims of violence and incarcerated people.
- BNP Paribas Personal Finance's online education platform, "Responsible Budget", already active in France, Italy and Belgium, was rolled out in 2022 in three new countries: Bulgaria, Romania and Portugal. In 2022, 59,000 young people were educated on financial education;
- In March 2022, during the Global Money Week, BNP Paribas Personal Finance organised an operation in 11 European countries in partnership with the Junior Achievement association to raise awareness of budget management among young people. Educational content and a podcast, "On the way", with 12 episodes in French and English were created and are available on the BNP Paribas Personal Finance websites to raise citizens' awareness on responsible consumption practices.

SUPPORTING FRAGILE CUSTOMERS OR CUSTOMERS WITH SPECIFIC NEEDS

BNP Paribas' role is to welcome its customers by providing them with structures, human resources, products and services adapted to their specific situation. Whether they are people with disabilities or people made vulnerable by life situations, the Group innovates every year to meet the needs and requests of its customers as comprehensively as possible.

For example, BNP Paribas acts to improve the accessibility of its branches open to the public, in all its entities around the world, and also of its online services or documents. BNP Paribas Polska, has launched a sign language translation service in all its customer centres, and has made its call centre accessible to hearing-impaired people. Nearly 900 people have already used it. In Belgium, 47% of BNP Paribas Fortis branches are accessible to people with reduced mobility. People with partial or complete blindness can receive all their account statements in Braille language free of charge and use ATMs with voice recognition. Hearing-impaired people have the possibility of being accompanied by sign language interpreters for all their appointments.

Tailor-made systems to address specific needs

Young people and seniors

In Italy, BNL has developed the BNL Abito ecosystem to offer multiple solutions: home purchase, insurance, renovation and improvement of energy efficiency through a comprehensive range of financing and services. This solution includes an offer dedicated to people under the age of 36 to cover housing-related expenses. BNL Abito received the National Innovation Award "*Premio dei Premi*" for this product.

In France, in conjunction with the associations hosted by *L'Ascenseur* such as Article 1, BNP Paribas has decided to extend its student loan without a guarantor system launched in 2021, to offer unsecured loans for scholarship students wishing to pursue high-level studies. As of 31 December 2022, over 1,600 students had benefited from this offer, for a total amount of EUR 15.5 million in loans.

To support seniors at home, BNP Paribas Personal Finance in France has developed a partnership with Capautonomy to finance home improvement and renovation work. In addition, the Group signed the first Senior Health Impact Bond in the Netherlands (see *Financing and investments with a positive impact*, Commitment 1).

For transgender and non-binary people

At the end of 2022, Nickel announced the arrival of the "True Name" functionality on its nominative Mastercard, which allows transgender and non-binary people to change the first name on their payment cards. True Name will be gradually rolled out in 2023 in France and Spain, then in Belgium and Portugal. A similar functionality was implemented on the VISA cards offered by CPBF in 2021.

COMMITMENT 8: SUPPORTING HUMAN RIGHTS AND COMBATTING SOCIAL EXCLUSION

BNP PARIBAS IS COMMITTED TO RESPECTING HUMAN RIGHTS

Commitment at the highest level

BNP Paribas adheres to internationally-recognised human rights standards. This commitment is expressed at the highest level in the BNP Paribas Declaration on human rights[1], signed by the Group's Executive Management and promoting the respect of these rights within BNP Paribas' sphere of influence. The Chairman of the Board of directors and the Group Chief Executive Officer also co-sign the statement on modern slavery and human trafficking that BNP Paribas publishes annually.

The Group supports the United Nations Guiding Principles on Business and Human Rights, as well as the OECD's Guidelines for Multinational Enterprises, in accordance with the "Protect, Respect and Remedy" framework. It has chosen to follow the recommendations of the United Nations Guiding Principles reporting framework.

BNP Paribas takes part in the annual meetings of several initiatives, associations and working groups dedicated to human rights: *Entreprises pour les Droits de l'Homme* (EDH), the Thun group, and the Human Rights Working Group of the French network of the Global Compact.

In 2022, BNP Paribas Asset Management joined the PRI's Advance initiative, whose aim is to engage with 40 major companies of the mining, metallurgy and renewable energy sectors, on human rights issues, as a Lead investor.

Awareness-raising and training

The Group focuses on employee training and awareness-raising, which are important components of its human rights risks management process. A "Human Rights and Business" training module established in collaboration with EDH and available in eight languages, has been assigned since 2016 to Group employees tackling human rights issues as part of their professional missions.

Since 2016, more than 22,000 employees have completed this training. At end 2022, 89% of assigned employees had completed this online awareness-raising module on how human rights are taken into account in financing decisions. This training programme was supplemented in 2022 by awareness-raising sessions organised for target audiences on business and human rights issues. Lastly, a Business & Human Rights newsletter is sent monthly to Group employees working on human rights issues.

Management of "salient[2]" risks as part of the distribution of products and services

BNP Paribas has identified two "salient" risks in the distribution of its products and services:

- non-discrimination in access to financial services;
- right to privacy (protection of clients' personal data).

Non-discrimination in access to financial services

The Group believes that sustainable economic development promotes wider access to fundamental rights, which is why it strives to contribute to the accessibility of financial services in the communities where it operates (see *Products and services that are widely accessible,* Commitment 7).

The right to privacy

The protection of privacy remains an ethical priority for the Group, as evidenced by its inclusion in the Code of conduct. In 2022, BNP Paribas continued to develop its network of data protection specialists, integrated into all of the Group's territories and businesses. Worldwide, job assignments to apply the principles of data confidentiality and increase personal data protection knowledge occupy more than 100 full-time equivalents (2nd line of defence).

Created in 2018 and reporting to the Risk Function, the Group Data Protection Office (GDPO) aims to support, advise and supervise data protection activities. One of its responsibilities is to implement the continuous development programme for Data Protection project managers and correspondents.

In 2022, the action plans established at the end of the maturity self-assessment exercise carried out in 2021 were closed. Resources have been allocated to strengthening the control system (1st line of defence) and independent test plan (2nd line of defence), in order to strengthen the integration of data protection into the Group's operational risk management framework.

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1 *BNP Paribas and Human Rights (https://cdn-group.bnpparibas.com/uploads/file/fr_declaration_bnp_sur_droit_de_l_homme.pdf).*

2 *"Salient" is the term used by the drafters of the United Nations Guiding Principles Reporting Framework.*

Key tools

Available to all employees, they cover:

- data protection risk assessment to identify and address data processing risks;
- reporting personal data breaches. Each employee can report any suspicious personal data breach for investigation[1];
- the recording of personal data processing activities;
- evaluating the impact of data sharing.

Together, they provide a single view on how the Group manages and assesses personal data protection.

Management of "salient" risks of breaches in human rights in the Group's financing and investment activities

The activities of corporate clients may pose a risk to human rights, particularly in the area of workers' rights, and have an impact on local communities.

The Group endeavours to identify, assess (due diligence process), monitor and encourage the improvement of the current and future performance of its clients operating in sensitive sectors, through the application of its investment and financing policies (see *Systematic integration and management of environmental, social and governance risks (ESG)*, Commitment 3). This system was recently strengthened by the systematic ESG assessment of the Group's clients on five dimensions, including respect for human rights, as part of the credit process (*ESG Assessment*). The deployment of the ESG Assessment continued in 2022 and will cover all large corporate clients by the end of 2023.

To ensure that the existing system meets the requirements of the French Duty of Care, BNP Paribas set up a risk mapping of its clients taking into account both their business sectors and the countries they operate in. This tool covers human rights issues through the analysis of several criteria, such as child labour, forced labour, human trafficking and failure to respect the rights of local communities. The criteria are both sector-weighted and geographically weighted. This mapping thus strengthens the ability of the business lines and functions concerned to implement the most appropriate in-depth vigilance measures (see 7.7. *Duty of Care*).

Workers' rights

The human rights criteria of financing and investment policies in sensitive sectors deal with issues related to workers' rights in particular. In addition to child labour and forced labour, workers' health and safety as well as freedom of association are assessed. These themes are also taken into account in the analysis of projects covered by the Equator Principles (see *Systematic integration and management of environmental, social and governance risks (ESG)*, Commitment 3).

Rights of local communities

Identified as another "salient" issue, the rights of local communities are at the heart of most controversies related to large industrial projects. Therefore, for its project finance activities, BNP Paribas encourages its clients to obtain the Free, Prior and Informed Consent (FPIC) of the local communities impacted by their projects.

In accordance with the Equator Principles, the Group ensures that the negative impacts are avoided and, if necessary, remedied. Since 2020, BNP Paribas has been applying the 4th version of the Equator Principles (EP4), after having actively participated in the process of updating them. Discussions resulted in a greater acknowledgement of the UN Guiding Principles by the Equator Principles, and a broader use of Equator Principle-defined standards – including mandatory FPIC – in "Designated Countries[2]", where they were previously considered as optional.

Due diligence and dialogue

In the event of suspected or identified serious abuses of human rights by a BNP Paribas customer or a company in its portfolio, the Group conducts in-depth due diligences and discusses the matter with the company concerned (see *Systematic integration and management of environmental, social and governance risks*, Commitment 3).

For example, in 2022, the construction of a renewable energy project in South America was interrupted due to the opposition of members of the local indigenous opulations, over fear of the loss of a customary zone of use. Dialogue is maintained between the local communities and the project sponsor, in order to reach a satisfactory agreement for all stakeholders. Regular meetings are organised with the client concerned as well as with internal and external experts to progress in the resolution of this dispute and to reach a compromise respectful of the FPIC principles.

COMBATTING SOCIAL EXCLUSION

As a committed and responsible group, the fight against social exclusion is a priority for BNP Paribas, with two main areas of intervention: the integration of young people and support for the local territories. The majority of these actions are carried by the

[1] *In accordance with the General Data Protection Regulation (GDPR), customers can exercise their rights in order to control the use made of their personal data. See page Data protection at the corporate site (https://group.bnpparibas/en/data-protection).*

[2] *According to the OECD definition.*

Group's Foundation and described in Commitment 9 *(Corporate philanthropy policy focused on the arts, solidarity and the environment*).

The Group's active participation in the *Collectif d'Entreprises pour une économie plus inclusive* (Group of Companies for a More Inclusive Economy) and Business for Inclusive Growth (B4IG) coalitions contributes to this. In addition to these actions, BNP Paribas supports employee's skills-based volunteering to non-profit volunteering to non-profit organisations involved in tackling social inclusion (see *A Good place to work and responsible employment management*, Commitment 5).

The *Projet Banlieues* (Neighbourhoods Project) highlights and supports those working in the field

The *Projet Banlieues* aims to support associations operating in the priority city neighbourhoods (QPV), which work in multiple areas such as education, social and professional integration and strenghtening social bonds among communities. This commitment is reflected in hundreds of local initiatives: tutoring, French and foreign language courses, literacy courses, fostering disadvantaged families, employability training, mentoring, *etc*. Since 2006, EUR 29 million have been mobilised, including EUR 8 million dedicated to 1,035 local associations benefiting 900,000 people in the QPVs, and the remainder in for the Association for the Right to Economic Initiative, Afev, Proxité et Entreprendre pour savoir.

In 2022, the BNP Paribas Foundation reaffirmed its commitment to the *Projet Banlieues* in the amount of EUR 1.2 million per year for a period of three years, large-scale financial support whose priority is to help the most vulnerable populations, particularly young people. In 2022, the *Projet Banlieues* supported 355 local associations spread over a large part of the territories covered by the CPBF branch network, including 141 new associations benefiting approximately 140,000 vulnerable people.

The BNP Paribas Foundation launched its 2022 *Projet Banlieues* Award, and, with 12 associations being nominated through a selection process open to all Group's employees. Three associations received the 2022 *Projet Banlieues* Award: *Creative Vintage* in Strasbourg, *Tous en mer* in Nantes and *Drop de Breton* in Bordeaux, and were rewarded by an additional grant.

COMMITMENT 9: CORPORATE PHILANTHROPY POLICY FOCUSED ON THE ARTS, SOLIDARITY AND THE ENVIRONMENT

The BNP Paribas Foundation has been a major player and expert in corporate philanthropy since 1984. Wherever the Bank is present, it leads and coordinates the international development of the BNP Paribas Group's sponsorship, through it's ten international foundations and its endowment fund. It dedicates its philanthropy approach to projects promoting solidarity culture and the environment.

In 2022, BNP Paribas allocated EUR 74.1 million to public interest activities, including EUR 15.1 million dedicated to supporting Ukraine. The remaining EUR 59 million, excluding exceptional support for Ukraine, up 10.3% compared to 2021, can be broken down into the following three areas of action:

- 72% for solidarity;
- 15% for the environment;
- 13% for culture.

CULTURE

Contemporary creation is at the heart of the BNP Paribas Foundation's cultural philanthropy programme. Engaged alongside many artists and the institutions that welcome and present their works, the Foundation in particular supports contemporary dance, jazz and new circus arts. In 2022, the BNP Paribas Foundation's cultural philanthropy was enhanced by a strategic focus through the development of a new theme in line with its solidarity actions: cultural transmission.

Cultural transmission and access to it for all: a new commitment focus

Passing down, sharing an artistic heritage and musical knowhow are all levers that enable younger generations to succeed and move towards excellence while being supported and guided. The BNP Paribas Foundation has forged new partnerships in this regard, for example with the EuroFabrique event held in February 2022. Created by the *Réunion des Musées Nationaux – Grand Palais*, the *École des Arts Décoratifs* and the ANdEA (National Association of Higher Art Schools), this event is presented as an agora and a major European art and design school; it brought together the energy and creativity of young emerging artists and designers from all over Europe, while using mainly reused materials.

Similarly, since the 2021/2022 season, the BNP Paribas Foundation has supported the *Maîtrise de Radio France*, a children's choir that combines academic excellence, superior musical training and equal opportunities.

In 2022, the BNP Paribas Foundation supported the *Athénée-Théâtre Louis Jouvet* in the implementation of a participatory creation project. Students from vocational high schools worked for a year to write a show combining story, dance and music, which was performed on the main stage.

Contemporary creation is at the heart of the BNP Paribas Foundation's cultural philanthropy programme

Committed to numerous artists and institutions, since 2017, the Foundation has supported the contemporary dance company of Hofesh Shechter, starring in the film *En Corps* in 2022. In this context, it supported the first performances of the Barbarians show at the *Festival d'Avignon* and accompanied the performances of Uprising and In your rooms at the *Opéra national de Paris*, of which it is a partner.

SOLIDARITY

Supporting equal opportunities, promoting social inclusion and employee commitment are the three pillars that structure the Foundation's actions in terms of solidarity.

Accelerating social inclusion

Helping the integration of refugees

In 2022, BNP Paribas continued its sponsorship programme, launched in 2015, to promote the integration of refugees in Europe with the same objective: to enable refugees, minors as well as adults, to learn the language of the host country in order to better integrate, find professional training, resume studies, receive support, be coached, gain autonomy and find a job. To contribute to this, the global philanthropy programme managed by the BNP Paribas Foundation made it possible in 2022 to finance the programmes of 29 associations in 11 European countries[1].

In 2022, the BNP Paribas Foundation also managed the plan for Ukrainian refugees set up by the Group. More than EUR 15 million was collected and distributed to support organisations helping refugees and Bank employees in Ukraine.

In total, since 2015, EUR 34 million has been allocated to the aid and integration of refugees in Europe.

Help2Help

Since 2003, the BNP Paribas Foundation has supported projects carried out by BNP Paribas employees in France, invested in solidarity associations in their own time. In 2022, this programme, rolled out in around twenty countries, supported projects from over 250 associations thanks to an endowment of over EUR 762,000. In total, in France, 85 projects were supported for a total budget of nearly EUR 200,000.

Rescue & Recover Fund: 10 years of aid for humanitarian and environmental crises

The Rescue & Recover Fund makes it possible to react quickly and effectively worldwide in the event of a humanitarian or environmental disaster. This fund collects donations from employees, CPBF customers and retirees of the Group who are members of the ADR (*Amicale des Retraités* - Retired Employees Circle), and doubles the amount, or exceptionally triples it, in order to finance the projects of four partner NGO: Doctors Without Borders (DWB), CARE, the French Red Cross and IFAW. In 10 years, more than EUR 13 million (including EUR 5 million for Ukraine in 2022) has been used to finance tangible actions on the ground benefiting more than 5 million people. The Rescue & Recover Fund has been associated with 42 campaigns in more than 30 countries around the world.

In 2022, the Rescue & Recover Fund was mobilised to support three major crises: in February, in Madagascar, then in the grip of a destructive cyclone, in March, in Ukraine with the outbreak of the conflict, and in September, in Pakistan following the devastating floods. In total, nearly EUR 7.5 million was donated to NGO partners in 2022 (compared to EUR 1.3 million in 2021).

International community initiatives

Since 2018, the BNP Paribas Foundation has supported the South African programme of the NGO Whitaker Peace & Development Initiative (WPDI), which enables young women and men from disadvantaged neighbourhoods to take on the role of ambassadors for peace and entrepreneurs in their community. In 2022, the Group supported this NGO in its actions in two new countries: Mexico and France.

Equal opportunities player

For more than 20 years, BNP Paribas has been working alongside associations that work to promote equal opportunities. Three years ago, BNP Paribas enabled the creation of *L'Ascenseur*, a unique third-place in Paris dedicated to equal opportunities, and which brings together around twenty associations.

In December 2022, the Group created the Equal Opportunities HQ in Marseille, housed in *L'Epopée*, a 12,000 m^2 third-place dedicated to educational and inclusive innovation. This space allows entrepreneurs and associations that settle there to develop and benefit from a permanent collaborative environment.

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[1] *Germany, Austria, Belgium, France, Italy, Luxembourg, Poland, Portugal, Switzerland, United Kingdom.*

Supporting young people and women

Faced with the increased insecurity of young people, BNP Paribas Foundation strengthened its actions by continuing to support 14 associations through the "Youth Solidarity Plan[1]" based on three areas: educational continuity, precariousness and psychological distress. Combatting precariousness by helping young people to meet their needs, combatting psychological or physical distress, building confidence, accelerating mentoring, enabling everyone to succeed, fighting against social injustices are all actions undertaken by the BNP Paribas Foundation by supporting partners and associations that act in the field as close as possible to the needs of the most vulnerable.

In 2022, the BNP Paribas Foundation reaffirmed its support for women with associations whose solidarity and awareness-raising actions help to combat the difficulties that particularly affect them. Access to healthcare, housing and basic necessities, and the fight against violence against girls and women are the main pillars of the BNP Paribas Foundation's support for *Solidarité Femme Accueil, Résonantes, Règles élémentaires* and *Agir pour la Santé des Femmes* (ADSF, act for women's health). The Foundation also supports Paris *SAMU Social*'s programme of baths and showers dedicated to homeless women and has been a long-term partner of *the Fondation des Femmes* (Women's Foundation). This association supports the *Abri d'Urgenc*e (Emergency Shelter) programme, which consists of financing, and providing specialised associations with quality hotel rooms for safety and short stays in emergency accommodation for these women and their children.

THE ENVIRONMENT

See *Advancing awareness and sharing of best environmental practices*, Commitment 12.

7.5 Our environmental responsibility: accelerating the ecological and energy transition

The Group deploys its environmental responsibility in three priority areas:

- **Commitment 10**: Enabling its clients to transition to a low-carbon economy respectful of the environment;
- **Commitment 11**: Reducing the environmental impacts of its operations;
- **Commitment 12**: Advancing awareness and sharing of best environmental practices.

COMMITMENT 10: ENABLING ITS CLIENTS TO TRANSITION TO A LOW-CARBON ECONOMY RESPECTFUL OF THE ENVIRONMENT

HELPING TO FINANCE THE ENERGY AND ECOLOGICAL TRANSITION

As set out in Commitment 1 (*Financing and investments with a positive impact*), the Group supports its clients in the transition to a more sustainable economy. It has set itself ambitious targets for 2025:

- EUR 200 billion to support its clients in the transition to a low-carbon economy (indicator 8 of the CSR policy dashboard);
- EUR 4 billion to finance companies helping to protect terrestrial and marine biodiversity (indicator 9 of the CSR policy management dashboard).

With a majority of financing for low-carbon energy production, BNP Paribas' support for the energy sector has already been deeply transformed

At the end of 2022, BNP Paribas' financing for energy production was already predominantly dedicated to low-carbon energies. With credit exposure of EUR 28.2 billion[2], low-carbon energies represent 55% of credit exposure to the energy production sector (compared to 45% for fossil fuels)[3].

The Group is continuing to exit coal by 2030 in OECD countries, and in the rest of the world in 2040. It stopped financing new

[1] *Launch of the Youth Solidarity Plan: the back-to-school priority for the BNP Paribas Foundation (https://group.bnpparibas/en/our-commitments/bnp-paribas-foundation/solidarity).*

[2] *Credit exposures as at 30 September 2022 for the production of low-carbon energy (renewable, biofuel and nuclear). This amount of credit exposures is different from the amount calculated for indicator 1 and indicator 8 of the CSR dashboard.*

[3] *Oil refining, oil and gas extraction and production, coal.*

oil projects in 2016 and is now embarking on an exit from exploration-production with the objective of reducing its credit exposure by 80%, *i.e.* less than EUR 1 billion in 2030, compared to the current credit exposure of EUR 5 billion as of 30 September 2022, through the scheduled phasing out of financing activities specialised in or associated with this sector. Regarding gas, the Bank aims to reduce its credit exposure by 30% by 2030, and will reserve its financing for thermal power plants with low emission rates and security of supply.

At the same time, the Group has set a target of EUR 40 billion in credit exposure for the production of low-carbon, mainly renewable, energy by 2030.

Increased support for renewable energy

As indicated in the section *Electricity production: a loan portfolio aligned with the Net-Zero 2050 objectives*, Commitment 3, BNP Paribas has strongly committed to decarbonising the electricity mix that the Group finances. This includes strong support for the development of renewable energies.

Thus, BNP Paribas, a leader in green finance, is committed to support its client companies in their energy and ecological transition through dedicated financial products and services. The GTS 2025 strategic plan set the target of EUR 30 billion in credit exposure for renewable energies by 2025; at the end of 2022, these exposures which constitutes the bulk of the low carbon exposure, amounted to EUR 24.8 billion.

Among the achievements of the year, BNP Paribas was a major player in the Edwards Sanborn project led by Terra-Gen in the United States whose amount is higher than EUR 1 billion. This company that works on the generation of photovoltaic electricity is carrying out a project of 410 MW of solar panels and 1,716 MW/h of stored energy, which will be the largest solar project with storage in North America.

The Group was also the financial advisor for the largest offshore wind farm project in the world, the Dogger Bank Wind Farm project. Located more than 130 km from the north-east coast of England, this project will enable renewable electricity to be provided to 6 million households.

Lastly, in partnership with the Engie group, BNP Paribas participated in a loan of EUR 321 million to finance the Punta Lomitas project in Peru, which consists o f the construction of a wind farm with a capacity of 296 MW and 300 km of associated transmission lines. This programme will be the largest renewable energy project in this country.

An important role in green bonds

The Group is present across the entire range of bond issues that finance the transition of its clients to a sustainable economy which enabled it to be the world leader in the structuring and placement of green bonds in 2022[1].

In particular, in 2022, BNP Paribas was Joint Global Coordinator and Bookrunner of the 1st General Motors (GM) green bond, for an amount equivalent to EUR 2.4 billion. It aims to finance its investments to increase its production capacity of electric vehicles to 2 million units per year by 2025. In addition, the Group has been involved in a Sustainability-Linked Bond issued by L'Oréal for EUR 3 billion, for which the coupon is indexed to the achievement of several environmental objectives: zero greenhouse gas emissions on scopes 1 and 2 of the Company, reduction of scope 3 by unit sold and use of 50% recycled or organic plastic for all packaging in 2025.

Similarly, in March 2022, Commercial & Personal Banking in France (CPBF) launched a loan offer for small and medium-sized companies, incorporating targets to improve ESG criteria, enabling clients to benefit from an interest rate bonus if these criteria are achieved.

Funds and indices to direct financial flows towards environmental objectives

In addition to loans and bonds, BNP Paribas is integrating gradually environmental criteria into its entire range of financial products. Since 2015, BNP Paribas has launched a range of indices taking into account ESG criteria on various themes such as climate, water and biodiversity. At the end of 2022, assets held in these ESG indices amounted to EUR 11.6 billion. These investment solutions offer financial returns to investors while supporting advanced ESG companies, for example those that demonstrate a robust energy transition strategy.

In 2022, for example, BNP Paribas Asset Management launched the BNP Paribas Sustainable Asian Cities Bond fund, a bond fund classified as article 9 according to the SFDR regulation[2]. Focused on the sustainable development of cities in Asia (excluding Japan), it seeks to respond to the challenges of increasing urbanisation, the impacts of climate change and inclusivity. The fund invests in bonds that contribute to projects such as clean transport, renewable energies or health infrastructure; and in conventional bonds of issuers where at least 20% of their revenues come from activities contributing to the development of sustainable cities, such as smart grids. BNP Paribas Asset Management has also launched two climate-focused funds (BNP Paribas Fund Emerging Markets Climate Solutions and Global Climate Solutions), and the BNP Paribas Fund SICAV based on corporate green bonds.

[1] *Source: Bloomsberg.*

[2] *Sustainable Finance Disclosure Regulation on sustainable development disclosures in the financial services sector; article 9 classification corresponds to a product with a sustainable investment objective.*

USING THIRD-PARTY ASSET MANAGEMENT TO SUPPORT THE ENERGY AND ECOLOGICAL TRANSITION

Third-party asset management supporting the energy and ecological transition, in particular through the exercise of voting rights and shareholder dialogue

In 2022, BNP Paribas Asset Management strengthened its ESG voting guidelines[1], with particular attention given to the climate and biodiversity. It now opposes the major resolutions of large companies in the sectors that emit the most greenhouse gases, which have not set themselves a carbon neutrality target by 2050. In terms of biodiversity, companies, and in particular those in sectors with a high potential impact on biodiversity, must now assess and report on their main impacts and dependencies on nature, particularly in terms of deforestation and water issues.

In addition to its ESG risk management system (see *Systematic integration and management of environmental, social and governance (ESG) risks*, Commitment 3), and one year after the publication of its biodiversity roadmap, BNP Paribas Asset Management released the first results of its research to determine the biodiversity footprint of its investments[2]. BNP Paribas Cardif did the same for its own investment portfolio[3]. This methodology takes into account various environmental components (land use, air and water pollution, climate change) and translates them into a quantified impact and quantified dependencies on biodiversity. This data is then aggregated to calculate the biodiversity footprint of a company and then an investment portfolio.

SUPPORTING CORPORATE CLIENTS IN THEIR ENERGY AND ECOLOGICAL TRANSITION

Climate change, circular economy and preserving biodiversity have become systemic challenges for companies. The Group offers its clients support throughout their energy and ecological transition strategy, which may cover efforts to reduce their energy consumption (energy efficiency), decarbonise it, offset their residual greenhouse gas emissions, or develop more circular business models and minimise their impact on biodiversity.

The Low-Carbon Transition Group

In 2021, BNP Paribas created the Low-Carbon Transition Group, a strong internal organisation of 100 bankers (within a network of 160) dedicated to supporting clients, corporate clients and international institutions, in accelerating their transition to a sustainable and low-carbon economy. The Group provides them with banking and non-banking expertise, in particular in terms of clean energy, mobility and eco-responsible real estate.

In order to mobilise its financing towards the energy and ecological transition, the Group has set itself a target of EUR 200 billion to support its clients in the transition to a low-carbon economy by 2025. The amount at the end of 2022 was EUR 44 billion (see *the CSR policy management dashboard*).

In addition, the Low-Carbon Transition for SMEs & MidCaps initiative supports SMEs and mid-sized companies in the transition to Net-Zero emissions[4] in the Group's five main Domestic Markets (France, Belgium, Italy, Luxembourg and Poland).

Energy efficiency of corporate clients

In 2022, BNP Paribas strengthened its action in the area of energy efficiency for corporate clients, in particular through its partnership with the French start-up Metron, a CleanTech expert in energy efficiency and business performance improvement, in which the Bank acquired a stake in 2018. In November 2022, BNP Paribas extended this collaboration by signing a partnership to offer access to Metron's digital platform to 100 companies operating industrial sites across Europe. Thanks to this innovative tool based on artificial intelligence, sites will be able to measure, compare and optimise their energy consumption.

Development of more sustainable mobility

Supporting the development of more sustainable mobility is a major focus for BNP Paribas as part of its strategic plan GTS 2025, and mobilises many of the Group's business lines.

As the first rental company to offer a combined car rental offering equipped with a car-sharing solution, Arval has been working since January 2022 with Ridecell, a global supplier of fleet mobility and automation solutions to enhance its Arval Car Sharing solution for company employees. It works with an app allowing drivers to reserve, unlock and lock vehicles using a smartphone or *via* the Company badge. The Company receives access to a platform that allows it to manage the vehicles it makes available to its employees in real time.

At the same time, Arval has raised its targets and is now targeting 700,000 electrified vehicles in the leased fleet by 2025, and a reduction in CO_2 emissions by 35% for this fleet compared to 2020. In 2022, the number of electrified vehicles was 297,000.

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1 *https://www.bnpparibas-am.com/fr/stewardship-un-future-maker-en-action.*

2 *Sustainable by nature sequel: our portfolio biodiversity footprint (https://www.bnpparibas-am.com/en/blog/sustainable-by-nature-sequel-our-portfolio-biodiversity-footprint/).*

3 *Responsible Investment Report 2021 (https://bnpparibascardif.com/documents/348001/348117/BNPP_Cardif_Art29_LEC_2021_EN_V3.pdf/52bf2483-f66d-4788-7237-fa973f76bb1f?t=1664378901594).*

4 *SMEs: Small and Middle-Sized Enterprises. MidCaps: mid-capitalisation.*

BNP Paribas supports the automotive industry in its transition to electrification. The Group thus supported the Geely Auto group with a green loan of EUR 428 million, in which BNP Paribas was Mandated Lead Arranger and Bookrunner and Joint Sustainability Structuring Bank. Geely Auto has announced two “Blue Geely Initiatives” focused on the development of hybrid and electric vehicles. These initiatives are part of the Company’s commitment to reduce greenhouse gas emissions related to the vehicle life cycle by 24% by 2025 and achieve carbon neutrality by 2045, and also to achieve objectives of zero waste incineration, zero waste water, and zero waste production in its factories.

Deployment of the circular economy

In order to reduce the consumption of non-renewable raw materials and waste production, BNP Paribas continues to support the development of circular economy, which resulted in the following achievements in 2022:

- the Group’s involvement as global coordinator of Carrefour’s inaugural bond issue to support the food transition. With an amount of EUR 1.5 billion, this issue is indexed to two targets for 2025 on reducing packaging and food waste;
- BNP Paribas Asset Management’s offer to investors of a range of investment products related to circular economy: the ETF (listed fund) BNP Paribas Easy ECPI Circular Economy Leaders UCITS , and the BNP Paribas Apollo Circular Economy formula fund launched in 2022. Outstandings related to this thematic range amounted to EUR 688 million at the end of 2022, demonstrating the strong attractiveness of this subject for investors (individuals and professionals);
- the EUR 15 million investment in Phenix, a company that offers solutions for managing unsold goods and combating food and non-food waste (see *Financing and investments with a positive impact,* Commitment 1).

Partnerships proved to be key once again in 2022 to propose offers that help promote the circular economy to clients:

- BNP Paribas Leasing Solutions uses a subscription management partner, Zuora, to support its value offer to simplify the invoicing of services such as maintenance, repair, recycling and damage management, which are steps that contribute to extending the equipment life;
- the BNP Paribas 3Step IT joint venture offers companies a comprehensive service for managing their technological equipment at each stage of its life cycle. As part of its GTS 2025 strategic plan, BNP Paribas has committed to a production amount for BNP Paribas 3Step IT of EUR 850 million by 2025 based on a circular economy model;
- BNP Paribas Cardif and Boulanger have strengthened their partnership initiated in 2017 for telephone and other device insurance, by launching a new offer. It allows customers, *via* a monthly subscription, to benefit from a comprehensive repair service for all new or reconditioned devices rather than replacing them and informs customers on how to maintain and extend the life of their devices.

Responsible real estate for companies

Métal 57, the BNP Paribas Real Estate’s new head office in Boulogne-Billancourt, in France, is located on the site of the former Renault plant and was an opportunity to test and apply the principles of circular economy at each phase of the project, in order to be able to systematise the inclusion of such offers for the buildings in BNP Paribas Real Estate’s portfolio. Firstly, during the deconstruction and construction phase, the bricks that paved the factory floor were reused to cover one of the walls of the interior street. Then, during the relocation phase, the sale, donation, reuse and recycling of 626 tonnes of materials from the former Issy-les-Moulineaux headquarters avoided the emission of 863 teqCO_2.This building has obtained several labels and certifications such as Biodivercity level ABAB, BREEAM Excellent, HQE Bâtiment Durable, Osmoz.

Support for the development of low-carbon hydrogen

The Group considers low-carbon hydrogen as one of the components necessary for the emergence of a global energy system compatible with the ambition of the Paris Climate Agreement.

Among the highlights in 2022 to support the development of this energy vector, Portzamparc, a subsidiary of BNP Paribas, provided expertise and advice to the French company Lhyfe, which produces hydrogen from renewable energies. With a commercial portfolio of 93 projects, Lhyfe aims to have an installed capacity of 55 MW in 2024 and 200 in 2026. To achieve this, Lhyfe raised EUR 118 million on the Euronext regulated market in 2022.

SUPPORTING ITS INDIVIDUAL CUSTOMERS IN REDUCING THEIR CARBON FOOTPRINT AND PARTICIPATING IN THE ENERGY TRANSITION

Support for the energy renovation of housing and less-polluting vehicles

In the various countries where it operates, the Group supports its customers in carrying out energy audits and renovating their homes.

In France, CPBF launched the “My Sustainable Home” initiative to decarbonise the loan portfolio of individuals *via* new financial and extra-financial offers. The aim is to support individual customers in home improvements, throughout the property life cycle (purchase, renovation, rental, resale). From 2023, CPBF will propose new offers to meet this need and will train its employees in the challenges of energy renovation so that they can guide their customers.

In Luxembourg, BGL BNP Paribas launched a new loan in 2022 for customers wishing to undertake energy renovation work or install energy equipment, with an advantageous rate (and competitive with the market) for a maximum amount of EUR 75,000 and over a maximum period of 10 years. This offer is backed by a partnership with a certified player in the Luxembourg market and includes an energy diagnosis, the preparation and sending of the aid recovery file and site monitoring.

In Poland, the European Investment Bank (EIB) provided a loan of EUR 100 million to BNP Paribas Bank Polska to provide energy efficiency or renewable energy projects for small to moderate-sized companies (SMEs to Mid-Caps), private owners, real estate trustees, real estate cooperatives, and any other stakeholders qualified to carry out the energy renovation of buildings.

Lastly, BNP Paribas Personal Finance proposes an offer in France, promoting access for low-income households to a less polluting car, that is new or second-hand, and authorised for circulation in the low emissions zones – "*Crit'Air"* 0 and 1. This is a lease with a purchase option that can be spread over 10 years for an amount of approximately EUR 150 per month. The residual value is low – the equivalent of a monthly payment – which allows these households, if they wish, to become owners of the vehicle at the end of the contract. This offer targets an amount of EUR 120 million in loans.

A 100% green offer for individual customers in Sweden and Norway

To support individual customers in Sweden and Norway, BNP Paribas recently launched in 2022, in collaboration with Dreams AB, a joint venture, Dreams Sustainable, which offers a full range of financial services (savings, loans, day-to-day banking) that are 100% green and digital. Customers of Dreams Sustainable benefit from a digital payment card whose functionalities will enable them to measure their carbon footprint, and also savings products to allocate financing to the energy transition. In addition, 1% of the bank's revenue will be donated to an environmental protection Non-Governmental Organisation (NGO).

CONTRIBUTING TO PROTECTING BIODIVERSITY

Financing and investment policies to limit impacts on biodiversity

Since 2012 BNP Paribas has set up financing and investment policies(1) governing its activities in sectors considered sensitive from a biodiversity point of view: agriculture (including livestock and forestry), palm oil, wood pulp, mining, unconventional oil and gas. In 2021, the Group strengthened its contribution to the fight against deforestation in the Amazon and Cerrado, by adopting new criteria for the beef and soybean sectors. In January 2023, these commitments were, among others, recognised by the NGO Global Canopy, which ranked BNP Paribas as one of the leaders among 150 financial institutions in its Forest500 ranking(2) for 2022.

Support for the transition to more sustainable agriculture

In addition to its sectoral policy of responsible financing of the agricultural sector(3), the Group is committed to developing products and services to promote the transition to more sustainable agriculture.

In Poland, BNP Paribas Polska created the Agronomist.pl platform to help agrifood companies make the transition to digitisation and the environmental protection of their ecosystem. The platform was extended in 2022 and makes it possible to measure, through various tools such as *AgroEmission*, the potential for carbon sequestration in soils, greenhouse gas emissions (CO_2 and N_2O) and the crop water footprint.

Under these policies, the Group does not finance projects in areas particularly rich in biodiversity. In 2022, BNP Paribas extended these criteria by announcing that it would not finance any offshore oil and gas exploration or production projects in the **Arctic National Wildlife Refuge** or in the Amazon.

In order to assess and contribute to reducing the impact of the Group's clients on biodiversity, 18 sectoral questionnaires, the ESG Assessment, were finalised in 2022 (see *Systematic integration and management of environmental, social and governance risks*, Commitment 3); they include questions relating to biodiversity, and 1,500 business analyses were carried out.

Lastly, the Group has rolled out a specific indicator to measure its financing for biodiversity in order to measure the amount of financing to companies contributing to the protection of terrestrial and marine biodiversity (see *CSR policy management dashboard, Strategy,* indicator 9). The amount reached at the end of 2022 was EUR 1.8 billion, compared to a target of EUR 4 billion in 2025.

COMMITMENT 11: REDUCING THE ENVIRONMENTAL IMPACTS OF ITS OPERATIONS

GREEN COMPANY FOR EMPLOYEES (GC4E): EMPLOYEE ENGAGEMENT WORLDWIDE

The Green Company For Employees programme accelerates the reduction of all of BNP Paribas' direct impacts on the environment, by according a central role to the participation of all employees. Foremost among the priorities are the promotion of soft mobility by encouraging the sharing of journeys (carpooling) and vehicles (car-sharing, bicycle-sharing), the control of the digital footprint, the fight against single-use plastic, as well as the proposal for more sustainable food (responsible sourcing, food waste reduction, waste recovery, stakeholder awareness). Special emphasis is placed on raising the awareness of all Group employees, *via* dedicated actions (Cleaning weeks or conferences) as well as training in eco-friendly habits.

Concerning the digital footprint, the BNP Paribas Information Technology Department has set up a “Sustainable Digital” programme. This programme continues the ongoing efforts to improve the reliability of the measurement of digital technology’s environmental footprint. It has already made it possible to strengthen requirements for equipment suppliers (extension of CSR criteria and their weight in the assessment and selection of suppliers) as well as the inclusive purchasing approach with service providers in the adapted sector. In addition, a charter dedicated to sustainable digital technology has been drafted.

STRENGTHENED EFFORTS TO REDUCE THE ENERGY CONSUMPTION OF OPERATIONS

2022 was marked by the continued impacts of the global health crisis, the effects of which continue with reduced business travel, either due to health constraints for certain destinations, or following changes in habits related to new remote meeting methods.

In addition, the Group has strengthened its commitments to further reduce its energy consumption as soon as possible and thereby respond to the call of the French Government’s National Sobriety Plan launched in June 2022. It aims to reduce energy consumption by 10% by 2024. In France, the Group signed the Ecowatt Charter, through which it is committed to reducing its energy consumption and relaying alerts included in the system within its real estate assets.

Robust and multi-use environmental indicators

The fifty or so indicators monitored each year as part of environmental reporting (see *the definition of CSR indicators and CSR issues*, Extra-financial performance statement) enable precise monitoring of the change in the Group’s direct environmental impacts, ensure effective management by reporting detailed data to the business lines and regions and implement appropriate policies and actions to further reduce BNP Paribas’ operational environmental footprint.

The data required to calculate these indicators is collected annually for a scope comprising the Group’s main regions (19 in 2022) in terms of employee headcount (88% of FTEs). The results obtained for this scope are then extrapolated to cover all of BNP Paribas. The period taken into account for the data collected covers 12 months from October (N-1) to September (N). The number of FTEs is that officially determined by Group HR as of 31 December of the year in question.

The measurement of the CO_2 emissions for the Group’s operating scope is based on the reference methodology of the *GHG Protocol*. The following are taken into account: energy consumed (electricity, gas, fuel oil, district heating) in the buildings occupied by the Group, and the energy consumed in the means of transport used by employees for their business travel (excluding commuting) by car, train or plane. Only the combustion of fossil fuels is taken into account; the extraction and transportation of fuels are excluded from this calculation.

SITUATION OF THE MAIN ENVIRONMENTAL INDICATORS AT 31 DECEMBER 2022

Indicators	2019	2020	2021	2022	2025 Objectives
Greenhouse gas emissions – buildings and business travel *(teqCO_2/FTE)*	2.32	1.85	1.50	1.65	1.85
Water consumption *(m^3/FTE)*	21.8	15.8	18.2	10.7	Qualitative improvement of the indicator
Paper consumption *(kg paper/FTE)*	86	58	49	44	70
Share of sustainable paper *(in %)*	71.3	74.6	78.7	74.9	90
Waste production *(kilos/FTE)*	171	109	87	92.3	Qualitative improvement of the indicator

MAIN CONSUMPTION SITUATION AT 31 DECEMBER 2022

Total consumption/production	2019	2020	2021	2022
Energy consumption *(in GWh)*	1,399	1,209	1,171	1,123
Water consumption *(in m^3)*	4,339,270	3,058,462	3,453,976	2,072,981
Paper consumption *(in tonnes)*	17,018	11,162	9,363	8,428
Waste production *(in tonnes)*	33,905	21,085	16,451	17,771
Share of recycled waste *(in %)*	21	31	34	26

Note: through its activities, the Group is not a significant source of noise pollution or any other industrial specific pollution.

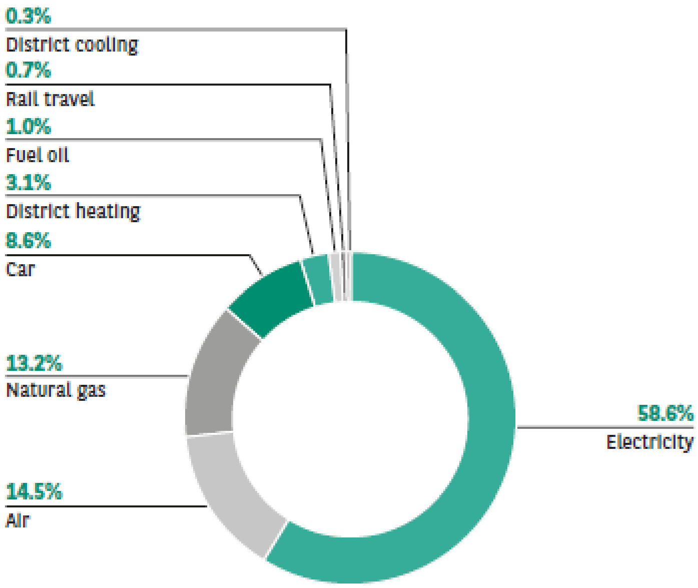
Focus on greenhouse gas emissions in the operational scope[1]

In 2022, the Group's total emissions in its operational scope (direct emissions (Scope 1), indirect emissions related to energy purchases (Scope 2) and indirect emissions related to business travel) amounted to 318,489 teqCO_2 (expressed in Location-based[2]) up by 10% compared to 2021, but down by 28.8% compared to 2019, the pre-Covid reference year.

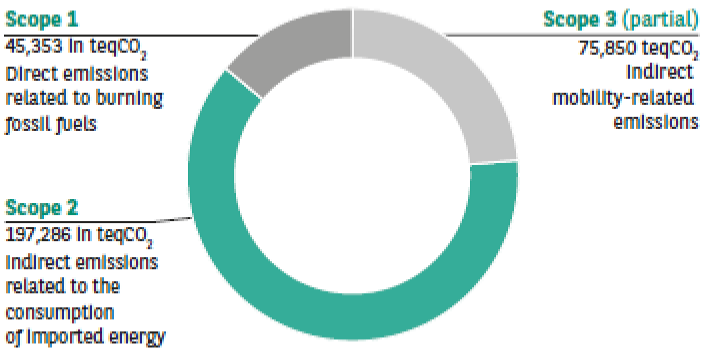
The achievement of the 2025 objective as soon as 2022 is due to specific circumstances: business travel by plane, which contributes significantly to emissions, has not returned to the level expected in 2022. We anticipate a rise in this indicator from 2023 due to the resumption of flights, particularly in Asia, and the energy mix in some of the countries where we operate, which will deteriorate in terms of CO_2 emissions due to the global energy crisis.

76% of these emissions come from the energy consumption of buildings and 24% from business trips. In more detail, the breakdown of the Group's greenhouse gas emissions in 2022 is as follows:

BREAKDOWN BY TYPE OF GREENHOUSE GAS EMISSIONS



BREAKDOWN OF THESE EMISSIONS BY SCOPE OF GHG/ISO PROTOCOL IN TEQCO_2



In absolute terms, the Group's GHG emissions increased by 34,059 teqCO_2 in 2022 compared to 2021, for the reasons explained above.

1 *BNP Paribas' carbon footprint report presented here represents the entire Group. As the environmental reporting covers 19 regions, an extrapolation is carried out to cover the entire Group; this extrapolation represents 12% of this assessment for 2022.*

2 *The Location-based approach quantifies Scope 2 greenhouse gas emissions by taking into account the emission factors of the average mix of each country participating in BNP Paribas' environmental reporting. The Group uses it to report tonnes of GHG emissions annually and to define the GHG emissions target per FTE.*

As a reminder, for this operational scope, BNP Paribas has set itself the target of reaching 1.85 teqCO_2/FTE in 2025, *i.e.* a reduction of 25% compared to 2018 (see *CSR policy management dashboard*, Strategy, indicator 10).

Numerous environmental and commitment certifications

In 2022, BNP Paribas had 12 ISO 14001 environmental certifications under way, covering more than 74,000 employees, *i.e.* 39% of BNP Paribas' workforce, demonstrating the renewed commitment of the property management business lines (France and Belgium), IT assets (France, Belgium, Italy, Great Britain), leasing (France), and long-term leasing (France), long-term leasing of company vehicles or financing of housing, individuals and cars (France).

At end-2022, two entities, IMEX and BGL, obtained ISO 50001 certification, relating to energy management. The Group also holds three labels: the Responsible Digital Label (INR), the Diversity & Inclusion Label (AFNOR), and the Supplier Relations and Responsible Purchasing Label (Corporate Mediation).

Efforts acknowledged by extra-financial rating agencies

Once again, BNP Paribas obtained a significant level in the ratings obtained on the assessments related to environmental aspects. Thus, the Group was awarded scores of 96/100 and 100/100 respectively in the environmental areas, Climate Strategy and Environmental Reporting, of the CSA (Corporate Sustainability Assessment) of Standard & Poor's, which places BNP Paribas in the top 1% of the banking industry on the Environment pillar.

USE OF LOW-CARBON ELECTRICITY

To continue reducing its environmental impact, the Group has been increasing its share of low-carbon electricity for several years. In 2022, renewable electricity accounted for 31.7% of the Group's total electricity bill. This electricity came either from purchase of renewable electricity certificates, or from direct consumption of renewable energy produced by the Group's buildings.

This commitment is strengthened with the introduction of exclusively renewable electricity purchase contracts (PPA). For example, the subsidiary in Poland has been using such a contract for 100% of its electricity supply since January 2021 and a second PPA will be set up in early 2023 in the United Kingdom.

Low-carbon electricity represented 72% of the total consumed and the consumption of renewable energy was 23.8% of the total energy consumed of 1,121 Gwh in 2022.

OFFSETTING RESIDUAL GREENHOUSE GAS EMISSIONS

Since 2017, within its operating scope, BNP Paribas annually offsets residual greenhouse gas emissions released the previous year. These emissions amounted to 182,044 teqCO_2 in 2021 (expressed in Market-based[1]). These emissions were offset in 2022 ***via*** the following four projects:

- in Kenya, the Kasigau project, supported by the Group since 2017 is a programme to preserve and restore 200,000 hectares of forest. Led by the NGO Wild Life Works, it also finances access to healthcare, water and education for local populations;
- in India, the project is based on a ten-year voluntary carbon offset programme as part of a partnership between BNP Paribas and the GoodPlanet Foundation, *via* the construction of 13,000 biodigesters. They make it possible to obtain 4 hours of gas daily and thus avoid cooking over wood fires and deforestation. This initiative improves the living conditions of nearly 70,000 people in the state of Madhya Pradesh;
- in Indonesia, an important initiative to restore and conserve tropical peatlands covering more than 150,000 hectares of swamp forest located in Central Kalimantan;
- in Peru, a support programme for seven local communities to preserve 127,000 hectares of threatened Amazon rainforest.

RESPONSIBLE REAL ESTATE INITIATIVES

The Green Buildings programme of the Real Estate Department

The Group real estate operating function (IMEX) is a key player in reducing the environmental footprint of BNP Paribas' operating scope. In this respect, the Green Buildings programme implements an approach to sustainably reduce the Group's environmental impact. To do this, IMEX implements work projects to improve the operations and maintenance of the sites. In addition, programmes are implemented to encourage the circular economy, facilitate the sustainable mobility of employees and promote the purchase of sustainable and less energy-consuming equipment. This programme also aims to raise awareness among all employees.

[1] The Market-based approach quantifies Scope 2 greenhouse gas emissions based on the GHG emissions emitted by the producers from which the Group purchases electricity it consumes. With this method and via the renewable energy certificates or guarantees of origin purchased, the electricity covered by these certificates has a reduced GHG footprint. This makes it possible to take into account the Group's efforts to decarbonise its electricity. The Group uses it to calculate the quantity of tonnes of residual GHG that determines the volume of purchase of voluntary carbon credits.

The plan to reduce the carbon footprint of the real estate portfolio

This plan is broken down into three levers involving the business lines, the Group's employees and IMEX. The first lever involves the continuous improvement of the energy performance of buildings *via* a monitoring tool that centralises energy consumption data for 90% of the portfolio, enabling optimisation plans to be monitored. The second lever is based on work and investment plans to modernise and improve the efficiency of facilities (heat pumps, LED lighting, façade insulation, roof repairs, *etc*.). Lastly, concerted decisions are made with the Bank's employees in order to implement actions according to the uses of buildings (office buildings, bank branches, data centres) to satisfy all users of these premises while seeking the maximum reduction in energy consumption.

These efforts were rewarded in December 2022: BNP Paribas received the Silver Shield for the best real estate portfolio progress and the second best total increase in savings in the Cube competition organised by the IFPEB *(Institut Français pour la Performance Energétique des Bâtiments*) under the patronage of the French Ministry for the Ecological and Inclusive Transition. This competition rewards users of commercial buildings who have saved the most energy over a year.

The new head offices of BNP Paribas Fortis and BNP Paribas Real Estate, two exemplary cases

In recent years, the head office of BNP Paribas Fortis has been rebuilt in the heart of Brussels, becoming an exemplary building. This building is seven times less energy-intensive than its predecessor and uses a maximum of 15 kWh/m²/year for heating and cooling. The MIPIM Awards, which recognise the most remarkable real estate projects worldwide, awarded this building the 2022 MIPIM Award in the "Best Office and Business Development" category.

Similarly, the new head office of BNP Paribas Real Estate is part of the Group's global approach to sustainable development (see *Enabling its clients to transition to a low-carbon economy respectful of the environment*, Commitment 10).

RESPONSIBLE CONSUMPTION

Initiatives with our operational subcontractors

In France, the BPG (Business Partners Group) Department builds and operates shared service centres with its subcontractors for the various Group entities: logistics and transport platforms, vehicle fleet management, mobile telephony, document management (for example, industrial desktop publishing, *etc*.), management of banking AT(Automated Teller Machines). Operational efficiency, including the search for a reduction in environmental impacts, has made it possible to obtain the following results:

- the complete overhaul of the road network, now 93% shared, will reduce transport-related CO_2 emissions by 55% from 2022, *i.e.* a reduction of 120 tonnes of CO_2 emissions per month;
- the new mobile telephone fleet management implemented in 2021 made it possible to recycle 70% of the phones returned in 2022, thanks to a partnership with the BNP Paribas 3 STEP IT joint venture;
- the development of ATM recycling (47% of banknotes recycled) has made it possible to reduce the cash transport journey by 15% to 20% and therefore reduce the related CO_2 emissions.

Mandatory use of responsible paper in 2022

In order to contribute to the protection of forest ecosystems and biodiversity, the Group has been committed for many years to responsible paper purchasing (from recycled or sustainably managed forests, *i.e.* more than 50% recycled or PEFC or FSC certified).

Since 2022, the purchase of responsible paper has become an obligation for all of the Group's business lines, except in the event of technical impossibility. This has made it possible to set an ambitious overall target for 2025 of 90% of responsible paper and 95% for the regions that consume the most paper. In 2022, 74.9% of the paper consumed by the Group met the responsible criteria detailed above.

COMMITMENT 12: ADVANCING AWARENESS AND SHARING OF BEST ENVIRONMENTAL PRACTICES

SUPPORTING RESEARCH AND DEVELOPMENT ON CLIMATE CHANGE AND BIODIVERSITY

Supporting innovative start-ups in the energy and ecological transition

The energy and ecological transition also involves developing innovative technologies. BNP Paribas supports innovation in the area of the energy transition and, since 2022, biodiversity, sustainable food and the circular economy by committing a total of EUR 250 million of equity in support to start-ups in these areas since 2016. Through its investment line called "Ecological Transition Capital" and active since 2016, at end-2022, BNP Paribas had already invested EUR 78.3 million in 12 innovative companies including CarbonWorks in France (microalgae) and Protix in the Netherlands (insect factory), and in six funds including Maniv Mobility, Shift4Good and the European Circular Bioeconomy Fund.

In partnership with the Solar Impulse Foundation, BNP Paribas has also created an article 9 fund (SFDR), open to third-party investors, called BNP Paribas Solar Impulse Venture. In 2022, they completed the first closing of this fund for EUR 100 million, with the objective of reaching EUR 200 million to invest directly in high-potential start-ups committed to the ecological transition. BNP Paribas has committed EUR 75 million to this fund, that has notably already invested in NatureMetrics a company specialising in measuring the state of biodiversity on site thanks to environmental DNA technology (e-DNA) (see *Financing and investments with a positive impact*, Commitment 1). Each start-up selected by the fund is assessed by the "Solar Impulse Efficient Solutions" label.

The Group also supports young companies *via* IPOs or capital increases. In 2022, Portzamparc BNP Paribas, a specialised subsidiary, supported several companies in the sector such as Okwind, specialising in the self-consumption of photovoltaic electricity, through EUR 19 million in fundraising.

Support for scientific research on climate change and biodiversity: better knowledge and understanding to find appropriate solutions

Two BNP Paribas Foundation philanthropy programmes are working in this field:

- the "Climate & Biodiversity Initiative", launched in 2010, has already made it possible to support 27 research projects, with more than 400 researchers, to the tune of EUR 18 million. In 2022, the BNP Paribas Foundation launched a new call for projects and 49 eligible applications were studied by around a hundred volunteer trained employees, before being submitted to the Foundation's Scientific Committee and then to the Foundation's Executive Committee. Eight research projects, ranging from the study of forests, underwater animals to the impacts of climate change in the African savannah or on the ecosystems of the hubs, were selected. These projects will be supported for the next three years with a dedicated budget of EUR 6 million;
- the "One Planet Fellowship" programme is supported by the BNP Paribas and Bill & Melinda Gates Foundations, the European Commission and the International Development Research Center (CRDI, Canada). It is operated by AWARD (Kenya) and the Agropolis Foundation. Endowed with USD 15 million over five years, its ambition is to create an intergenerational community of African and European researchers working on climate change adaptation in the agricultural sector in Africa. To date, 270 junior and senior scientists have benefited from the mentoring programme.

At the same time, since 2020, the Foundation has supported the work of IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), as part of the definition of the 2050 Vision for Biodiversity.

Lastly, since 2022, the Foundation has supported the "e-BioAtlas" project of the International Union for Conservation of Nature (IUCN), which aims to create an international database listing the e-DNA of the biodiversity present in wetlands and freshwater in order to have a vision of the health of these ecosystems.

RAISING AWARENESS AMONG INTERNAL AND EXTERNAL STAKEHOLDERS

BNP Paribas believes that the energy and ecological transition can only succeed if all stakeholders (businesses, public authorities, associations, citizens/consumers) work together to bring about change. The Group therefore discusses these issues with all its stakeholders and participates in the joint awareness-raising and training effort.

Employees, the Group's best sustainable development ambassadors

The launch of the Sustainability Academy at the end of 2022 (see *Ambitious training objectives thanks to new tools,* Commitment 3 and *Developing skills and improving employability*, Commitment 6) has given a tangible expression to the Group's ambition to equip all its employees with the knowledge necessary to achieve its sustainable finance objectives. With this same objective, some notable, older initiatives in terms of sustainable development awareness and training are continued:

- the Group continued the "WeEngage" initiative, an awareness-raising programme for all employees worldwide dedicated to sustainable finance and current environmental and social issues. Eight modules, available in five languages, have been produced since the launch of WeEngage, and more than 17,000 Group employees had been informed by the end of 2022;
- in France, the modules of CPBF's "committed banker" common core had been taken by more than 87% of the workforce at the end of September, *i.e.* nearly 23,000 employees;
- the training of Group managers in sustainable development has been accelerated through the Shape the Future programme. Thanks to collaborations with leading universities (Cambridge, Columbia) and industrial experts, 1,272 leaders received CSR training in 2022;
- more than 350 BNP Paribas Asset Management employees have completed a certifying ESG training course. In addition, a training course on sustainable investment, lasting from 4 to 20 hours, is offered to all BNP Paribas Asset Management employees. A training course was also created with the CFA Institute, and made available to BNP Paribas Asset Management employees and clients;
- the Climate Fresk, a game in the form of collaborative workshops enables a systemic vision of climate change issues and their consequences to be acquired. This awareness-raising campaign, rolled out at BNP Paribas since 2019, saw strong growth in 2022, with nearly 3,000 employees trained during this year. In total, 4,200 employees, including 400 members of Management Committees have already attended this workshop, proposed in over fifteen countries. Lastly, this year saw the start of the deployment of the biodiversity and digital frescoes.

A network of internal experts serving the entire Group

In order to accelerate the environmental and social transition, BNP Paribas launched the NEST (Network of Experts in Sustainability Transitions) at the end of 2021. This network is now composed of more than 500 experts, who are BNP Paribas employees, in areas such as the energy transition, the circular economy, biodiversity, human rights, social inclusion and sustainable finance. The aim of this international network is to strengthen and share expertise to accelerate the transition of our teams and our clients. Since its launch, NEST has organised 27 internal webinars attended by more than 3,000 participants, and has supported the various BNP Paribas entities in their communication with their external stakeholders.

The creation of informative content dedicated to the ecological transition

BNP Paribas regularly publishes information dedicated to the ecological and inclusive transition for its employees and external stakeholders. Thus, in 2022, NEST distributed four newsletters capitalising on the knowledge of more than 100 internal and external experts. In addition, the Group publishes a newsletter on LinkedIn dedicated to the challenges of sustainable finance: “Sustainable Finance at Scale”. Launched in 2022, this newsletter has published four issues dedicated to biodiversity, COP 27, the circular economy and green mobility and counts nearly 300,000 subscribers.

Raising client awareness through high-level presentations

In addition to communications dedicated to ESG, BNP Paribas also organises targeted events with its clients on the theme of the energy and ecological transition. In 2022, the Group offered its customers a forum dedicated to ESG experts, which was an opportunity to discuss the challenges of Net-Zero emissions, ESG regulations, biodiversity and the circular economy. In addition, in October 2022, BNP Paribas organised the 7th edition of the Sustainable Future Forum (SFF), followed worldwide by more than 3,200 financial sector corporate participants, with the central theme: “Navigating the Transition”.

Awareness-raising efforts for students and the general public

The first cohort of the ESSEC Business School “Talents for the Ecological Transition” chair was certified in 2022. Supported by BNP Paribas alongside partners such as the Bilan Carbone Association, Campus de la Transition, Capgemini, CY Paris Cergy Université, Citepa and SNCF, this chair addresses the challenges of climate change, biodiversity and living organisms, ecological justice, as well as the management of resources (water, air) and waste, the energy and food transition, new forms of mobility and the impact of digital technology.

In 2022, in line with the actions carried out since 2010 (conferences, exhibitions and other public events), seven conferences led by researchers from the “Climate & Biodiversity Initiative” programme were organised and made it possible to raise awareness of around 3,000 people.

TAKING AN ACTIVE PART IN PARTNERSHIPS AND COLLECTIVE INITIATIVES

Participation in the work of *Entreprises pour l’Environnement (EpE)*

Jean-Laurent Bonnafé, director and Chief Executive Officer of BNP Paribas, was appointed Chairman of the EpE (*Entreprises pour l’Environnement*) association from May 2019 to May 2022 (non-renewable three-year term). In this role, he has been able to showcase and promote EpE’s actions and reports in his public statements.

Over the past year, EpE has set up business line committees, covering various cross-functional functions of member companies (finance, public affairs, legal, research and innovation, Human Resources) in order to enable member companies to share their challenges and their best practices on how to integrate environmental issues into all functions of each company.

Active participation in several methodological initiatives related to the ecological transition

In 2022, BNP Paribas continued to play a central role in several initiatives to measure the impact on biodiversity.

At the global level, two Group experts joined the Taskforce on Nature related Financial Disclosures (TNFD) in 2021. This Taskforce is working to define a reporting framework enabling financial institutions to better describe their risks, dependencies and impacts, risks and opportunities on nature. Three draft versions of this framework have already been published to consult market players as widely as possible. In addition, at the COP 15 on biodiversity held in Montreal (Canada) in December 2022, the Group’s experts took part in numerous meetings aimed at sharing as widely as possible the progress of TNFD with global biodiversity players.

Other global and local partnerships

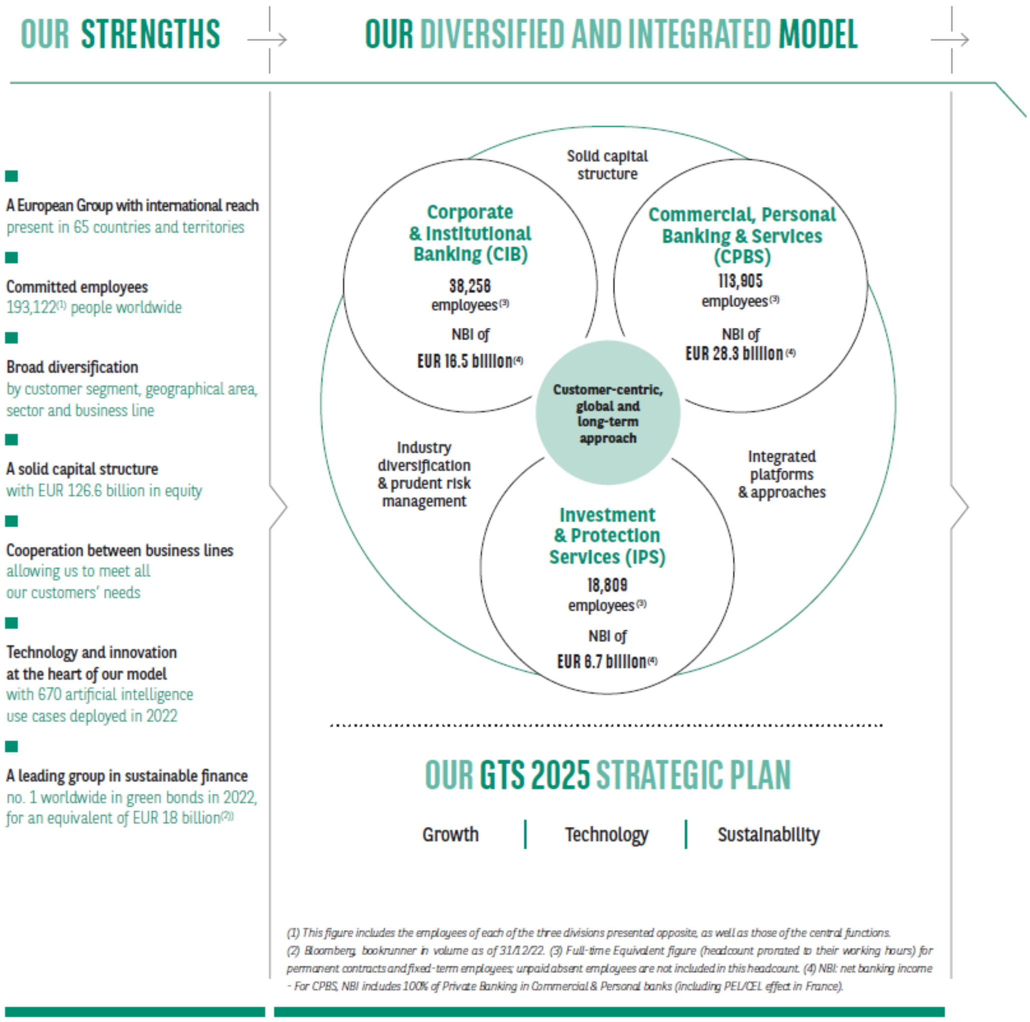
BNP Paribas has also partnered with various stakeholders to raise awareness and promote solutions to climate and environmental challenges, including:

- by joining the Aviation Climate-Aligned Finance Working Group, composed of representatives of European and American banks, in partnership with the Rocky Mountain Institute’s Centre for Climate-Aligned Finance. This group aims to establish the framework within which banks financing the aviation sector must operate while having adopted the commitment of the Net-Zero Banking Alliance (NZBA) platform;

- by actively contributing to the Hydrogen Council, which brings together nearly 150 international companies convinced that low-carbon hydrogen can be a key resource for the decarbonisation of industry and the energy system;
- by participating in the work of the Institute for Sustainable Development and International Relations (IDDRI), and by joining its platform *Agora Mobilité en transition*, dedicated to the success of the ecological transition in the mobility sector and the decarbonisation of road transport. This platform, which brings together car manufacturers, energy producers and NGOs, works on various areas of reflection and aims, in particular, to produce recommendations on sustainable mobility for political decision-makers and private players;
- by being a member of a working group initiated by UNEP-FI on how to finance sustainable fishing and on the implementation of resource efficiency and circular economy objectives for the financial sector;
- by participating in the 3Ambition4Circularity initiative, a platform that brings together the commitments made by member companies of the French Association of Private Companies in favour of the circular economy;
- by being an active member of Movin'On, the leading global co-innovation ecosystem bringing together the major players in sustainable mobility. In this context, workshops were conducted in 2022 on various topics such as hydrogen mobility, maritime transport and port infrastructure, new business models related to mobility and employee mobility with Arval and BNP Paribas Real Estate.

7.6 Extra-financial performance statement

A DIVERSIFIED AND INTEGRATED MODEL, CREATING VALUE



Serving customers and the world in which the Group operates, BNP Paribas supports transitions in society by providing expertise and contributing to financing the economy. **We create value through our diversified and integrated model, based on risk diversification, cooperation between our businesses and digitised platforms at scale.**

In a context of gradual recovery after the health crisis and economic constraints related to the global economic context and the invasion of Ukraine, the strengthened solidity of our model allows us to continue to company our clients in the development of their projects.

OUR SOLUTIONS → CREATING VALUE

Our solutions:

- Everyday banking
- Payments
- Advice
- Financing
- Investments
- Savings
- Protection

Creating value for all our stakeholders: customers, shareholders and investors, employees, partners and suppliers, local authorities, territories and civil society.

Promoting useful innovation for our customers

(individuals, entrepreneurs, SMEs, large companies, institutional, associations)

Nickel :
~3 million
accounts opened since its creation in France, Spain, Belgium and Portugal and development in Germany in 2023

Targeted acquisitions
to offer our clients innovative services: **Kantox** for foreign exchange risk management and **Floa** for split payment

294 million
monthly connections on mobile apps[5] (+14.1% compared to 2021)

Promoting sustainable growth for the economy

EUR 223 billion
in assets managed by BNP Paribas Asset Management in open-ended funds distributed in Europe and classified Article 8 or 9 under the SFDR regulation[6]

EUR 28.2 billion
in credit exposure to low-carbon energy production[7] at the end of September 2022, already nearly 20% higher than the production of fossil fuels[8]

EUR 32 billion
of sustainable bonds issued for clients at the end of 2022[9]

Growing our contribution to society

EUR 74.1 million
budget for the Group's sponsorship in 2022 (including an exceptional EUR 15.1 million dedicated to support for Ukraine)

EUR 7.2 billion
in taxes and levies paid in 2022

Nearly 1,000
employees involved in mentoring

1,126,142 solidarity hours
performed by employees (#1MillionHours2Help) in 2021 and 2022

(5) Scope: private individuals, professional and Private Banking customers of commercial and digital banks, Nickel and Personal Finance (6) Figure as of 31/12/2022; funds distributed in Europe. The European Sustainable Finance Disclosure Regulation (SFDR) identifies funds according to their sustainability potential; The Article 8 classification concerns funds declaring that social and/or environmental criteria are taken into account. The Article 9 classification concerns funds with a sustainable investment objective. (7) Renewable, biofuel and nuclear. (8) Oil refining, gas extraction/production, oil extraction/production, coal. (9) Cumulative amount of all types of sustainable bonds 2022-2025 (total amount divided by the number of bookrunners).

ANALYSIS OF ISSUES, RISKS AND OPPORTUNITIES

Information requested pursuant to article R.225-105-1 of the French Commercial Code and Ordinance No. 2017-1180 relating to the publication of extra-financial information. The processes and responsibilities relating to the analysis, review and validation of non-financial risks are described in Commitment 3 *Systematic integration and management of environmental, social and governance risks*. They are also described in the dedicated sections of chapter 5 *Risks and capital adequacy – Pillar 3*, which also deals with operational risks, including regulatory compliance risk.

BNP Paribas' business model is included in the preceding page. In order to complete its materiality matrix described by a graph[1], BNP Paribas relied on an assessment of materiality criteria to classify around one hundred extra-financial subjects brought together in 21 themed issues based on their relevance to the Group's external and internal stakeholders. Carried out for the first time in 2018, this analysis was repeated in 2021 using a very similar methodology. It is based on an assessment of the importance for BNP Paribas of these 21 extra-financial issues from two points of view: on the one hand, that of BNP Paribas employees, on the other hand, that of its external stakeholders. The internal perception is established by a survey to which more than 1,200 top management employees responded, while the external point of view is assessed by the importance of these issues in several databases: publications of ten of our main peers, more than 2,500 regulations applicable to our activities and locations, more than 20,000 industry press articles and more than 450 million tweets on social networks. The results of this study, presented in the graph indicated above, make it possible to distinguish three groups of issues: important, major and crucial.

As in 2018, these results highlight as crucial issues: data privacy and security, climate change and energy transition, as well as ethics and compliance. Three other issues join this category of crucial issues in 2021: human rights, responsible investments and financing, and business continuity. Together with the eight major challenges identified in the materiality matrix, they form the 14 most important challenges for BNP Paribas and are listed in the table below. The indicators, policies and associated due diligence are then further developed in the relevant chapters.

Domain	Issue	Paragraph	Policy	Risks/Opportunities Description pages	Indicator	Pages (Paragraph; Indicator)
Social	Fair and inclusive workplace	Outstanding actions in the area of professional equality	Global agreement	Discrimination risks 744– 746,788	Share of women among the SMP population (Senior Management Position)	742
	Employment practices	"A good place to work" and responsible employment management	Global agreement, Code of conduct	Risks of employee demotivation and increased absenteeism, psychosocial risks 750-753	Percentage of employees on permanent contracts within the Group in 2022	749
	Employment practices	Training offer	Global agreement	Loss of talent risk 758	Share of employees who completed at least four training courses during the previous 12 months	718, 760
Civic	Transparent practices	The whistleblowing system	Code of conduct, Group Policy on Protecting Clients' Interests	Risks of discrimination for some customers and lack of sales information 730– 732,763– 765	Number of alerts received by the Group *via* the whistleblowing channel	728
	Personal data and security	Cybersecurity and technological risk Training	Code of conduct	Legal risk, Reputational and operational risks: leaking, alteration or loss of data 346, 351-352	Percentage of employees who followed the training Personal Data Protection Awareness	729

[1] *Found in 7.7 Vigilance plan.*

Domain	Issue	Paragraph	Policy	Risks/Opportunities Description pages	Indicator	Pages (Paragraph; Indicator)
Social/ Environment	Responsible investment and financing	Financing and investments with a positive impact	Engagement manifesto	Reputational risk and opportunity to limit societal and environmental risks 345-348	Amount of sustainable bonds	718, 724
Environment	Climate change and environmental transition	Systematic integration and management of environmental, social and governance risks Enabling its clients to transition to a low-carbon economy respectful of the environment	Engagement manifesto, BNP Paribas' commitments to the Environment	Transition, physical, pollution, biodiversity, reputational, legal liability risks 345-348, 733-735, 787–791	Amount of the support enabling our clients to transition to a low-carbon economy	718, 772
Economic	Customer expectations	The Advocacy *programme* and the *Net Promotor System*	Group policy on protecting clients' interests	Operational risk 600– 607	Response rates to surveys sent to clients in Domestic Markets	731-732
	Digital transformation and Innovation	Cyber security and technological risk Domestic Markets	Plan 2025	Cyber security and technological risk 346	Number of customers active on mobile applications in Domestic Markets	782
	Corporate economic value	Resilience of results in a context marked by the health crisis – positive scissor effect	Plan 2025	Operational risk 600– 607	Return on tangible equity	6
Human rights	Human rights	BNP Paribas is committed to respecting Human Rights	BNP Paribas statement on Human Rights, Responsible Business Principles	Risks of violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment 766-768	Percentage of assigned employees who completed the "Business & Human Rights" e-learning course	766
Fight against corruption and tax evasion	Ethics and compliance	Ethics of the highest standard	Code of conduct	Financial risk 359-361	Percentage of employees who completed ethics or conduct training	729
Governance	Governance	Composition of the Board Independence of directors	Report on Corporate Governance	Legal, operational and reputational risks 358-360	Number of independent members of the Board of directors	57
	Business continuity	Policy and requirements in terms of business continuity	Policy and requirements in terms of business continuity	Operational risk 600– 607	Percentage of coverage of the Group's business plans	604

DEFINITION OF EXTRA-FINANCIAL ISSUES' INDICATORS[1]

The definition of the 10 indicators of the CSR policy dashboard is described in *7.1 Strategy.*

PERCENTAGE OF EMPLOYEES ON PERMANENT CONTRACTS WITHIN THE GROUP IN 2022

The "Percentage of employees on permanent contracts" corresponds to the percentage of employees on permanent contracts as of 31/12/2022 among the workforce managed by the Group on a full-time equivalent basis. The Group's managed workforce includes employees on permanent and fixed-term contracts. A permanent employment contract, unlike a fixed-term contract, does not specify the date on which it ends.

NUMBER OF ALERTS RECEIVED BY THE GROUP VIA THE WHISTLEBLOWING CHANNEL

Number of alerts received by the Compliance Function through the BNP Paribas Group whistleblowing system in 2022 (from 1 January to 31 December 2022). Employees can send a report either through Compliance Alert channels (by email, post, orally or in a dedicated system such as in the United States and the United Kingdom), or to a manager who will send it through a Compliance Alert reporting channel. External third parties can also send a report to the Compliance Alert channels (by email). Reports are treated confidentially by the Compliance officers.

PERCENTAGE OF EMPLOYEES WHO FOLLOWED THE "PERSONAL DATA PROTECTION AWARENESS" TRAINING

This indicator measures the percentage of employees who completed the Personal Data Protection Awareness module during the year (on a scope of 98% of the workforce monitored in the Mydevelopment tool), compared to the total number of Group employees on permanent + fixed-term contracts at 31/12/2022 (as indicated in the HR systems).

RESPONSE RATES TO SURVEYS SENT TO CUSTOMERS IN DOMESTIC MARKETS

The four Domestic Markets are France, Luxembourg, Belgium and Italy. The surveys are sent to customers by email, SMS or telephone. Time scope: 2022 calendar year.

NUMBER OF CUSTOMERS ACTIVE ON MOBILE APPLICATIONS IN DOMESTIC MARKETS

Number of connections from individual, professional and Private Banking customers of commercial & personal banking and digital banks, Nickel and Personal Finance (monthly average).

RETURN ON TANGIBLE EQUITY

Indicator that measures the BNP Paribas Group's return on tangible equity.

The ROTE divides the net income attributable to owners of the parent restated for the remuneration net of tax on Undated super subordinated notes and the foreign exchange effect by the average of tangible permanent non-revalued equity.

The average of tangible permanent non-revalued equity is defined as the average between the beginning of the year and the end of the period of tangible permanent equity. Tangible permanent equity is equal to accounting equity attributable to the owners of the parent, restated for changes in assets and liabilities recognised directly in equity, the assumption of dividend payments, intangible assets and goodwill.

PERCENTAGE OF ASSIGNED EMPLOYEES WHO COMPLETED THE "HUMAN RIGHTS INTO BUSINESS" E-LEARNING COURSE

This indicator measures the percentage of Group employees to whom the Human Rights into Business training module was assigned and who completed it at the end of year n. This training module is assigned to employees dealing with human rights issues in the context of their activities, and mainly includes the following categories: relationship managers, RISK officers, buyers and CSR contacts.

PERCENTAGE OF EMPLOYEES WHO COMPLETED ETHICS OR CONDUCT TRAINING

This indicator measures the percentage of employees who have completed the second part of the Conduct Journey training course, assigned in 2022 to all Group employees (on a scope of 98% of the workforce monitored in the Mydevelopment tool), compared to the total number of Group employees on permanent + fixed-term contracts at 31/12/2022 (as indicated in the HR systems). The Conduct Journey comprises 11 modules, covering the topics addressed in the BNP Paribas Code of conduct (protection of clients' interests; respect for colleagues; engagement with society; conflicts of interest; confidential information relating to financial markets; fight against corruption; financial security; competition law; cybersecurity; data protection; responsible communication).

NUMBER OF INDEPENDENT MEMBERS OF THE BOARD OF DIRECTORS

This indicator compares the number of independent directors, within the meaning of the Afep-MEDEF Governance Code, out of the total number of directors on the Board of directors of a company. Directors are independent when they have no relationship of any kind whatsoever with the Company, its Group or its management that could compromise the exercise of their freedom of judgment.

PERCENTAGE OF COVERAGE OF THE GROUP'S BUSINESS PLANS

It measures the number of entities with a business continuity plan that have been approved in the last 12 months by the Business Continuity Committee. In accordance with the Group's requirements, this plan must include:

- the description of the roles and responsibilities of the various stakeholders in the process, whether internal or external to the Group;
- organisational and functional procedures enabling the activation of business continuity and return-to-normal solutions. They provide for the organisation of remote work and critical activities requiring specific equipment on a dedicated fallback site;
- contact lists.

7.7 Duty of Care

BNP PARIBAS 2022 VIGILANCE PLAN

REGULATORY FRAMEWORK

Law No. 2017-399 of 27 March 2017 on the Duty of Care of parent companies and of companies using subcontractors applies to the Group as a whole and requires a vigilance plan to be established and implemented to identify and prevent the risk of serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment. The law also requires the preparation of an Annual Report on the effective implementation of the Group's vigilance plan.

BNP Paribas' vigilance plan applies to all subsidiaries controlled by the Group and is published in its Universal Registration Document. BNP Paribas updates its vigilance plan each year, in particular by drawing on best practices in this area, and reports on its framework for monitoring the measures implemented and assessing their effectiveness in section 5 of this chapter.

STRATEGY & GOVERNANCE

Purpose and Strategic Plan

Contributing to a more sustainable and responsible economy is at the heart of BNP Paribas' purpose. Building on the achievements of its 2017-2020 strategic plan and its essential support for the economy during the health crisis, the Group is continuing its long-term development to serve its customers, the economy and society. In early 2022, BNP Paribas launched its 2025 Strategic Plan entitled GTS (Growth, Technology, Sustainability), one of whose three pillars is to accelerate and mobilise all of the Group's business lines around the challenges of sustainable finance.

CSR Policy and Governance

A bimonthly Sustainable Finance Strategy Committee, chaired by the director and Chief Executive Officer of BNP Paribas, validates the overall sustainable finance strategy and decides on the commitments made by the Group. The Corporate Social Responsibility (CSR) policy is managed by the CSR Department, reporting to the Company Engagement Department, and represented on the Group's Executive Committee, which regularly decides on CSR issues.

BNP Paribas' Board of directors determines BNP Paribas's business orientations and supervises their implementation by the Executive Management, taking the social and environmental challenges of BNP Paribas' activities into consideration. CSR-related topics were specifically addressed thirty-one times during Boards and committees in 2022, in particular during meetings of the Governance, Ethics, Nominations and CSR Committee (CGEN).

In addition to the CSR Department, Environmental, Social and Governance (ESG) issues are monitored by the Human Resources Department (HR) with regard to the Group's employees, Procurement & Performance (P&P) for BNP Paribas suppliers and subcontractors, and by the main business lines within the three BNP Paribas divisions (Commercial, Personal Banking & Services – CPBS, Investment & Protection Services – IPS, and Corporate & Institutional Banking – CIB). In addition, the Finance, Compliance, RISK and LEGAL divisions contribute to oversight of the monitoring of the Group's ESG issues.

Environmental commitments

For more than 10 years, BNP Paribas has been committed to the fight against climate change. Since 2015, the Group has committed to aligning its activities with the objectives of the Paris Agreement. To do this, it has continuously reduced its support for the most environmentally damaging fossil fuels and at the same time accelerated its financing for low-carbon technologies. Convinced of the importance of collective action, the Group joined the Principles for Responsible Banking in 2019 and the Net-Zero Banking Alliance (NZBA) in 2021 as a founding member, thus contributing very actively to the development of alignment methodologies, practical guides and open source tools. Group entities, BNP Paribas Asset Management and BNP Paribas Cardif, have respectively joined the Net-Zero Asset Managers initiative (NZAMi) and the Net-Zero Asset Owners Alliance (NZAOA). BNP Paribas' objective is not only to meet its climate commitments, but also to share its approach to make it more effective and powerful.

For several years, BNP Paribas has been committed to preserving biodiversity through its financing and investment policies, a constructive dialogue with its clients, the coalitions in which it participates, philanthropy and support for research. Aware of the importance of managing the risks and opportunities related to this issue, the Group has published a Biodiversity Position.

Social commitments

Respect for human rights is one of the pillars on which BNP Paribas' CSR strategy is based. The Group is committed to respecting the principles and standards that form the foundation of its activities, including the 10 principles of the United Nations Global Compact, the United Nations Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises (internationally accepted), human rights standards (internationally accepted as defined in the International Bill of Human Rights), core labour standards (as defined by the International Labour Organization).

Among the major voluntary commitments made by BNP Paribas to address the many issues surrounding human rights are its Code of conduct, its Human Rights Statement and its Fundamental Rights and Global Social Pillar Agreement (Global Agreement) signed in 2018 and extended until 2023.

OUR VIGILANCE APPROACH

As part of the preparation of its vigilance plan, BNP Paribas conducted, consistent with its commitments, risk mapping and a review of its existing risk assessment and control policies and tools, on a scope consistent with the text of the law.

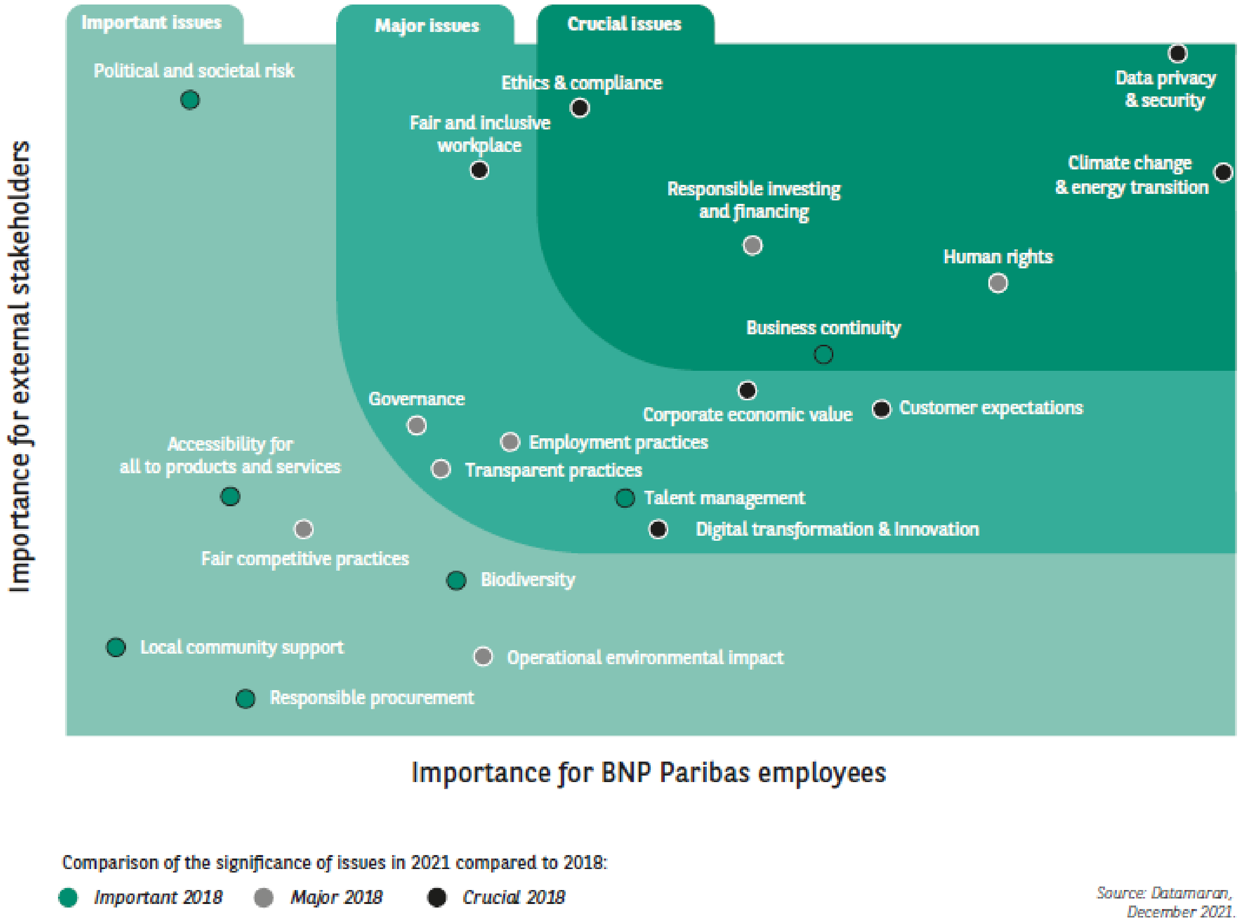
1 RISK MAPPING

1.1 Environmental, Social and Governance (ESG) risks taken into account by BNP Paribas

1.1.1 Materiality matrix

BNP Paribas produced a materiality matrix to classify around a hundred extra-financial topics, grouped into 21 thematic issues, according to their relevance for the Group's internal and external stakeholders. The internal perception is established by a survey to which more than 1,200 top management employees responded, while the external point of view is assessed by the importance of these issues in several databases: publications of our main peers, more than 2,500 regulations applicable to our activities and locations, more than 20,000 industry press articles and more than 450 million tweets on social networks. The results of this study, presented below, make it possible to distinguish three groups of issues: important, major and crucial; the crucial issues being:

- human rights (which are included in all the maps detailed in sections 1.3. to 1.7. included);
- climate change and the energy transition (which are included in the mapping related to the Group's suppliers – see section 1.4., and in the mapping related to the business sectors and countries of operation of BNP Paribas' corporate clients – see section 1.7.);
- data privacy and security (identified as one of the main issues related to the distribution of financial products and services to individuals – see section 1.5);
- ethics & compliance as well as business continuity (which are directly linked to the Group's cross-functional governance);
- responsible investments and financing (which are one of the major priorities of BNP Paribas' GTS 2025 Strategic Plan).



1.1.2 Risks taken into account in the development of different mapping exercises

In line with its CSR commitments, the Group has included in its vigilance approach the risks of serious violations of human rights and fundamental freedoms, and of harm to human health and safety and to the environment, and the following issues in particular:

- issues related to human rights and fundamental freedoms: child labour; forced labour and human trafficking; use of violence, torture, cruel treatment and failure to respect the right to life; protection of the rights of migrant workers; self-determination rights of people; non-respect of the rights of local communities, the right to property, the right to privacy, the freedom of association and collective bargaining, the freedom to exercise the right to strike; discrimination; harassment; inadequate housing standards; over-indebtedness; failure to respect the right to an adequate standard of living; unfair compensation methods; excessive working hours; lack of respect for diversity (social and ethnocultural origins), (professional) equality and inclusion;
- issues related to the individual health and safety: health and safety at work for employees and consumers; industrial accidents; respect for work-life balance (remote working);
- environmental issues: climate, physical and transition risks; GHG emissions (CO_2, methane, *etc.*); pollution and water scarcity; air pollution; soil quality (pollution, erosion and depletion); scarcity and depletion of raw materials; excessive waste production; degradation of ecosystems and biodiversity; environmental impacts related to the use of products and their end-of-life.

To take these issues into account, BNP Paribas:

- builds on benchmark scientific work, such as that of the IPCC (Intergovernmental Panel on Climate Change) and IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services);
- builds on forward-looking scenarios compatible with the objective of collective carbon neutrality in 2050, such as those of the IEA (International Energy Agency).

Risk mappings were, among others, carried out with regard to Group employees, purchase categories for BNP Paribas' suppliers and subcontractors, as well as business sectors and operating countries for BNP Paribas' banking and financial activities.

1.2 Mapping with regard to Group employees

In 2022, the Group is present in 65 countries. For all human rights risks that may impact its employees, the Group relies on an external database of indicators to determine a level of risk by type of risk:

- risks related to freedom of association and collective bargaining;
- risks of discrimination, inequality and exclusion;
- occupational health and safety risks;
- risks related to working conditions.

1.3 Mapping of BNP Paribas' suppliers and subcontractors

An ESG risk mapping on purchasing categories, covering 13 ESG issues enables the identification of those that carry a significant level of environmental and social risk. This mapping is the result of a market initiative led by AFNOR in 2018, which resulted in four levels of criticality being assigned to the categories and subcategories of BNP Paribas' purchases, such as air transport, databases, data centres, office supplies, *etc*., according to the following issues:

- fair practices and ethics: fraud and corruption; protection of personal data; property rights and patents;
- human rights and social conditions: child labour; forced labour and modern slavery; discrimination; health and safety; working conditions and freedom of association;
- environment: climate change and greenhouse gases; damage to biodiversity; depletion of natural resources; pollution (water, air, soil); waste and end-of-life management.

The breakdown of BNP Paribas' purchasing sub-categories by level of criticality is as follows (data at end-2022):

Criticality	Purchasing subcategories	% of total	Corresponding amount (EUR million)	% of total
Very high	7	5%	EUR 261 million	3%
High	28	22%	EUR 760 million	9%
Average	62	48%	EUR 5,280 million	63%
Low	32	25%	EUR 2,036 million	24%
TOTAL	**129**	**100%**	**EUR 8,337 MILLION**	**100%**

1.4 Mapping of the distribution of financial products and services to individuals

The Group has identified two main risks in the distribution of its products and services to individuals: non-discrimination in the access to financial services (protection of clients' interests, prevention of over-indebtedness, *etc.*) and the right to privacy (protection of clients' personal data).

1.5 Global approach to managing ESG risks related to corporate financing and investment activities and associated mappings

Since 2011, BNP Paribas has gradually deepened and broadened its framework to manage the ESG risks that may affect its activities. Initially focused on the most sensitive sectors from an ESG point of view (with the development of sectoral policies), the system now covers all sectors of the economy in which the Group has clients. At the same time, sectoral policies are regularly adapted to better take into account the new challenges of the sectors covered by increasing the level of ambition. The Group has eight sectoral policies[1], covering: Agriculture, Palm oil, Paper pulp, Energy production from coal, the Mining industry, Oil and gas, Nuclear energy, and Defence.

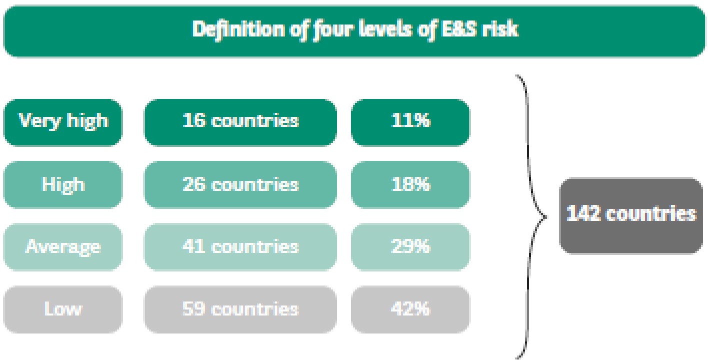
1.5.1 Mapping of environmental and social risk levels in the countries of operation of the Group's corporate clients

A level of environmental and social risk (E&S) was defined for each country where the clients of the Group operate on the basis of reference sources provided by Maplecroft and Reporters Without Borders and issued by recognised international organisations and NGOs, such as the International Labour Organization, the World Bank, the United Nations Environment Programme, Human Rights Watch, Transparency International, and the World Resources Institute.

15 indicators cover the following topics: child labour; forced labour; rights to land, property and housing; freedom of association and collective bargaining; living wages; decent working time; migrant workers; occupational health and safety; environmental regulatory framework; biodiversity and protected areas; deforestation; waste management; water quality; water stress; freedom of the press.

[1] https://group.bnpparibas/en/our-commitments/transitions/financing-and-investment-policies.

The 15 indicators are weighted and give the breakdown of the countries of operation of the Group's corporate clients according to the following four levels of environmental and social risk (data from May 2022):



1.5.2 Mapping of the salient E&S risks of the Group's business sectors

For each business sector, BNP Paribas analysed the ones that had salient risks related to human rights and fundamental freedoms, individual health and safety and the environment. These risks were defined according to a methodology for rating the level of severity and occurrence of each risk, which is based on the United Nations Guiding Principles reporting reference framework. The level of risk inherent in each business sector was then determined based on the presence of salient risks.

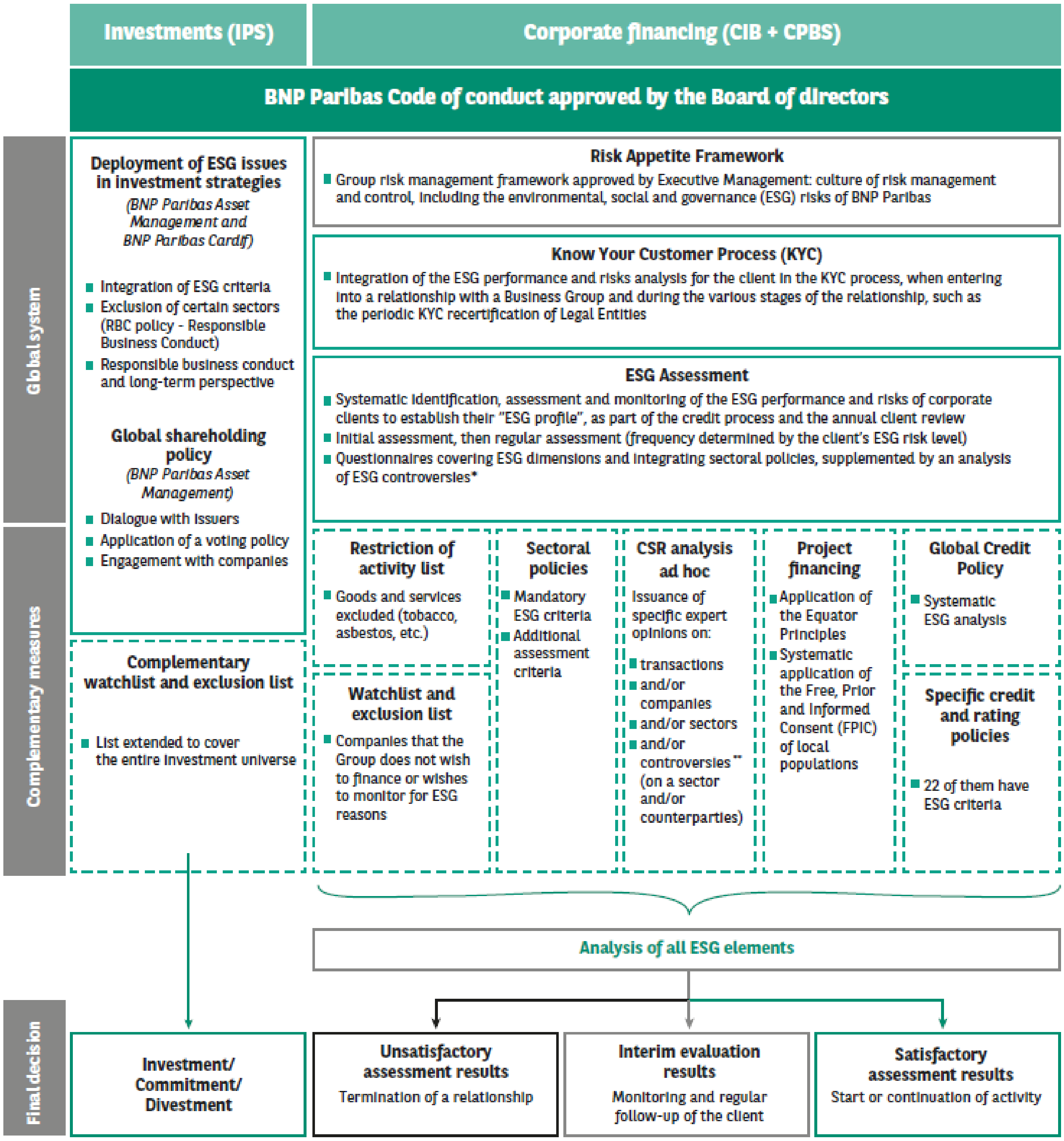
The number of salient environmental and social risks relevant to the business sectors of the Group's corporate clients is detailed as follows:

Business sectors	Human rights and fundamental freedoms	Consumer health and safety	Environment	Total
Agriculture, food, tobacco	7	1	6	**14**
Materials and minerals	6	1	6	**13**
Energy excluding electricity	4	1	6	**11**
Transport & storage	6	1	4	**11**
Suppliers (electricity, gas, water, etc.)	3	1	6	**10**
Equipment excluding IT	5	1	4	**10**
Chemicals excluding pharmaceuticals	3	2	3	**8**
Construction & public works	6	1	1	**8**
Information Technology (IT)	6	0	1	**7**
Consumer goods	4	0	2	**6**
Healthcare & pharmaceutical industry	2	2	1	**5**
Hotels, tourism, leisure	3	1	1	**5**
Automotive	0	1	1	**2**
TOTAL	**55**	**13**	**42**	**110**

It should be noted that the same risk may exist for different sectors, such as the risk related to water pollution or the risk of child labour. These mappings make it possible:

- on the one hand, to provide a more specific framework for the business sectors of the Group's clients that carry salient environmental and social risks;
- on the other hand, to develop financing and investments in activities with a positive impact.

1.5.3 Representation of the overall ESG Risk Management system



*Sources: * external ESG data providers (Reprisk, Moody's ESG Solutions, Sustainalytics), as well as ** media, NGOs, customers*

2 PROCEDURES FOR REGULAR ASSESSMENT OF THE SITUATION OF SUBSIDIARIES, SUBCONTRACTORS OR SUPPLIERS, WITH REGARD TO RISK MAPPINGS

2.1 Systems used to manage these risks

The Group made an inventory of its existing systems, and compared them against the elements required for the preparation of the vigilance plan and its risk mappings, ensuring that these existing systems fully covered the main risks for employees, the main suppliers and banking and financial activities.

2.2 The system concerning Group employees

In order to assess and prevent the risks that could impact its employees, the Group relies on Group-level HR policies, which apply up to the highest level of the Group and to all Group companies, and on agreements negotiated with employee representative bodies, in particular on the Global Agreement, which covers all employees:

- freedom of association and collective bargaining: social dialogue is part of the Group's European Social Charter, and the Global Agreement specifically includes the right to freedom of association and collective bargaining;
- diversity, inclusion and prevention of discrimination: these issues are at the heart of the Code of conduct, whose chapter "Respect for people" aims to combat inappropriate behaviour, including in the recruitment process;
- occupational health and safety: a minimum level of health coverage is provided to all Group employees, the internal We Care programme was created to bring together the health and well-being offer, and crisis units are set up during major events, such as the health or geopolitical situation;
- working conditions: forced labour is prohibited within the Group, BNP Paribas has no employees under the age of 18 at the end of December 2022, and employment is managed under collective agreements.

The policies and actions already undertaken by Group HR will continue to be implemented and monitored over time.

2.3 The system concerning BNP Paribas suppliers and subcontractors

Dedicated teams in the Procurement & Performance (P&P) Department deal with supplier- and subcontractor-related ESG risks.

In accordance with the deployment of the law on the duty of care, BNP Paribas' ESG Risk Management system for its suppliers and subcontractors is based on the following elements, in line with the ESG risk mapping for purchasing categories:

- standard ESG questionnaires used in calls for tenders to assess suppliers, taking into account ESG criteria for at least 5% in the assessment of offers;
- supplier monitoring rules, targeting certain ESG criteria used during the selection process and completed by the thematic regulatory watches;
- training of Procurement function employees.

In addition to this system, in France, BNP Paribas as a signatory of the Responsible Supplier Relations Charter promoted by the Business Mediation body of the French Ministry of Economy and Finance, has an internal procurement ombudsman which is independent from the P&P Department, whose contact details are provided on the Group's institutional website, to offer advice in the event of a dispute.

The use of ESG evaluation questionnaires in calls for tenders and the inclusion of their results in the overall evaluation of the supplier form part of the Procurement control plan.

2.4 The system related to the distribution of financial products and services to individuals

The Group has identified two main risks in the distribution of its products and services for individuals: non-discrimination in the access to financial services and the right to privacy (protection of clients' personal data).

Non-discrimination in access to financial services is included in the internal Clients' Interests Protection (CIP) policy. This subject is at the top of the BNP Paribas Code of conduct and is a specific area of expertise within the Compliance teams, which monitor these issues. The Clients' Interests Protection (CIP) policy defines the applicable rules of organisation and conduct within the Group in terms of protecting customers' interests.

In addition, BNP Paribas is committed to being exemplary in the protection of their personal data. BNP Paribas' ability to do business is intrinsically tied to the fluidity of electronic transactions as well as the protection and security of information and technology assets. Regulatory authorities classify cybersecurity as a systemic risk for the financial sector.

Under the aegis of the Group's Board of directors, this subject is supervised by the CCIRC (Internal Control, Risk Management and Compliance Committee). BNP Paribas has adopted a comprehensive approach to cybersecurity management:

- the Group's operating entities have deployed a transformation programme since 2015, based on the international National Institute of Standards and Technology (NIST) standard, which takes into account new threats and recent incidents identified on a global scale;
- within the RISK Department, a team is dedicated to cybersecurity in order, among other things, to monitor existing risks, identify potential new negative impacts on the Group's activity, and carry out actions to assess and strengthen the Group's capacity to respond to vulnerabilities and ensure that policies, procedures and main projects take into account aspects of cybersecurity and technological risk.

2.5 The system related to corporate financing activities

The activities of BNP Paribas' corporate clients may involve risks in relation to human rights and fundamental freedoms, human health and safety, and the environment. The Group has published its Responsible Business Principles Charter for its corporate clients, thus reaffirming BNP Paribas' expectation to engage with clients whose business practices demonstrate a high level of governance and responsibility with respect to human rights, fundamental freedoms, human health and safety and the environment.

ESG risks related to corporate financing and investment activities are managed under the aegis of the Group's Risk Appetite Framework, a Group Risk Management framework validated by Executive Management, which includes ESG risks (see section 1.5.1). The general credit policy includes a systematic ESG analysis, while 22 specific credit and rating policies include ESG criteria.

Considering the ESG aspect to be one of the Group's major challenges and a fundamental component of Know Your Client, in 2022 the Group generalised the integration of ESG assessment criteria into the client life cycle (Know Your Client – KYC process): in the process of entering into a relationship and during the various stages of the relationship, such as the KYC recertification, the Credit Committee or the annual review. The analysis of the client's ESG profile (enabled, among other things, by the ESG Assessment) will be an integrated step of the KYC process, according to a deployment by client typology.

The ESG Assessment is a new ESG assessment framework, rolled out since June 2021. It enables to identify, assess and monitor the performance and ESG risks of corporate customers, on a sector-specific manner, with a common approach within the Group for a given customer segment. Overall, the assessment aims to perform a systematic ESG analysis as part of the credit process, one of the foundations of the banking activity, thus integrating ESG criteria with the other criteria included in the assessment of the counterparty's credit profile. The ESG Assessment covers the environmental (climate and biodiversity), social (health, safety and impact on communities) and governance (business ethics) dimensions through a set of questions, supplemented by an analysis of the controversies affecting the client. The questionnaires developed in this context are specific to each sector in order to better integrate the challenges and issues specific to their activities. They include issues related to sectoral policies and lead to the assessment of the mandatory and additional ESG criteria they contain.

This tool enables the assessment of corporate clients' compliance with sectoral policies, as well as the maturity of their ESG strategy and its implementation. The deployment of the ESG Assessment, included in the credit files for all business sectors and business groups, will enable the RISK Function to exercise greater control over the ESG dimensions during Credit Committees, on a documented basis. Initially designed for the Group's large corporate clients, for which the deployment will be completed by the end of 2023, the ESG Assessment is gradually being adapted and extended to different client segments.

Until the deployment of the ESG Assessment has been completed for all of the Group's corporate clients, additional ESG risk assessment tools remain, such as questionnaires related to the law on the duty of care, which apply to corporate clients operating in countries with very high or high environmental and social risk and in business sectors with salient risks, as defined by the mapping related to the Group's banking and financial activities (see sections 1.5.1. and 1.5.2.).

2.6 The system related to investment activities

The investment decisions of the Group's asset management subsidiary, BNP Paribas Asset Management, fully integrate ESG risks and opportunities into investment strategies by aligning their fiduciary duty with sustainable investment. The management of sustainability risks is reflected in the integration of ESG criteria in the investment analysis and decision-making process. Given that some systemic risks, such as climate change or biodiversity loss, cannot be fully addressed through the integration of ESG in portfolio management, the sustainable approach is reinforced by stewardship (voting and dialogue) activities, the Responsible Business Conduct (RBC) policy and forward-looking analysis, to better protect investments from major risks and systemic risks that require an urgent and collective response. The following four pillars systematically apply to all investment decisions:

- ESG integration: the policy of integrating ESG criteria applies to all investment processes (including funds and mandates). There are still some exceptions such as index funds and ETFs that are not covered by this policy;
- a Stewardship Strategy which includes the exercise of voting rights, ongoing and proactive dialogue with companies or other issuers, as well as engagement with regulators, civil society representatives and industry groups on sustainability issues. This strategy covers all assets under management, including funds and ETFs;
- a Code of Responsible Business Conduct that applies to all open-ended funds. Certain exclusions apply to all new mandates, but application within existing mandates depend on the client's prior agreement;
- a forward-looking vision: BNP Paribas Asset Management has identified three conditions to ensure a more sustainable and inclusive economic system, which are an energy transition to a low-carbon economy, respect for the environment, equality and inclusive growth. The analysis of these three conditions applies to all portfolios under management.

Together, these approaches strengthen the way BNP Paribas Asset Management invests, including the way investment ideas are proposed, constructs optimal portfolios, controls risks and leverages their influence with companies and markets.

3 APPROPRIATE ACTIONS TO MITIGATE RISKS OR PREVENT SERIOUS HARM

3.1 Concerning the Group's employees

In order to reduce the risks of discrimination and promote respect for people, the Group has:

- defined targeted action plans to promote diversity and inclusion, such as for young people by recruiting more work-study students and interns, to respect sexual orientation through the renewal of the signing of the *L'Autre Cercle* Charter in June 2022 and finally by continuing to promote access to employment for people with disabilities, as part of a continuous improvement approach;
- strengthened its policy on respect for people around key areas in 2022: broadening the range of behaviours covered by the policy, including those that may be discriminatory, the development of prevention and principles common to the Group in the collection, analysis and processing of alerts.

In order to promote professional equality, the Group:

- mobilises the members of the Executive Committee and the HR teams to increase the number of women in governing bodies by setting the goal of achieving 40% women among SMP (Senior Management Position) employees by 2025;
- for several years now, it has introduced specific equal pay measures as part of the Mandatory Annual Negotiations.

In terms of work-life balance, the Group:

- continues its preventive actions around the health and well-being of its employees while adapting its managerial practices;
- sets up programmes related to the prevention of psychosocial risks and stress at work.

3.2 Concerning BNP Paribas' suppliers and subcontractors

In addition to the assessment system described above, BNP Paribas has:

- published a "Responsible Procurement Charter", setting out the reciprocal commitments of the Group and its suppliers and subcontractors from an environmental and social standpoint;
- integrated standard contractual clauses covering requirements in order to meet environmental and social criteria. Since 2018, they have also included the option of ending contracts if suppliers do not comply with the Group's ESG requirements;
- initiated an on-site audit process. The first audits concerned the cash transport sector and the manufacture of ATMs.

3.3 Concerning the distribution of financial products and services to individuals

In order to reduce the risk of discrimination in access to financial services, the Group:

- optimises the sale of products and services adapted to the needs and situation of customers, according to the rules defined by the internal policy for the protection of clients' interests (CIP);
- ensures that the information provided is clear and enables customers to make informed decisions;
- ensures the accuracy of information relating to the environmental or social characteristics of the products offered;
- prioritises the interests of customers rather than those of the Group or its employees;
- trains all employees concerned (in particular Front Office and Management) to protect customer interests;
- manages customer complaints;
- implements a financial inclusion approach, by supporting microfinance through financing and services provided to specialised institutions, by improving access to credit and insurance, and by supporting customers facing difficulties as because of their disability or their financial situation.

BNP Paribas acts both to facilitate access to credit and to prevent over-indebtedness. It considers that the role of a responsible bank is to support its customers, even in the most difficult times.

- It is in this spirit that the Commercial & Personal Banking in France (CPBF) launched the AXELLE platform in 2019 for customers experiencing financial difficulties, to present solutions (advice, information, good deals) offered by associations such as Croesus or Adie, by social enterprises supported by Act for Impact, or by companies of the Collective of companies for an inclusive economy such as Orange or Danone. This system was offered in 2022 to 300,000 financially vulnerable customers of CPBF through the "MyAccounts" application and the advisors of the Specific Budgetary Solutions Centre.
- In France, BNP Paribas Personal Finance was selected by FASTT (*Fonds d'Action Sociale du Travail Temporaire* – Temporary Work Social Action Fund) as a lender for temporary workers. This fund facilitates projects such as access to housing, obtaining a driving license or purchasing a vehicle.
- In addition, the Group provides financial education to combat over-indebtedness, promote economic development and improve the Company's financial health. The majority of BNP Paribas entities are deploying training programmes in this area.

In addition to the regulatory requirements related to the duty of vigilance, the Group has launched several initiatives that fall within its civic responsibility, such as:

- the development of Nickel, currently offered in four European countries, which offers a bank account number (RIB), a payment card, an account for all, without conditions;

- support for microfinance, whose microloans benefit people in 15 countries, including many emerging countries;
- training in financial issues, such as financial education provided to retailers in Ivory Coast working in the markets of Abidjan;
- the offer of BNL, the Group's subsidiary in Italy, for seniors wishing to make a better link with their retirement pensions (loss of employment less than 36 months before retirement or early retirement up to four years in advance).

In order to reduce the risk of non-compliance with personal data protection, BNP Paribas has set up a dedicated training course on the subject.

3.4 Concerning corporate financing and investment activities

The risk mitigation and serious harm prevention system is based on the results of the application of the Group's eight sectoral policies. These are updated regularly. For example, the oil and gas policy was amended in 2022 to include conventional oil and gas resources.

In addition, the Group's risk mitigation and serious harm prevention system also relies on specific actions implemented with regard to risk mapping, such as the management of controversies concerning environmental and social issues.

3.4.1 Activity restriction according to the severity of the environmental and social impacts

BNP Paribas defines strict ESG criteria in many sectors, compliance with which determines the activity with its corporate clients, whether at the level of a client (which does not comply with the prohibitive criteria of a sectoral policy), a sub-sector (unconventional hydrocarbons), or a sector as a whole (such as tobacco).

In order to identify the companies presenting the highest environmental and social risks, the Group defines and applies sectoral policies, while managing activity restriction lists according to the level of ESG risks observed, i.e. a list of excluded companies and a list of companies placed under monitoring. Companies placed on the monitoring list are subject to an engagement by the Group to make lasting changes to their practices and reduce their ESG risks. For excluded companies, the Group prohibits any financing or investment relationship. Lastly, BNP Paribas has compiled an exclusion list of specific goods and activities that the Group is unwilling to finance, such as tobacco. These lists are periodically updated using data supplied by clients and external sources, and by analysing the key controversies involving corporate clients accused of serious violations of environmental standards or human rights.

Following the announcement in 2020 of a strategy for a full exit from the thermal coal value chain by 2030 in the European Union and OECD countries, and by 2040 in the rest of the world, BNP Paribas conducted a comprehensive analysis of its customer portfolio in the electricity generation sector. Sector policies covering the mining and dedicated infrastructure sectors were also reviewed. At the end of 2022, the activity restriction list included 90 customers, in particular because they continue to plan new coal-fired capacity and/or do not have an exit strategy in line with BNP Paribas' objectives.

In 2017, the Bank stopped supporting companies whose primary business is exploration, production and export of gas/oil from shale, oil from tar sands or gas/oil production in the Arctic. In 2022, BNP Paribas decided to no longer provide products and services to companies where more than 10% of the activity is related to tar sands and shale oil and gas. The Group has also tightened its funding restrictions in particularly sensitive ecosystems such as the Arctic and the Amazon:

- for the Arctic:
  - extension to the Arctic Monitoring and Assessment Programme (AMAP; intergovernmental forum bringing together 8 Arctic States and 6 indigenous peoples' organisations) definition of the Arctic, with the exception of areas exploited off the Norweigian coasts; Norway has some of the most stringent environmental laws and regulations in the world,
  - end of financing for projects in the Arctic and for companies where more than 10% of the activity is derived from activities in the Arctic,
  - assessment of companies specialising in oil and gas production with regard to their reserves in this region,
  - assessment of diversified oil and gas companies according to a ratio defined as the share of revenues linked to production multiplied by the share of reserves in the Arctic;
- for the Amazon, BNP Paribas will not finance any oil and gas project or infrastructure in IUCN zones I to IV in the Amazon (Brazil, Ecuador, Bolivia, Colombia or Venezuela).

The criteria related to unconventional oil and gas as well as to the Arctic and the Amazon will not apply to companies that have adopted the most credible plans in terms of transition to the "Net-Zero" objective by 2050. The quality of this transition plan will be assessed on the basis of objective criteria such as the public commitment to align with a 1.5°C strategy, intermediate emission reduction targets, and a consistent investment programme to support the diversification strategy by abandoning the production of fossil fuels, the measurement and annual publication of the level of greenhouse gas emissions, a climate strategy supervised by the highest governance bodies.

In early 2021, BNP Paribas strengthened its commitment to combating deforestation through its agricultural policy. The Group is committed to providing financial products or services only to companies (producers, meat packers and traders) with a strategy to achieve zero legal and illegal deforestation in their direct and indirect value chains (production and supply) by 2025 at the latest. In particular, the Group does not finance customers purchasing beef or soybeans from land cleared or converted after 2008 in the Amazon, nor after 2020 in the Cerrado. In addition, this policy now includes criteria related to the improvement of animal welfare, particularly in chicken farms. In 2022, the analysis of the portfolio of meat producers, packers and traders was carried out in order to assess their progress and initiate a dialogue.

3.4.2 Project financing

For all of its project financing activities, BNP Paribas encourages its clients to obtain the Free, Prior and Informed Consent (FPIC) of the local communities impacted by their projects.

Specific restrictions concerning protected areas (such as those listed by the IUCN) are also included in the Group's financing and investment policies.

The Group has been a signatory of the Equator Principles since 2008. These aim to avoid, reduce, mitigate or offset the negative impacts of major industrial or infrastructure projects on communities, ecosystems and the climate, with additional measures in certain countries.

3.4.3 Controversy management

The Group monitors controversies targeting its clients, with sources such as NGOs, the media, and alerts generated as part of the ESG Assessment (controversies identified by RepRisk and Sustainalytics). These controversies can be raised by the business lines, the CSR managers of the business lines, or the Group CSR.

When a controversy arises, the Group first approaches risks according to the geography and criticality of the subject (such as a violation of human rights). An internal analysis combines the available information, in connection with the business line hierarchy and the Group's CSR, in order to estimate the severity of the controversy and to determine the list of questions that the client must answer. After contact with the latter, their additional responses and any action plan (taking into account the time horizon) are analysed in order to reach a final decision: continue the activity if everything is deemed satisfactory; suspend operations if doubts remain (with request for the implementation of a remediation plan and monitoring until satisfaction); exclusion if the situation cannot be remedied.

3.5 Alignment of the loan and investment portfolio with the Net-Zero in 2050 objective

Continuing its commitments to combat global warming, BNP Paribas signed up to the Net-Zero Banking Alliance (NZBA) from its launch on 21 April 2021, committing to finance a carbon neutral economy by 2050, which corresponds to a temperature increase limited to 1.5°C compared to the pre-industrial era.

Other Net-Zero initiatives are grouped within the Glasgow Financial Alliance for Net-Zero (GFANZ). The Net-Zero Asset Owner Alliance (NZAOA) signed by BNP Paribas Cardif in September 2021 and the Net-Zero Asset Managers initiative (NZAMi) signed by BNP Paribas Asset Management in November 2021 are examples. The two entities are committed to supporting the goal of zero net greenhouse gas emissions by 2050.

In its Climate analysis and alignment report, published in 2022, BNP Paribas presented its targets for reducing greenhouse gas (GHG) emissions related to the Group's credit activities in three of the most emitting business sectors supplemented in January 2023, by additional commitments by 2030:

- electricity production, for which the Group has undertaken to:
  - increase the share of renewable energies in the energy mix that it finances to reach more than 66% in 2025 and reduce the share of coal in the energy mix that it finances to less than 5% in 2025,
  - reduce the CO_2 intensity of its financing by at least 30% in 2025 compared to 2020;
- oil and gas (exploration, production and refining), for which the Group has undertaken to:
  - reduce its credit exposure in oil production activities by 25% in 2025 compared to 2020 and at least 80% by 2030,
  - reduce its credit exposure in gas production activities by at least 30% by 2030,
  - reduce its credit exposure in oil & gas production activities by 12% in 2025 compared to 2020,
  - reduce the CO_2 intensity of its financing by at least 10% in 2025 compared to 2020;
- the automotive sector (manufacturers), for which the Group has undertaken to:
  - increase the share of electrified vehicles in the automotive mix that it finances to reach more than 25% by 2025,
  - reduce the CO_2 intensity of its financing by at least 25% in 2025 compared to 2020.

BNP Paribas is currently setting intermediate sector targets for the residential real estate (in France), steel, aluminium and cement sectors, which will be presented in the second quarter of 2023.

In 2022, BNP Paribas Asset Management and BNP Paribas Cardif published their "Net-Zero" commitments:

- regarding BNP Paribas Asset Management's investments (with the exception of index-linked funds or managed by clients):
  - reduce the carbon footprint (scopes 1 and 2) of the investments concerned (around 50% of assets under management to date, with the objective of reaching 100% over time), by 30% by 2025 and by 50% by 2030 (vs. 2019),
  - align the relevant investments (also around 50% of assets under management to date) with the "Net-Zero" principle: by 60% by 2030 (meeting, aligned or in the process of aligning with the "Net-Zero" objective) and by 100% by 2040,
  - substantially increase investment solutions in climate and environmental issues,
  - dialogue with clients on their "Net-Zero" transition;
- regarding BNP Paribas Cardif's investments:
  - reduce the carbon footprint of directly held equity and corporate bond portfolios by at least 23% by 2024 (vs. 2020),

- reduce the carbon intensity of directly owned office buildings by at least 12% by 2030 (vs. 2020),
- allocate at least EUR 800 million per year to environmental-themed investments;
- with regard to shareholder engagement or stewardship:
  - vote for climate action (in favour of the most relevant climate initiatives or shareholder proposals),
  - dialogue with companies on the "Net-Zero" principle,
  - advocate for a climate policy aligned with the "Net-Zero" principle.

3.6 Investment and financing activities with a positive impact

The Group's CSR strategy has long been structured to contribute to achieving the United Nations' 17 Sustainable Development Goals (SDG). This strategy involves supporting all customers, individuals, companies and institutions, in their transition to a low-carbon economy, respectful of the planet's resources and allowing the inclusion of the most vulnerable as well as respect for human rights.

To this end, the Group continues to expand the range of products and services to support or even accelerate this transition including:

- support for impact companies (including microfinance institutions), which reached EUR 2 billion at end-2022, with support for more than 3,170 impact companies:
  - through banking services or investment,
  - through financing, in particular with impact bonds, which enable the financing of innovative projects led by associations or impact companies, with a payment for results model conditional on social, environmental and development indicators, or the circular economy;
- assets under management classified under articles 8 and 9 according to the SFDR (Sustainable Finance Disclosure Regulation) in BNP Paribas Asset Management's open-ended funds distributed in Europe, which make it possible to direct investments to assets incorporating ESG criteria, in other words funds classified as articles 8 and 9 according to the Sustainable Finance Disclosure Regulation (SFDR), that either promote environmental or social characteristics (article 8), or that have a sustainable investment objective (article 9);
- sustainable bonds, with EUR 32 billion as bookrunner for its clients, including green bonds for which the Group is the world leader at the end of 2022 with EUR 18 billion;
- Sustainability-Linked Loans (SLL), loans whose rate is modulated according to the achievement of environmental and/or social targets by the borrower, for which BNP Paribas is the European leader at the end of 2022, with EUR 26.4 billion in SLL at the end of 2022;
- financing renewable energies: the Group has set a target of EUR 30 billion by 2025, and a target of EUR 40 billion in credit exposures for low-carbon energy production by 2030.

4 ALERT MECHANISM (WHISTLEBLOWING)

4.1 For Group employees

BNP Paribas Group pays particular attention to the concerns of customers, employees, shareholders, suppliers and society as a whole. The Group is committed to listening, understanding and seeking to respond to the concerns raised by its stakeholders in a fair and effective manner.

BNP Paribas employees are required to report any effective or suspected breach of the Code of conduct, Group policies and procedures, or regulations. Employees can report issues to their line manager or another manager for issues relating to Respect for People, or to a Compliance alert channel.

Any suspicion by a BNP Paribas employee of a serious or potentially serious violation of human rights and fundamental freedoms, the health and safety of people, and the environment may be reported according to this whistleblowing system, except when specified otherwise by local regulations or procedures.

Pursuant to the Sapin II law, amended by the Waserman law, the Group completed its whistleblowing system at the end of 2022 by opening whistleblowing channels to certain external third parties (depending on local regulations, but at least for suppliers and former employees). The alert form to be completed is freely accessible on the BNP Paribas institutional website[1].

Communication and awareness-raising campaigns are carried out regularly with employees and employee representative bodies, in consultation with employee representatives. Following the legal and regulatory changes relating to the protection of whistleblowers, the system for collecting and processing alerts was strengthened in 2022, on the one hand to facilitate the reporting of alerts and on the other hand to ensure the impartiality and fairness of the measures taken in respect of the confidentiality of the information collected with the establishment of HR Conduct "Respect for people" contact persons.

BNP Paribas' whistleblowing policy guarantees employees exercising their right to raise an alert protection against reprisal for having raised an internal alert in good faith. A summary note[2] on whistleblowing is available on the BNP Paribas website.

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[1] *group.bnpparibas.*

[2] *Summary of the system – BNP Paribas' whistleblowing procedure.*

In addition, alerts are analysed and processed, with 306 alerts reported in 2022.

4.2 For external stakeholders

The Group maintains open and constructive relationships with its identified stakeholders, with a triple challenge: anticipating changes in the business lines and improving products and services by better understanding expectations; optimising risk management by listening; and having a positive impact on society.

Dedicated systems and contacts are set up by the Group for each stakeholder:

- for BNP Paribas suppliers and subcontractors, BNP Paribas has an internal ombudsman who is independent of the Procurement & Performance function, the contact details of whom are published on the Group's institutional website, offering a remedy channel in the event of a dispute, and an ethics channel open to suppliers since the end of 2022;
- the CSR Department coordinates discussions with advocacy NGOs;
- the Finance Function coordinates the dialogue with investors and analysts;
- the Institutional Affairs Department is responsible for relations with regulatory bodies and public authorities;
- the Group Communication Department is the main contact for journalists and the media;
- for BNP Paribas customers, consumer associations and local elected representatives, exchanges are based on the close relationship they may have with the Group's subsidiaries and business lines, supplemented by independent ombudsman services (organised by the regulatory bodies) in many Group entities, such as the Commercial Banking networks in France, Belgium, Italy, Morocco and Poland.

5 SYSTEM FOR MONITORING THE MEASURES IMPLEMENTED AND ASSESSING THEIR EFFECTIVENESS

5.1 Our CSR dashboard

BNP Paribas has set up a dashboard comprising 10 CSR indicators to guide its strategy in this area. The monitoring of this CSR dashboard is carried out on an annual basis by the Group's Executive Committee and Board of directors. Achievement of these 10 indicators is included in the calculation of the three-year loyalty plan for more than 8,400 of the Group's key employees, where it accounts for 20% of the grant conditions.. The achievement of these indicators is also included in the calculation of 15% of the variable compensation of the Group's executive corporate officers.

These indicators include our results for:

- our employees (indicator 4 on professional equality between women and men; indicators 5 and 6 on solidarity hours and training provided by employees);
- our distribution of financial products and services to individuals (indicator 7);
- our corporate financing and investment activity (indicators 1, 2, 3, 8 and 9 on supporting our clients in the transition to a sustainable and low-carbon economy);
- our own activity (indicator 10).

Pillar	No.	Indicator	2022 Results	2025 Objectives
Our economic responsibility	1	Amount of sustainable loans	EUR 87 billion	EUR 150 billion
	2	Amount of sustainable bonds	EUR 32 billion	EUR 200 billion
	3	Amount of investments under management of open-ended funds distributed in Europe under article 8 & 9 according to the SFDR	EUR 223 billion	EUR 300 billion
Our social responsibility	4	Share of women among the SMP population (Senior Management Position)	35.2%	40%
	5	Number of solidarity hours performed by employees (#1MillionHours2Help)	1,126,142 hours (in 2021 and 2022)	1 million hours (over two rolling years)
	6	Share of employees who completed at least four training courses during the previous 12 months	97.4%	90%
Our civic responsibility	7	Number of beneficiaries of products and services supporting financial inclusion	3.3 million beneficiaries	6 million beneficiaries

(https://cdn group.bnpparibas.com/uploads/file/resume_du_dispositif_droit_alerte_de_bnp_paribas_fr_juin_2022.pdf).

	8	Amount of the support enabling our clients to transition to a low-carbon economy	EUR 44 billion	EUR 200 billion
Our environmental responsibility	9	Amount of financing to companies contributing to protect terrestrial and marine biodiversity	EUR 1.8 billion	EUR 4 billion
	10	Greenhouse gas emissions (teqCO_2/FTE) (Kwh buildings and business travel)	1.65 teqCO_2/FTE	1.85 teqCO_2/FTE

5.2 Our employees

In addition to the indicators included in the Group's CSR dashboard, other objectives are monitored by the Group with regard to its employees.

As part of the Global agreement, a joint monitoring committee responsible for the implementation of the agreement meets once a year to assess the progress made under the agreement and to take stock of the past year on the basis of a grid of indicators by country and geographical area.

In terms of gender pay equality, the Group set a dedicated budget of EUR 10 million for BNP Paribas SA over two years in 2022.

BNP Paribas remains attentive to its employees through Pulse surveys, with 70 surveys carried out in the Group's 63 countries and more than 170,000 employees interviewed in 2022.

5.3 Our suppliers and subcontractors

The number of ESG assessments of suppliers and sub-contractors that are conducted as part of calls for tender, in particular those relating to categories of at-risk purchases, is a metric of BNP Paribas monitoring actions towards this type of stakeholder.

At the end of 2022, over 5,100 ESG assessments had been carried out and over 2,200 Responsible Procurement Charters signed by BNP Paribas suppliers.

5.4 Our distribution of financial products and services to individuals

In 2022, resources were allocated to strengthening the control system and the independent test plan, in order to strengthen the integration of data protection into the Group's operational risk management framework.

5.5 Our corporate financing and investment activities

At the end of 2022, the results concerning our corporate financing and investment activities were as follows:

- restriction lists: following their update in 2022, these lists included 1,490 companies, of which 1,369 companies under restrictions and 121 under monitoring;

With regard to the alignment of our loan portfolio, our progress since 2022 for the three major emitting sectors of activity:

- electricity production: 179 gCO_2/kWh at end-2022 (vs 208 in 2020);
- oil and gas sector: 67 gCO_2/MJ at end-2022 (vs 68 in 2020);
- automotive sector: 167 gCO_2/km at end-2022 (vs 183 in 2020).

In addition to our investments, in 2022, our asset management subsidiary, BNP Paribas Asset Management, published the 1st measurement of the biodiversity footprint of its investment portfolio.

5.6 Our own activity

Every year, BNP Paribas measures its environmental footprint of its own operations (scopes 1 and 2). This includes, among other things, the electricity and heating of the Group's buildings, as well as employee travel.

At the end of 2022, the Group's greenhouse gas emissions (expressed in tonnes of CO_2 equivalent per Full-Time Equivalent – FTE) amounts to 1.65 teqCO_2 per FTE.

5.7 Our systems' controls

Risk management is central to the banking business and is one of the cornerstones of operations for BNP Paribas. The Group has an internal control system covering all types of risks to which it may be exposed, including environmental and social risks, organised around three lines of defence:

- as the first line of defence, internal control is the business of every employee, and the heads of the operational activities are responsible for establishing and running a system for identifying, assessing and managing risks according to the standards defined by the functions exercising an independent control in respect of the second line of defence;
- BNP Paribas' second line of defence is handled by the Compliance, RISK and LEGAL Departments. Their Heads report directly to the Director and Chief Executive Officer and account for the performance of their missions to the Board of directors *via* its Specialised Committees;

- General Inspection provides a third line of defence. It is responsible for the periodic control.

In addition, BNP Paribas' consolidated extra-financial performance statement is audited by an independent third party.

OUR COMMITMENT TO CONTINUOUS IMPROVEMENT

BNP Paribas' vigilance approach is part of a drive for continuous improvement. As such, the Group will complete, where necessary, its identification, control and management tools for identified risks, and will report on them each year in its universal registration document.

7.8 Statement on modern slavery and human trafficking

INTRODUCTION

This Statement[1] outlines the steps that BNP Paribas has taken to ensure that human trafficking[2] and modern slavery[3] are not taking place in its business or in any of its supply chains. It also refers to the risk management processes that the Group has put in place in the context of its financing and investment activities, which govern the potential cases of human rights violations that may affect the activities of its clients.

This Statement is for the financial year ended 31 December 2022. The Board and the Director and Chief Executive Officer attest annually that the Group complies with this Statement through the information provided by the respective departments of Corporate Social Responsibility (CSR), Procurement & Performance and Human Resources (HR).

This Statement applies to all companies within the BNP Paribas Group that are required to have a slavery and modern trafficking statement. Those who have chosen to prepare their own declaration are not concerned.

THE BNP PARIBAS GROUP

BNP Paribas is Europe's leading provider of banking and financial services. It operates in 65 countries and employs 193,122 Full-Time Equivalent workforce. It holds key positions in its three main areas of activity: Commercial, Personal Banking & Services (network of commercial & personal banks in the eurozone, Europe-Mediterranean and America, as well as some of the Group's specialised business lines[4], Investment & Protection Services (expertise in savings, investment and protection solutions) and Corporate and Institutional Banking (personalised solutions for our corporate and institutional customers). More information on BNP Paribas operations can be found in section 1.4 *Presentation of operating divisions and business lines*. The Group purchases over EUR 10 billion of expenditures worldwide broken down into nine categories: Real Estate, Market Data, Marketing & Communication, Consumables & General Services, Banking Services, Professional Services, Technology, Transaction Fees and Travel.

RISKS OF MODERN SLAVERY AND HUMAN TRAFFICKING

Academic studies, field investigations and recent news coverage have all clearly demonstrated that all sectors, industries and areas may be affected, to varying degrees, by these types of serious infringements to human rights. In recent months, the issue of forced labour in globalised value chains has been extensively discussed in the media and tackled by regulators, and the number of countries having set up (or working on) legislation aimed at combating modern slavery in all its forms increased in 2022.

[1] *This Statement applies to all companies within the BNP Paribas Group that are required to have a slavery and modern trafficking statement. Those who have chosen to prepare their own declaration are not concerned.*

[2] *The expression "human trafficking" means: "the recruitment, transportation, transfer, harbouring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person for the purpose of exploitation" United Nations Convention against Transnational Organised Crime and Protocols thereto.*

[3] *"Slavery is the status or condition of a person over whom any or all of the powers attaching to the right of ownership are exercised" United Nations Convention on Slavery.*

[4] *Arval, BNP Paribas Leasing Solutions, BNP Paribas Personal Finance, BNP Paribas Investors, new digital business lines (Nickel, Floa, Lyf).*

In this regard, risk assessment policies devoted to the matter of modern slavery practices need to be multi-factorial (with complementary thematic screenings performed, on sector & industry, products & services, geographical and entity level) and regularly updated, in order to tackle this complex issue as fully and efficiently as possible. The risk-assessment process BNP Paribas implements to address the risks of modern slavery and human trafficking takes into account the vastly different situations of its stakeholders, and is complemented by the *ad hoc* monitoring and regular discussions performed by Group teams on this subject.

WORKFORCE'S INHERENT RISKS

Risks of modern slavery and human trafficking have been deemed low in business operations as, to the best of our knowledge, no publicly available study has categorised the banking sector and its employees, most of them being highly skilled professionals, as particularly exposed to these practices.

SUPPLIERS' INHERENT RISKS

As a bank, BNP Paribas' supply chains are mainly focused on indirect procurements and expenditure (consulting services, IT services, security, IT equipment, office furniture, promotional items, cleaning and catering services). Depending on the procurement categories, supply chains may be simple or very complex, with human rights related risks being higher, and more difficult to monitor, where supply chain arrangements are complex. Based on the risk mapping tool developed by BNP Paribas, less than 25% of the Group procurement categories are at high risk of modern slavery or child labour.

BANKING AND FINANCIAL ACTIVITIES' INHERENT RISKS

BNP Paribas meets the needs of millions of individual and professional customers, entrepreneurs, small, medium and large companies in business sectors facing multiple environmental, social and governance (ESG) challenges. The Group also operates in countries where legal and governance systems are at diverse levels of development. This diversity of context calls for structured, comprehensive and expert-driven review and analysis processes, in order to identify potential risks of modern slavery and human trafficking in BNP Paribas clients' activities (see *Business Case: Risk of forced labour in Xinjiang*).

BNP PARIBAS POLICY ON MODERN SLAVERY AND HUMAN TRAFFICKING

Respect for human rights is one of the pillars on which BNP Paribas' CSR strategy is based. The Group has committed itself to the promotion of the following principles and standards that form the basis of its activities:

- the United Nations Sustainable Development Goals;
- the Ten Principles of the United Nations Global Compact;
- the United Nations Guiding Principles on Business and Human Rights;
- the internationally-accepted OECD Guidelines for multinational enterprises;
- the internationally-accepted standards of human rights, as defined in the International Bill of Human Rights;
- the core labour standards set out by the International Labour Organization.

These public commitments are backed by internal policies implemented at Group level, with the goal of handling the many subjects revolving around social, environmental and governance matters, including human rights. These policies include:

- the BNP Paribas Group Code of conduct (updated in 2021);
- the BNP Paribas statement on Human Rights;
- the BNP Paribas Responsible Procurement Charter;
- the BNP Paribas Responsible Business Principles.

Early and efficient identification of modern slavery risks is the first step towards its prevention, alleviation and remediation, and calls for specific policies and practices. In this regard, BNP Paribas has taken the following steps and actions in order to exert its duty of care with all due seriousness.

TOWARDS ITS EMPLOYEES

BNP Paribas is committed to providing a working environment in which all employees are treated fairly. In particular, the Group focuses on respect and the need to apply the most stringent norms of professional behaviour, and rejects all forms of discrimination. BNP Paribas' policies and procedures notably include an annual review of high-risk countries in terms of human rights, as well as a monitoring of employees under the age of 18 (the Group did not have any in 2022).

Furthermore, the existing policies and procedures within the Group, including notably a diversity and inclusion policy as well as compensation principles are in line with the principles of non-discrimination in the recruitment process and career management of employees. The BNP Paribas Code of conduct, which applies to all employees, reaffirms the Group's commitment to changing behaviour and combating disrespectful behaviour towards people, including harassment and discrimination.

In line with these policies and principles, all employees of the Group are required to treat their colleagues with respect, make sure their interactions are professional and efficient, and be receptive of their contributions, even if they express different views from their own.

The Global agreement, signed on 18 September 2018 and extended to 30 September 2023, set up an ambitious plan to contribute to improving quality of life and working conditions of employees, and thus achieve more equality and inclusive growth.

AWARENESS AND TRAINING

BNP Paribas took part in the development of an awareness-raising e-learning module called "Human Rights into Business", co-created with the other members of the French association *Entreprises pour les Droits de l'Homme* (Businesses for Human Rights – EDH). This module is mandatory for all employees who directly contribute to the promotion of human rights including Risk management teams, Procurement[1], relationship managers in CIB, and the CSR network. It is available in eight languages and freely accessible to all Group employees.

RAISING CONCERNS

BNP Paribas Group pays particular attention to the concerns of customers, employees, shareholders, suppliers and society as a whole. The Group is committed to listening, understanding and seeking to respond to the concerns raised by its stakeholders in a fair and effective manner.

BNP Paribas employees are required to report any effective or suspected breach of the Code of conduct, Group policies and procedures, or regulations.

Employees can report issues to their line manager or another manager, or to Human Resources for issues relating to respect for people, or to a Compliance alert channel.

Any violation or suspected violation of human rights in the context of the Group's activities or its suppliers may be reported in the Group's whistleblowing system, except if local regulations or procedures prevent this.

Pursuant to the Sapin II law, amended by the Waserman law, the Group completed its whistleblowing system at the end of 2022 by opening whistleblowing channels to certain external third parties (depending on local regulations, but at least for suppliers and former employees). The alert form to be completed is freely accessible on the BNP Paribas institutional website[2].

The whistleblowing policy guarantees employees exercising their right to raise an alert protection against reprisal for having raised an internal alert in accordance with the terms of the policy.

A summary note[3] on whistleblowing is available on the BNP Paribas Group website.

TOWARDS ITS SUPPLIERS

Within the Procurement & Performance Function, dedicated teams address ESG risks linked to suppliers and subcontractors. BNP Paribas ESG risk management related to its suppliers and subcontractors hinges around the following elements:

- a responsible purchasing policy that aligns the Function's objectives with the Group's CSR objectives, as expressed in the Group's purpose;
- the definition by the Function of a normative reference framework. This framework includes:
  - an ESG risk mapping tool encompassing 13 themes, including modern slavery and child labour, allowing the identification of procurement categories at high environmental or social risk,
  - a "Sustainable Sourcing Charter", setting out the reciprocal commitments of the Group and its suppliers and subcontractors from an environmental and social standpoint,
  - contractual clauses requiring compliance with the International Labour Organization's conventions in all countries where suppliers are located, allowing contract termination in case of non-compliance by the suppliers of the Group ESG requirements,
  - ESG questionnaire models, used during calls for tenders and including environment, ethics and human rights targeted questions,
  - supplier monitoring rules, targeting ESG criteria used during the selection process and completed by the thematic regulatory watches,
  - training for employees of Procurement & Performance.

1 *In the process of being rolled out for the Australian Purchasing function.*

2 *group.bnpparibas.*

3 *Summary of the system – BNP Paribas' whistleblowing procedure. (https://cdn-group.bnpparibas.com/uploads/file/summary_of_bnp_paribas_wb_framework_eng_june_2022.pdf).*

TOWARDS ITS CLIENTS (BANKING AND FINANCIAL ACTIVITIES)

BNP Paribas has set up ESG risk management systems for its financing and investment activities (see *Systematic integration and management of environmental, social and governance risks (ESG),* Commitment 3).

These provisions are based on:

- the development of financing and investment policies managing the Group's activities in sectors with significant ESG issues;
- the respect of the Equator Principles for major industrial and infrastructure projects;
- the integration of ESG criteria in the Know Your Client (KYC) process;
- the progressive integration of ESG criteria in lending and rating policies;
- the development and use of management and monitoring tools for these risks, including specific questionnaires for activities with salient environmental and social risks;
- the training of financing business lines and control functions on the ESG risk framework;
- an operational control plan.

In addition to the tools described above, a new ESG Assessment framework was deployed in June 2021. It enables the identification, assessment and monitoring of the performance and ESG risks of corporate customers, on a sector-specific manner, with a common approach within the Group for a given customer segment. The ESG Assessment covers five major extra-financial topics, including respect for human rights. Currently designed for large companies, which will all be subject to an ESG Assessment by the end of 2023, this framework will be gradually adapted and extended to different client segments.

Business case: Risk of forced labour in Xinjiang

The increase in recent months of alerts from research institutes, think tanks and civil society organisations active in the defence of human rights regarding the situation of ethnic minorities in the Xinjiang Autonomous Province in China (XUAR), drew the Group's attention to this particular topic.

As a major producer of several strategic raw materials (cotton, tomatoes, polysilicon), used by many sectors and industries (textiles, agri-food, photovoltaics) through increasingly globalised supply chains, Xinjiang has been identified by several credible sources as a place of oppression of members of the Uyghur ethnic group, who are victims of discrimination and widespread surveillance, as well as imprisonment and indoctrination in specialised detention centres. Uyghur detainees are employed on industrial sites (both in Xinjiang and other parts of China) in conditions akin to forced labour. As a consequence, BNP Paribas has decided to strengthen its ESG risk management system for client companies potentially impacted by this serious violation of human rights in their subcontracting chain.

Based on a cross-analysis of the Group's financing portfolio and external sources documenting the companies and sectors most exposed to the direct or indirect use of forced Uyghur workers, a list of especially high-risk clients, and an *ad hoc* questionnaire was sent to them. The responses collected, supplemented where appropriate by direct discussions with clients, made it possible to assess the identification of this issue, and the relevance and completeness of the responses provided by these same clients.

At the same time, a project was launched with the Methodologies & Data team of the BNP Paribas CSR Function in order to industrialise the analysis of the portfolio and allow faster and more reliable identification of clients particularly exposed to this type of risk. Launched as a pilot in the textile sector, this approach is intended to be extended to other industries in the coming months.

ASSESSING EFFECTIVENESS

Acknowledging the challenges of assessing and addressing modern slavery and human trafficking issues, BNP Paribas remains committed to the review and enhancement of its own processes and policies, in order to continually improve their range and effectiveness.

FOR EMPLOYEE-TARGETED POLICIES

BNP Paribas tracks the effectiveness of its actions in this field through the percentage of employees contributing directly to the promotion of human rights who have received specific training. At the end of 2022, 89% of the employees who were assigned the module on how to address human rights in financing decisions of this specific training, had attended it. Since 2016, more than 22,000 employees of the Group have completed this training.

FOR SUPPLIER-TARGETED POLICIES

The number of ESG assessments of suppliers and sub-contractors that are conducted as part of calls for tender, in particular those relating to categories of at-risk purchases, is a metric of BNP Paribas monitoring actions towards this type of stakeholder. In 2022, over 5,100 ESG assessments were completed (compared with 3,700 in 2021) and over 2,200 Responsible Procurement Charters were signed by Group suppliers (compared with 1,400 in 2021).

FOR FINANCING AND INVESTMENT ACTIVITIES

The opening and maintenance of a high-quality dialogue between the Group and the entities it finances or in which it invests, plays an important role in monitoring and remedying certain issues, including those relating to human rights. The changes in exclusion and monitoring lists (*i.e.* the companies with which the Group does not wish to maintain commercial relations, or which are subject to increased monitoring, which may result from serious violations of human rights) is another indicator monitored by BNP Paribas. At the end of 2022, these lists numbered 1,490 legal entities (1,369 under exclusion and 121 under monitoring), against 1,480 at the end of 2021).

PROCESS OF CONSULTATION FOR PREPARING THIS STATEMENT

The information on this statement has been prepared thanks to the work and collaboration of relevant subject matter specialists, as well as members of the BNP Paribas CSR network, reaching through all functions, business lines and countries of the Group, where applicable (see *CSR taken to the highest level in the organisation*). The Group CSR and Group LEGAL Functions have coordinated this collaborative process over the past year, and in particular have consulted the designated contacts and experts for the United Kingdom and Australia.

CONCLUSION

This statement has been used by BNP Paribas to establish the annual statements required by the Modern Slavery Act 2015 of the United Kingdom and Modern Slavery Act 2018 (Cth) of Australia. This statement can be found on the “Publications” page of the Group website (https://group.bnpparibas/en/publications)[1].

This statement for the Group was approved by the Board of BNP Paribas S.A. as the parent entity on 22 February 2023.

Jean-Laurent BONNAFÉ
Director and Chief Executive Officer,

Jean LEMIERRE
Chairman of the Board of directors

1 *BNP Paribas also publishes its statement on modern slavery and human trafficking on the Modern slavery statement registry, a platform launched by the British government in March 2021.*

7.9 Eligible activities under the meaning of the European Taxonomy

REMINDER OF THE REGULATIONS AND REPORTING OBLIGATIONS FOR FINANCIAL INSTITUTIONS

The Taxonomy is a system for classifying economic activities according to their contribution to the six environmental objectives defined by the European Commission in the various Regulations and Delegated Acts published between June 2020 and July 2022.

The Taxonomy is based on two central concepts that are associated with the economic activities of companies subject to the NFRD[1] (and the CSRD when it comes into force[2]).

- The first of these concepts is that of eligibility. An economic activity is said to be eligible if it is described in one of the two Climate Delegated Acts (that of June 2021 or the complementary act of July 2022) due to its high contribution potential to one of the two environmental objectives.
- The second of these concepts is that of alignment, which makes it possible to confirm the significant contribution of this eligible economic activity to one of the two climate-related environmental objectives, on the basis of verifiable criteria.

This BNP Paribas Group publication, like the first publication of 2022 dated 31/12/2021, remains focused on the notion of eligibility in compliance with the Delegated Act of July 2021, supplementing article 8 of the Regulation, with three changes.

- Unlike the first publication, this second publication was able to benefit from the first Taxonomy eligibility data published by the companies subject to the NFRD for two indicators, revenue and investment expenditures (capex). As a reminder, both companies and financial institutions made their first publications in 2022, based on data as of 31/12/2021.
- This publication of eligible assets is also based on a change in the scope of loans granted to household customers. Unlike the 2022 publication, and in accordance with Appendix V of the Delegated Act of July 2021, eligible assets now include motor vehicle loans granted to households since 01/01/2022, in addition to financing of real estate acquisition and renovation by Households.
- Finally, the Complementary Delegated Act of July 2022 provides for several disclosure obligations, applying to both companies and financial institutions, with respect to exposures to energy production from fossil gas and nuclear energy. These obligations are broken down into five tables, the first table provides qualitative information while the other tables concern quantitative data. As financial institutions do not yet have information published by companies to finalise this first publication related to the application of this Complementary Delegated Act, only the qualitative table[3] could be included in this publication.

SCOPE OF FINANCIAL ASSETS SUBJECT TO THE ELIGIBILITY ANALYSIS

The amounts of financial assets recorded in the Group's balance sheet and reported below, both for the scopes excluded from the analysis and for eligible or non-eligible outstandings, are measured at gross carrying amount, i.e. before taking into account any provisions, and as per the scope of consolidation used for prudential reporting in Chapter 5 *Risks and capital adequacy* – Pillar 3.

The scope of financial assets subject to the eligibility analysis is firstly defined by a series of exclusions defined by the Delegated Act of July 2021. These exclusions are as follows:

- outstandings to central governments, central banks and supranational institutions;
- the trading book;
- interbank current accounts;
- outstandings on hedging derivatives;
- outstandings to European companies not subject to the NFRD and outstandings with non-European counterparties;
- cash on hand;
- other assets (*e.g.* property, plant and equipment, intangible assets, deferred tax assets).

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1 *Directive 2014/95/EU of 22 October 2014.*

2 *Directive EU 2022/2464 on the publication of sustainability information by companies of 14 December 2022.*

3 *See Annex III of the EU Delegated Regulation 2022/1214 of 9 March 2022.*

These financial assets are reported in proportion to the Total Assets of BNP Paribas' prudential balance sheet, measured at 31 December 2022 at gross carrying amount.

Within these remaining assets, the eligibility analysis makes it possible to cover a wide range of financing activities for the real economy, over a geographical scope equivalent to the European Union, including all types of financing (loans, specialised financing, debt securities, equity investments), all types of customers (households, companies), and covering a wide range of economic sectors.

ELIGIBILITY QUALIFICATION METHODS

The analysis of the eligibility of financial assets is based on differentiated approaches according to customer categories.

For financing transactions with no specific allocation identified for the benefit of companies (including financial), the eligibility analysis is based on the eligibility ratios published by European companies subject to the NFRD. Pursuant to the Delegated Act of July 2021, the eligibility ratio of a financing instrument without a specifically identified allocation is subject to two measures, on the one hand, a measure equivalent to the eligible revenue published by the counterparty, and a measure equivalent to the eligible capital expenditure indicator (capex) published by the same counterparty. The Group has limited itself to the valuation of eligible assets on the basis of this available published information, which remains limited to companies subject to the NFRD, without supplementing it by a voluntary estimate of the other eligible assets in the portfolio. In particular, the assets of the Group's insurance subsidiaries recognised in the prudential balance sheet using the equity method are not subject to an eligibility analysis in this publication.

For financing operations with a specifically identified allocation, the eligibility analysis is carried out by identifying transactions with an objective related to climate change mitigation determined when the financing is granted. Only financing for corporate clients subject to the NFRD is considered in this analysis.

With regard to financing transactions for the benefit of households resident in the European Union, real estate acquisition and renovation financing transaction portfolios as well as motor vehicle loans granted since 1 January 2022 are qualified in their entirety, with the future alignment analysis being carried out at the level of individual transactions according to the technical criteria.

With regard to financing transactions for the benefit of local authorities, an activity that is not very significant for BNP Paribas, an approach similar to that of companies has been implemented, i.e. transactions with a specifically identified allocation financing an eligible activity, supplemented for other financing of public institutions by taking into account the published eligibility ratios, where applicable.

	31 December 2022					
		Ratio on revenue (*)		Ratio on CAPEX(*)		
In millions of euros	**Gross carrying amount**	**Ratio on total GAR assets**	**Ratio non-eligible Assets on total GAR assets**	**Ratio on total GAR assets**	**Ratio non-eligible assets on total GAR assets**	**Total Assets ratio**
Assets included in the numerator and denominator						
Financial assets other than held for trading	629,064	20.2%	28.2%	20.5%	27.9%	
Loans and advances eligible for the calculation of the eligibility ratio	586,994	19.9%	25.2%	20.3%	24.9%	
Debt securities and equity instruments eligible for the calculation of the ratio	42,071	0.2	3.0%	0.2%	3.0%	
Collateral obtained by taking possession	254	0.0%	0.0%	0.0%	0.0%	
TOTAL ASSETS USED FOR THE ELIGIBILITY ANALYSIS (INCLUDED	**629,318**	**20.2%**	**28.2%**	**20.5%**	**27.9%**	

31 December 2022

In millions of euros	Gross carrying amount	Ratio on revenue (*)		Ratio on CAPEX(*)		Total Assets ratio
		Ratio on total GAR assets	Ratio non-eligible Assets on total GAR assets	Ratio on total GAR assets	Ratio non-eligible assets on total GAR assets	
IN THE NUMERATOR AND THE DENOMINATOR)						
Other assets only included in the denominator						
Outstanding loans to European non-financial companies (not subject to NFRD)	82,722					3.4%
Outstanding loans to non-European non-financial companies (not subject to NFRD)	245,131					10.0%
Derivatives used – Hedge accounting	25,682					1.1%
Interbank current accounts	10,848					0.4%
Cash on hand	3,032					0.1%
Other assets	303,796					12.4%
TOTAL ASSETS INCLUDED IN THE DENOMINATOR (TOTAL GAR ASSETS)	**1,300,528**	**100%**	**100%**	**100%**	**100%**	
Assets excluded from the numerator and denominator						
Outstandings with central governments and similar	132,396					5.4%
Outstandings with central banks	335,381					13.7%
Financial assets held for trading	673,641					27.6%
TOTAL ASSETS EXCLUDED FROM THE NUMERATOR AND THE DENOMINATOR	**1,141,418**					
TOTAL ASSETS BEFORE RECOGNITION OF PROVISIONS AND IMPAIRMENT	**2,441,946**					100%

(*) For financial institutions, the ratios of eligible assets published by the counterparties are used.

In total, eligible assets amount to 20% of the Group's total GAR assets. The share of financing to European households is predominant (18% of total GAR assets), driven by the weight of real estate financing. It is up very slightly compared to 31/12/2021 due to the inclusion of automotive financing granted since the beginning of the year. The balance of the ratio corresponds to the eligible portions of financing granted to other customers, including financing with a specific allocation to a project or activity eligible for the taxonomy, and financing without allocation. Financing to legal entities (companies and public authorities) for which a publication by the counterparties of their eligibility indicators is available represents only 7.6% of the Group's GAR assets.

The impact of the method for calculating the eligibility of financing transactions without a specific allocation – on the basis of the revenue eligibility ratios published by the counterparties, or on the basis of their Capex eligibility ratios – is minimal in terms of the total ratio of eligible assets. In the first case, eligible assets amount to 20.2% of total GAR assets and in the second case to 20.5%.

The next publication by financial institutions, which will be carried out in 2024, will take a step forward since it will include data on the alignment of portfolios of financial assets dedicated to economic activities that contribute significantly to the objectives of the European Taxonomy and the Paris Agreements. The approach will, therefore, be based on the alignment data published in 2023 by the companies subject to the NFRD, and by the alignment data that the bank will be able to recover with regard to specialised financing without a specific allocation, both for companies or for households.

INFORMATION SPECIFIC TO EXPOSURES FROM FOSSIL GAS AND NUCLEAR ENERGY PRODUCTION ACTIVITIES

The table below meets the transparency requirements of the Delegated Act of July 2022 on the financing of activities related to nuclear energy and fossil gas.

	Nuclear energy related activities	
1.	The undertaking carries out, funds or has exposures to research, development, demonstration and deployment of innovative electricity generation facilities that produce energy from nuclear processes with minimal waste from the fuel cycle.	Yes
2.	The undertaking carries out, funds or has exposures to construction and safe operation of new nuclear installations to produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production, as well as their safety upgrades, using best available technologies.	Yes
3.	The undertaking carries out, funds or has exposures to safe operation of existing nuclear installations that produce electricity or process heat, including for the purposes of district heating or industrial processes such as hydrogen production from nuclear energy, as well as their safety upgrades.	Yes
	Fossil gas related activities	
4.	The undertaking carries out, funds or has exposures to construction or operation of electricity generation facilities that produce electricity using fossil gaseous fuels.	Yes
5.	The undertaking carries out, funds or has exposures to construction, refurbishment, and operation of combined heat/cool and power generation facilities using fossil gaseous fuels.	Yes
6.	The undertaking carries out, funds or has exposures to construction, refurbishment and operation of heat generation facilities that produce heat/cool using fossil gaseous fuels.	Yes

7.10 Cross-reference tables

GRI, ISO 26000, Global Compact, Sustainable Development Goals, Principles for Responsible Banking, TCFD cross-reference table (as per Grenelle II).

Universal Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	(TCFD)**
Summary	**712**	**G4-102, 103**	**5.2.2, 5.2.3, 6.2**	**1 – 10**	**1 – 17**	**1 – 6**	**S. a)**
The Corporate Social Responsibility (CSR) Strategy							
A bank committed to a better future (4 pillars/12 commitments)	717	G4-102	5.2.1, 5.2.2, 6.6.3, 6.6.4, 6.6.6	1 – 10	1 – 17	1 – 6	MT c)
The CSR Policy Management Dashboard	718	G4-102	4.3, 7.7.2, 7.7.3	1, 6, 7, 8	1 – 17	5, 6	MT.a), MTb), MTc)

Universal Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	(TCFD)**
Progresses acknowledged by extra-financial rating agencies and external stakeholders	719	G4-102	7.6.2				
CSR taken to the highest level in the organisation	720	G4-102	6.2.2			5	G. a), G. b)
BNP Paribas' public positions	721	G4-102	6.8.9, 7.3.3	1, 3, 6, 8, 10	1 – 17	3, 4, 6	
Fostering dialogue with stakeholders	723	FS5, G4-102	5.3.3, 7.5.4	1, 3, 9	17	4	
OUR ECONOMIC RESPONSIBILITY: FINANCING THE ECONOMY IN AN ETHICAL MANNER							
Commitment 1 - Financing and investments with a positive impact							
Enabling the transition by offering a wide range of sustainable products	724	FS14, FS16, G4-103, G4-203	6.8.2	1 – 10	17	1	MT.c)
Financing impact entrepreneurship	724	FS7, FS14, G4-203	6.8.7, 6.7.9, 7.3.1	1, 4, 6	8, 10, 11, 17	2, 4	
Designing and promoting sustainable investment funds	726	FS-11, G4-103, G4-203	6.7.3, 6.7.9	1, 9	6, 7, 10, 11, 13, 14, 15, 17	1 – 3	MT.a), MT.c)
Federating financial institutions in coalitions around ambitious objectives and the development of shared methodologies	727	G4-102, FS5	5.3.3, 6.6.6, 7.3.3	8	17	1, 4, 6	
Tailored advice and support	727	FS14	6.3.7, 6.7.3, 6.7.9	6	5, 8, 9	3, 4	
Commitment 2 – Ethics of the highest standard							
Ethics of the highest standard	728	G4-103, G4-205, G4-206	4.7, 6.6.3, 6.6.4, 6.6.6, 6.6.7	10	10, 16	2, 5, 6	
The fight against tax evasion	729	G4-205	6.8.7	10	10, 16	1, 2, 6	
Protecting clients' interests	730	FS15, FS16, G4-103, G4-418	6.6.7, 6.7.3, 6.7.4, 6.7.5, 6.7.6, 6.7.7	10	10	3, 5	
The Advocacy programme and the Net Promoter System	732	G4-102	5.3.3		5, 8	4, 5	
Ethics at the heart of supplier relations	732	FS5, G4-204, G4-308, G4-414	5.2.1, 6.6.3, 6.7.3	2 - 6	12, 16	4, 5	
Commitment 3 – Systematic integration and management of environmental, social and governance risks (ESG)							
A comprehensive ESG risk management approach	733	FS1, FS2, FS3, FS9, G4-102, G4-103, G4-201, G4-203, G4-411, G4-412, G4-413	4.4, 4.6, 6.2, 6.3.4, 6.3.5, 6.5.5, 6.5.6, 6.6.3, 6.8.7	1 – 10	3, 5, 6, 7, 8, 9, 13, 14, 15, 16	1 – 6	R.a), R.b), R.c), MT.c)
Respect of the Equator Principles in project financing	733	FS1, FS2, FS3, G4-103, G4-411, G4-412, G4-413	6.3.4, 6.3.5, 6.5.5, 6.5.6, 6.6.3, 6.8.7, 6.6.7	1 – 10	3, 5, 6, 8, 9, 13, 14, 15, 16	1 – 6	MT.c)
Internal ESG analysis tools for clients and transactions	733	FS2, FS11, G4-103, G4-201, G4-203	6.3.5, 6.4.7, 6.7.4, 6.7.5	1 – 10	16	1, 2, 3, 5, 6	R.a), R.b), R.c)

Universal Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	(TCFD)**
Implementation of financing and investment policies	734	FS2, FS11, G4-103, G4-201, G4-203	6.3.5, 6.4.7, 6.7.4, 6.7.5	1 – 10	3, 5, 6, 7, 8, 9, 13, 14, 15, 16	1 – 6	R.a), R.b), R.c)
Other ESG risk management tools	736	FS2, FS11, G4-103, G4-201, G4-203	6.3.5, 6.4.7, 6.7.4, 6.7.5	1 – 10	3, 5, 6, 7, 8, 9, 13, 14, 15, 16	3, 4, 5	R.a), R.b), R.c)
Alignment of the loan portfolio with the net zero by 2050 objective	737	FS8, FS15, G4-305	6.5.5, 6.7.5	7, 8, 9	7, 9, 12, 13, 14, 15	1 – 6	S.a), S.b)
OUR SOCIAL RESPONSIBILITY: PROMOTE THE DEVELOPMENT AND THE ENGAGEMENT OF OUR EMPLOYEES							
Commitment 4 – Promotion of diversity, equality and inclusion							
A solid framework, a multi-actor commitment	741	G4-103, G4-405, G4-406	6.3.7, 6.4.3, 6.4.7	1, 6	5, 8, 10	5	
Promoting an inclusive culture	742	FS4, G4-405, G4-406	5.3.3, 6.6.6	1, 6	5, 8, 10, 16	4, 5	
Outstanding actions in the area of professional equality	742	G4-405, G4-406	6.3.7, 6.3.10, 6.4.3, 6.6.6	1, 6	5, 8, 10, 16	5, 6	
Constant progress, pioneering initiatives for greater diversity	744	FS5, G4-405, G4-406	5.3.3	1, 6	5, 8, 10, 17	5, 6	
Respect for human rights and code of conduct	746	G4-406, G4-408, G4-409	6.3.3, 6.3.5	1, 2, 6	5, 8, 10, 17	5, 6	
Commitment 5 – "A good place to work" and responsible employment management							
Our employees around the world	747	G4-401, G4-402	6.4.3		5, 8	6	
Recruitment, employee turnover, organisation of working hours, absenteeism	749	G4-401, G4-402	6.4.3, 6.4.4		5, 8	6	
Focus on employees (health and safety, risk prevention, context of health crisis and conflict in Ukraine)	751	G4-403	6.4.3, 6.4.4, 6.4.6	6	3, 5, 8	1, 5, 6	
Transforming working practices and maintaining the strong corporate culture	753	G4-103	6.4.3		4, 8	4, 5	R. c), MT. c)
Quality social dialogue	754	G4-407	5.3.3, 6.4.3, 6.3.10, 6.4.5	3	3, 5, 8, 17	1, 4, 5	
A competitive compensation policy	756	G4-401	6.4.3, 6.4.4	6	5, 8	4, 6	
Commitment 6 - A learning company supporting dynamic career path management							
Attracting candidates and retaining employees	758	G4-404	6.4.7	6	4, 5, 8, 10	1, 4	
Developing skills and improving employability	759	FS4, G4-404	6.4.3, 6.4.7, 6.8.5	1, 8	4, 5, 8, 10, 17	1, 4, 5	R. c), MT. c)
OUR CIVIC RESPONSIBILITY: BEING A POSITIVE AGENT FOR CHANGE							
Commitment 7 – Products and services that are widely accessible							
The Group's action to promote the inclusion and financial health of its clients	763	FS14, FS15, FS16	6.8.3, 6.8.9	6, 8, 9	1, 8, 10, 17	1 – 3	

Universal Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	(TCFD)**
Supporting fragile customers or customers with specific needs	765	FS14, FS15, FS16	6.7.4, 6.7.8, 6.8.6	6	8, 10	1 – 3	
Commitment 8 – Supporting human rights and combatting social exclusion							
BNP Paribas is committed to respecting human rights	766	FS4, FS5, G4-407, G4-408, G4-409, G4-411, G4-412	6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.7.7	1 – 6	1, 2, 8, 16	1 – 6	
Combatting social exclusion	767	G4-413	6.8.3, 6.8.4, 6.8.5	6	8, 10, 11	1, 2	
Commitment 9 – Corporate philanthropy policy focused on the arts, solidarity and the environment							
Culture	768		6.8.4		11	4	
Solidarity	769	G4-413	6.4.7, 6.8.3	1, 6	3, 4, 6, 7, 8, 13, 14, 15	1, 2, 4	
OUR ENVIRONMENTAL RESPONSIBILITY: ACCELERATING THE ECOLOGICAL AND ENERGY TRANSITION							
Commitment 10 – Enabling its clients to transition to a low-carbon economy respectful of the environment							
Helping to finance the energy and ecological transition	770	FS8, G4-201, G4-203, G4-302	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	7 - 9		1 – 6	MT.a), MT.c)
Using third-party asset management to support the energy and ecological transition	772	FS5, FS11, FS12, G4-201, G4-203, G4-302	6.5.4, 6.5.5, 6.6.6, 6.7.5	7 - 9	6, 7, 8, 9, 11, 13, 14, 15	1 - 5	R. c), MT.a)
Supporting corporate clients in their energy and ecological transition	772	FS5, FS8, G4-201, G4-203, G4-302	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	7 - 9	7, 9, 11, 13	1, 3, 4	MT.a), MT.c)
Supporting its individual customers in reducing their carbon footprint and participating in the energy transition	773	FS5, FS8, G4-201, G4-203, G4-302	6.5.3, 6.5.4, 6.5.5, 6.6.6, 6.7.5	7 - 9	7, 11, 13	1, 3, 4	MT.a), MT.c)
Contributing to protecting biodiversity	774	G4-304	6.5.4, 6.5.6, 6.7.5	7 - 9	5, 9, 11, 12, 14, 15, 17	1, 2, 4, 5	
Commitment 11 - Reducing the environmental impacts of its operations							
Green company for employees (GC4E): employee engagement worldwide	774	FS4, FS5, G4-103, G4-305	6.5.3, 6.5.4, 6.5.5, 6.7.5	7, 9	12, 13	1, 5, 6	
Strengthened efforts to reduce the energy consumption of operations	775	G4-103, G4-301, G4-302, G4-305	6.5.3, 6.5.4, 6.5.5, 6.7.5	7, 9	9, 11, 12, 13	1, 5, 6	MT.b)
Use of low-carbon electricity	777	G4-302, G4-305	6.5.3, 6.5.4, 6.5.5, 6.7.5	7, 9	11, 12, 13	1, 5, 6	MT.b)
Offsetting residual greenhouse gas emissions	777	G4-305	6.5.4, 6.5.5	8	9, 11, 12, 13	1, 5, 6	MT.b)
Responsible real estate initiatives	777	G4-103, G4-301, G4-302, G4-305	6.5.3, 6.5.4, 6.5.5, 6.7.5	9	9	2, 6	MT.c)
Responsible consumption	778	FS4, FS5, G4-103, G4-305	6.5.3, 6.5.4, 6.5.5, 6.6.6	9	12, 13	2, 6	MT.c)
Commitment 12 – Advancing awareness and sharing of best environmental practices							

Universal Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	(TCFD)**
Supporting research and development on climate change and biodiversity	778	FS5	6.5.5, 6.6.6, 6.8.6, 6.8.9	8, 9	13, 14, 17	4, 5	S.b)
Raising awareness among internal and external stakeholders	779	FS4, FS5, G4-404	6.5.5, 6.6.6, 6.8.6, 6.8.9	9	17	4, 5	S.b)
Taking an active part in partnerships and collective initiatives	780	FS5	6.5.5, 6.6.6, 6.8.6, 6.8.9	9	17	4, 5	S.b)
EXTRA-FINANCIAL PERFORMANCE STATEMENT, DUTY OF CARE AND MODERN SLAVERY AND HUMAN TRAFFICKING STATEMENT							
Extra-financial performance statement	781	FS9, G4-102, G4-103, G4-205, G4-404, G4-405, G4-412, G4-416, G4-418	5.2.2, 5.3.3, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.10, 6.4.3, 6.4.4, 6.4.5, 6.4.6, 6.5.3, 6.5.5, 6.5.6, 6.6.7, 6.7.7,	1 - 7	3, 4, 5, 6, 8, 13, 15, 16	1 – 6	G.b), R.a), R.b), MTa)
Duty of Care	786		7.3.1				
Risk mapping	787	G4-102	5.3.3	2, 7, 10		1, 5	G. b), S. a), R.a)
Procedures for regular assessment of the situation of subsidiaries, subcontractors or suppliers, with regard to risk mappings	792	FS5, FS9, G4-304, G4-307, G4-308, G4-406, G4-407, G4-408, G4-409, G4-410, G4-G4-411, G4-412, G4-423, G4-414, G4-416	5.3.3, 6.3.3, 6.3.4, 6.3.5, 6.3.7, 6.3.8, 6.3.9, 6.3.10, 6.4.3, 6.4.4, 6.4.5, 6.4.6, 6.5.3, 6.5.5, 6.5.6, 6.6.7, 7.7.2	2-8, 10	3, 5, 6, 8, 10, 12, 13, 14, 15, 16	4, 6	R. b)
Appropriate actions to mitigate risks or prevent serious harm	794	FS5	6.3.6	1-10	3, 5, 6, 8, 10, 12, 13, 14, 15, 16	2, 4, 6	R. b)
Alert mechanism (Whistleblowing)	797	G4-102, G4-416, G4-418	6.3.3, 7.5.3	2-8, 10		4, 5	R. b)
System for monitoring the measures implemented and assessing their effectiveness	798	G4-102	7.7.3, 7.7.4, 7.7.5	2, 7, 10		5, 6	R. b), MT. a)
Statement on modern slavery and human trafficking	800	FS4, FS5, G4-102, G4-103, G4-407, G4-408, G4-409, G4-410, G4-411, G4-412	5.2.2, 5.2.3, 6.3.3, 6.3.4, 6.3.5, 6.3.6, 6.3.10, 6.4.7	4, 5, 6	5, 8, 10, 16, 17	2, 4, 6	
Eligible activities under the meaning of the European Taxonomy	805	GRI-201, FS-8			9	6	
ANNEXES							
Report of one of the Statutory Auditors	815	FS9, G4-102					

Universal Registration Document	Pages	Global Reporting Initiative V4 (*)	ISO 26000	Principles of the UN Global Compact	Sustainable Development Goals (SDG)	Principles for Responsible Banking	(TCFD)**

(*) Management approach defined in the GRI G4 guidelines (financial sector); EC: Economy; EN: Environment; PR: Product liability; LA: Employment, social relations and work; HR: Human Rights; SO: Company; FS: Impact of financial products and services (2008 sector appendix), DMA direct approach to management.

(**) Task force on Climate-related Financial Disclosures - G: Governance, S: Strategy, R: Risk Management, MT: Metrics and Targets.

The table below takes into account the codified standards of the Sustainability Accounting Standards Board (SASB) for the "Commercial Banking" category. It should be noted that the SASB standards present, at this stage, a "United States"-oriented approach to defining the criteria. This table best represents the information and data mapping according to the SASB indicators for Commercial & Personal Banking. Note that this mapping has not been audited.

SASB CROSS-REFERENCE TABLE

Domain	SASB indicator	SASB code of the indicator	References of information and data available in thisUniversal Registration Document and the 2022 annual financial report
Data security	Description of the approach to identify and address data security risks	FN-CB-230a.2	Chapter 2.4 Internal control: p128-144, in particular p136 "Management of risks related to information and communication technologies" and "Management of risks related to the protection of personal data" Chapter 5.9 Operational risk: p604 "Cybersecurity and technology"
Financial inclusion and capacity building	(1) Number and (2) amount of outstanding loans eligible for programmes to promote the development of small businesses and local authorities	FN-CB-240a.1	Chapter 7.2 Our economic responsibility: p724-739 "Commitment 1: financing and investments with a positive impact", p724-726 "Financing entrepreneurship for impact" Chapter 5.4 Credit risk: p417 table 25 "Credit risk exposure by asset class and approach type", p520 table 56 "Loans and receivables subject to public guarantee mechanisms" Chapter 7.4 Our civic responsibility: p763-765 "Commitment 7: products and services that are widely accessible"
	(1) Number and (2) amount of past due loans or loans with unrecognised interest eligible for programmes to promote small business and community development	FN-CB-240a.2	Chapter 5.4 Credit risk: p417 table 25 "Gross credit risk exposure by asset class and approach type", p520 table 56 "Loans and receivables subject to public guarantee mechanisms"
	Number of fee-free bank accounts opened for previously unbanked or under-banked individual customers	FN-CB-240a.3	Chapter 7.4 Our civic responsibility: p763 "Commitment 7: products and services that are widely accessible"
	Number of participants in financial education initiatives for unbanked, underbanked or underserved customers	FN-CB-240a.4	
Incorporation of ESG factors in credit analysis	Commercial and industrial credit exposure by industry	FN-CB-410a.1	Chapter 5.4 Credit risk: p426 table 28 "Credit risk exposure by asset class and approach type"
	Description of the approach for integrating environmental, social and governance (ESG) factors into the credit analysis	FN-CB-410a.2	Chapter 5.4 Credit risk: p421 "Credit risk management system – Consideration of social and environmental responsibility (CSR)" Chapter 7.2 Our economic responsibility: p733-739 "Commitment 3: Systematic integration and management of environmental, social and governance (ESG) risks" Chapter 7.5 Our environmental responsibility: p770-774 "Commitment 10: enabling our clients to transition to a low-carbon economy respectful of the environment"

Domain	SASB indicator	SASB code of the indicator	References of information and data available in thisUniversal Registration Document and the 2022 annual financial report
Corporate ethics	Total amount of monetary losses resulting from legal proceedings related to fraud, insider trading, antitrust practices, anti-competitive behaviour, market manipulation, abusive practices or other financial industry laws or regulations	FN-CB-510a.1	Chapter 4.6 Notes to the financial statements prepared in accordance with IFRS as adopted by the European Union: p292 Note 7.b “Legal and arbitration proceedings” Chapter 2.4 Internal control: p128-144, in particular p133-135 “Compliance”, p135 “Legal”, p136-138 “Risk and Permanent Control” and p138-138 “Periodic control”
	Description of whistleblower policies and procedures	FN-CB-510a.2	Chapter 7.2 Our economic responsibility: p728 “Commitment 2: Ethics of the highest standard”
Risk management system	Global Systemically Important Bank (G-SIB) score, by category	FN-CB-550a.1	Chapter 5.2 “Capital management and capital adequacy”: p392 “Requirements related to banking regulations and banking supervision” notification-by-bce-du-srep-2022 (invest.bnpparibas)
	Description of the approach for integrating the results of mandatory and internal stress tests into capital adequacy planning, long-term organisational strategy and other operational activities	FN-CB-550a.2	Chapter 5.2 «Capital management and capital adequacy»
			Chapter 5.3 Risk management: p413-416 in particular “Stress tests”
			Chapter 5.4 Credit risk, p424-425 “Stress tests – credit risk”
			Chapter 5.6 Counterparty risk: p547-548 “Stress tests and adverse correlation risk”
			Chapter 5.7 Market risk: p574 “Stress tests – market risk”
			Chapter 5.8 Liquidity risk: p585 “Stress tests and liquidity reserve”
Activity metrics	(1) Number and value (2) of current accounts by segment: a) retail customers and b) small businesses	FN-CB-000.A	Chapter 1.4 Presentation of operating divisions and business lines: p8-22 Chapter 6 Notes to the parent company financial statements: p680-681 note 3.b “Customer transactions”
	(1) Number and value (2) of loans by segment: a) retail customers, b) small business and c) corporate clients	FN-CB-000.B	Chapter 5.4 Credit risk: p493 table 48 “Performing and non-performing exposures and corresponding provisions (EU CR1)”

7.11 Report of one of the Statutory Auditors, appointed as independent third party, on the verification of the consolidated non-financial performance statement

Year ended December 31, 2022

This is a free English translation of the report by one of the Statutory Auditors issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Shareholders' Meeting,

In our capacity as Statutory Auditor of BNP Paribas SA (hereinafter the "Company"), appointed as independent third party ("third party") and accredited by the French Accreditation Committee (Cofrac), under number 3-1886 rév. 0 (Cofrac Inspection Accreditation, scope available at www.cofrac.fr), we have conducted procedures to express a limited assurance conclusion on the historical information (observed or extrapolated) in the consolidated non-financial performance statement, prepared in accordance with the Company's procedures (hereinafter the "Guidelines"), for the year ended December 31, 2022 (hereinafter the "Information" and the "Statement", respectively), presented in the Group management report pursuant to the legal and regulatory provisions of Articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code (*code de commerce*).

Conclusion

Based on our procedures as described in the section "Nature and scope of procedures" and the evidence we have obtained, no material misstatements have come to our attention that cause us to believe that the non-financial performance statement does not comply with the applicable regulatory provisions and that the Information, taken as a whole, is not fairly presented in accordance with the Guidelines.

Preparation of the non-financial performance statement

The absence of a generally accepted and commonly used reference framework or established practices on which to base the assessment and measurement of the Information enables the use of different but acceptable measurement techniques that may impact comparability between entities and over time.

Accordingly, the Information must be read and interpreted with reference to the Guidelines, summarised in the Statement and available on the Company's website or on request from its headquarters.

Limits inherent in the preparation of the information relating to the Statement

The Information may be subject to uncertainty inherent to the state of scientific and economic knowledge and the quality of external data used. Some information is sensitive to the choice of methodology and the assumptions or estimates used for its preparation and presented in the Statement.

RESPONSIBILITY OF THE COMPANY

Management is responsible for:

- selecting or determining the appropriate criteria for the preparation of the Information;
- preparing a Statement pursuant to legal and regulatory provisions, including a presentation of the business model, a description of the main non-financial risks, a presentation of the policies implemented with respect to these risks as well as the outcomes of these policies, including key performance indicators and the information set-out in Article 8 of Regulation (EU) 2020/852 (Green taxonomy);
- implementing such internal control as it determines is necessary to enable the preparation of Information that is free from material misstatement, whether due to fraud or error.

The Statement has been prepared by applying the Company's Guidelines as referred to above.

RESPONSIBILITY OF THE STATUTORY AUDITOR APPOINTED AS INDEPENDENT THIRD PARTY

Based on our work, our responsibility is to express a limited assurance conclusion on:

- the compliance of the Statement with the requirements of Article R.225-105 of the French Commercial Code;
- the fairness of the information provided pursuant to part 3 of sections I and II of Article R.225-105 of the French Commercial Code, i.e. the outcomes of policies, including key performance indicators, and measures relating to the main risks, hereinafter the "Information."

As it is our responsibility to issue an independent conclusion on the information prepared by management, we are not authorised to participate in the preparation of the Information, as this could compromise our independence.

It is not our responsibility to provide a conclusion on:

- the Company's compliance with other applicable legal and regulatory provisions (particularly with regard to the information set-out in Article 8 of Regulation (EU) 2020/852 (Green taxonomy), the duty of vigilance and the fight against corruption and tax evasion);
- the fairness of information set-out in Article 8 of Regulation (EU) 2020/852 (Green taxonomy);
- the compliance of products and services with the applicable regulations.

Applicable regulatory provisions and professional guidance

We performed the work described below in accordance with our audit verification programme in application of Articles A.225-1 et seq. of the French Commercial Code, the professional guidance issued by the French Institute of Statutory Auditors (*Compagnie Nationale des Commissaires aux Comptes*) relating to this engagement and with the international standard ISAE 3000 (revised - Assurance engagements other than audits or reviews of historical financial information).

Independence and quality control

Our independence is defined by Article L.822-11-3 of the French Commercial Code and French Code of Ethics for Statutory Auditors (*Code de déontologie*). In addition, we have implemented a system of quality control including documented policies and procedures aimed at ensuring compliance with applicable legal and regulatory requirements, ethical requirements and the professional guidance issued by the French Institute of Statutory Auditors (*Compagnie Nationale des Commissaires aux Comptes*) relating to this engagement.

Means and resources

Our work engaged the skills of five people between December 2022 and March 2023 and took a total of twelve weeks.

To assist us in conducting our work, we referred to our corporate social responsibility and sustainable development experts. We conducted around fifteen interviews with people responsible for preparing the Statement.

This work involved the use of information and communication technologies allowing the work and interviews to be carried out remotely, without hindering the good execution of the verification process.

Nature and scope of procedures

We planned and performed our work taking account of the risk of material misstatement of the Information.

We consider that the procedures conducted in exercising our professional judgement enable us to express a limited assurance conclusion:

- we familiarized ourselves with the activities of all companies in the consolidation scope and the description of the principal risks;
- we assessed the suitability of the Guidelines with respect to their relevance, completeness, reliability, neutrality and clarity, taking into account, where appropriate, best practices within the sector;
- we verified that the Statement covers each category of information stipulated in section III of Article L. 225-102-1 governing social and environmental affairs, respect for human rights and the fight against corruption and tax evasion;
- we verified that the Statement provides the information required under Article R.225-105 II of the French Commercial Code where relevant with respect to the principal risks, and includes, where applicable, an explanation for the absence of the information required under Article L.225-102-1 III, paragraph 2 of the French Commercial Code;
- we verified that the Statement presents the business model and a description of the principal risks associated with the activities of all the consolidated entities, including where relevant and proportionate, the risks associated with their business relationships, their products or services, as well as their policies, measures and the outcomes thereof, including key performance indicators associated to the principal risks;
- we referred to documentary sources and conducted interviews to:
  - assess the process used to identify and confirm the principal risks as well as the consistency of the outcomes, including the key performance indicators used, with respect to the principal risks and the policies presented, and
  - corroborate the qualitative information (measures and outcomes) that we considered to be the most important[1]. For this information, work was carried out on the consolidating entity;
- we verified that the Statement covers the consolidated scope, *i.e.* all companies within the consolidation scope in accordance with Article L.233-16, with the limits specified in the Statement;
- we obtained an understanding of internal control and risk management procedures implemented by the Company and assessed the data collection process aimed at ensuring the completeness and fairness of the Information;
- for the key performance indicators and other quantitative outcomes[2] that we considered to be the most important, we implemented:
  - analytical procedures that consisted in verifying the correct consolidation of collected data as well as the consistency of changes thereto,
  - substantive tests, on a sample basis and using other selection methods, that consisted in verifying the proper application of definitions and procedures and reconciling data with supporting documents. These procedures were conducted for a selection of contributing entities[3] and covered between 27% and 68% of the consolidated data selected for these tests;
- we assessed the overall consistency of the Statement in relation to our knowledge of the entire Company.

The procedures conducted in a limited assurance review are substantially less in scope than those required to issue a reasonable assurance opinion in accordance with the professional guidelines of the French National Institute of Statutory Auditors (*Compagnie Nationale des Commissaires aux Comptes*); a higher level of assurance would have required us to carry out more extensive procedures.

Paris-La Défense, March 13th, 2023

One of the Statutory Auditors,

Deloitte & Associés

Laurence Dubois	Julien Rivals
Partner, Audit	Partner, Sustainability Services

1 Presence of implemented methodologies and/or processes with regard to the following themes, mentioned in the Statement : binding financing and investment policies, contributing to protecting biodiversity, integrating ESG criteria into asset management, BNP Paribas policy on modern slavery and human trafficking – towards its clients, alignment of the loan portfolio with the net-zero in 2050 objective.

2 Total workforce ; arrivals and departures ; share of women among the SMP population (Senior Management Position) (4) ; number of solidarity hours performed by employees (#1MillionHours2Help) (5) ; share of employees who completed at least four training courses during the previous 12 months (6) ; greenhouse gas emissions in tons of CO2 equivalent (teq CO2)/full-time employees (buildings and business trips) (10) ; paper consumption ; amount of sustainable loans (2) ; assets under management of SFDR Article 8 and 9 open funds distributed in Europe (3) ; number of beneficiaries of products and services supporting financial inclusion (7) ; amount of the support enabling our clients to transition to a low-carbon economy (8); amount of financing to companies contributing to protect terrestrial and marine biodiversity (9). The parenthesized numbers are labelled in order of appearance within the 2022 CSR Dashboard.

3 BNP Paribas France and India (social and environmental data, including KPI 4, 5, 6 and 10), BNP Paribas UK (environmental data, including KPI 10), BNP Paribas CIB, CPBS (including BNL and CPBB/Fortis, KPI 1) BNP Paribas CIB (KPI 2, 8 and 9) BNP Paribas Asset Management (KPI 3), Nickel (KPI 7).

8 GENERAL INFORMATION

8.1 Documents on display

This document is available on the BNP Paribas website https://rates-globalmarkets.bnpparibas.com/gm/Public/LegalDocs.aspx and the National Storage Mechanism (NSM) website, https://data.fca.org.uk/#/nsm/nationalstoragemechanism.

Any person wishing to receive additional information about the BNP Paribas Group can request documents, without commitment, as follows:

- by writing to:

  BNP Paribas – Finance & Strategy

  Investor Relations and Financial Information

  3, rue d'Antin – CAA01B1

  75002 Paris
- by calling: +33 (0)1 40 14 63 58

BNP Paribas' regulatory information can be viewed at: https://invest.bnpparibas.com/en/regulated-information.

8.2 Material contracts

To date, BNP Paribas has not entered into any material contracts – other than those entered into during the normal course of business – that create an obligation or commitment for the entire Group.

8.3 Dependence on external parties

To date, BNP Paribas is not dependent on external parties.

8.4 Significant changes

Save as disclosed herein, there has been no significant change in the Group's financial position or financial performance since 31 March 2023 and no material adverse change in the prospects of BNPP since the end of the last financial period for which audited financial information has been published.

To the best of the Group's knowledge, there have not been any recent events which are to a material extent relevant to the evaluation of BNPP's solvency since 31 March 2023.

8.5 Investments

Investments since 1 January 2020 that are individually valued at over EUR 500 million and considered material at Group level are as follows:

Country	Announcement date	Transaction	Transaction amount	Comments
Canada	16 December 2022	Participation of BNP Paribas SA in a capital increase organised *via* a private placement by Bank of Montreal, in the amount of CAD 750 million for a price of CAD 118.60 per share.	CAD 750 M	In connection with the acquisition of Bank of the West by BMO Financial Group
Germany Austria United Kingdom	17 December 2021 (non-binding agreement signed on 16 December 2021)	Reorganisation of the partnership between BNP Paribas Personal Finance and Stellantis: BNP Paribas would become the exclusive partner of Stellantis captive for Financing activities of all its brands in three strategic markets: Germany, Austria and the United Kingdom.	Not public	Subject to customary approvals
UK	21 October 2019 (closed in 2020)	Strategic partnership giving rise to contributions from BNP Paribas Asset Management of assets/activities in exchange for a 22.5% stake in Allfunds UK Ltd.	EUR 575 M	The amount of the transaction corresponds to the value of the securities received in exchange for the contributions

8.6 Information on locations and businesses in 2022

In accordance with article L.511-45 of the French Monetary and Financial Code and Decree No. 2014-1657 of 29 December 2014, credit institutions, financial holding companies, mixed financial holding companies and investment firms are obliged to disclose information about their locations and activities, included in their scope of consolidation, in each State or territory.

I. LOCATIONS BY COUNTRY

Locations	Business
1. European Union member States	
Austria	
Arval Austria GmbH	Arval
BNPP Asset Management France (Austria branch)	Asset Management
BNPP Leasing SolutionsGmbH (Ex-All In One VermietungGmbH)	Leasing Solutions
BNPP Personal Finance (Austria branch)	Personal Finance
BNPP SA (Austria branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Austria branch)	Insurance
Cardif Assurances Risques Divers (Austria branch)	Insurance
CNH Industrial Capital Europe GmbH	Leasing Solutions
Opel Bank (Austria branch)	Personal Finance
Belgium	
AG Insurance	Insurance
Alpha Crédit SA	Personal Finance
Arval Belgium NV SA	Arval
Astridplaza	Insurance
Axepta BNPP Benelux	Retail Banking
Bancontact Paytoniq Company	Retail Banking
BASS Master Issuer NV	Retail Banking
Batopin	Retail Banking
Belgian Mobile ID	Retail Banking
BNPP 3 Step IT (Belgium branch)	Leasing Solutions
BNPP Asset Management Be Holding	Asset Management
BNPP Asset Management France (Belgium branch)	Asset Management
BNPP B Institutional II	Asset Management
BNPP Fortis	Retail Banking
BNPP Fortis Factor NV	Retail Banking
BNPP Fortis Film Finance	Retail Banking
BNPP FPE Belgium	Retail Banking
BNPP FPE Expansion	Retail Banking
BNPP FPE Management	Retail Banking
BNPP Lease Group Belgium	Leasing Solutions
BNPP Partners for Innovation Belgium	Property Companies (Property used in operations) and Others
BNPP Real Estate Holding Benelux SA	Real Estate Services
BNPP Real Estate Investment Management Belgium	Real Estate Services
BNPP SA (Belgium branch)	Corporate and Institutional Banking
Bpost Bank	Retail Banking
Cardif Assurance Vie (Belgium branch)	Insurance
Cardif Assurances Risques Divers (Belgium branch)	Insurance
CNH Industrial Capital Europe (Belgium branch)	Leasing Solutions
Credissimo	Retail Banking
Credissimo Hainaut SA	Retail Banking
Crédit pour Habitations Sociales	Retail Banking
Demetris NV	Retail Banking

Locations	Business
Eos Aremas Belgium SA NV	Personal Finance
Epimede	Retail Banking
ES Finance	Leasing Solutions
Esmee Master Issuer	Retail Banking
Financière des Paiements Électroniques (Belgium branch)	New Digital Businesses
FL Zeebrugge	Leasing Solutions
Fortis Lease Belgium	Leasing Solutions
FScholen	Corporate and Institutional Banking
Gambit Financial Solutions	Asset Management
Immobilière Sauveniere SA	Retail Banking
Isabel SA NV	Retail Banking
Locadif	Arval
Microstart	Retail Banking
Private Equity Investments(1)	Retail Banking
Sagip	Retail Banking
Sowo Invest SA NV	Retail Banking
Terberg Leasing Justlease Belgium BV	Arval
Bulgaria	
BNPP Personal Finance (Bulgaria branch)	Personal Finance
BNPP SA (Bulgaria branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Bulgaria branch)	Insurance
Cardif Assurances Risques Divers (Bulgaria branch)	Insurance
Czech Rep.	
Arval CZ SRO	Arval
BNPP Cardif Pojistovna AS	Insurance
BNPP Cardif Services SRO	Insurance
BNPP Personal Finance (Czech Republic branch)	Personal Finance
BNPP SA (Czech Republic branch)	Corporate and Institutional Banking
Denmark	
Arval AS	Arval
BNPP Cardif Livforsakring AB (Denmark branch)	Insurance
BNPP Factor AS	Retail Banking
BNPP Leasing Solutions AS	Leasing Solutions
BNPP SA (Denmark branch)	Corporate and Institutional Banking
Cardif Forsakring AB (Denmark branch)	Insurance
Ekspres Bank AS	Personal Finance
Finland	
Arval OY	Arval
BNPP SA (Finland branch)	Corporate and Institutional Banking
France	
2SF - Société des Services Fiduciaires	Retail Banking
AEW Immocommercial	Insurance
Agathe Retail France	Insurance
Antin Participation 5	Property Companies (Property used in operations) and Others
Aprolis Finance	Leasing Solutions
Artegy	Leasing Solutions
Artel	Arval
Arval Fleet Services	Arval
Arval Service Lease	Arval
Arval Trading	Arval
Auguste Thouard Expertise	Real Estate Services
Austin Finance	Corporate and Institutional Banking
Autonoria 2019	Personal Finance
Axa Banque Financement	Personal Finance
Banque de Wallis et Futuna	Retail Banking

Locations	Business
Becquerel	Insurance
BNP Paribas SA	Banking
BNPP 3 Step IT	Leasing Solutions
BNPP Actions Croissance	Insurance
BNPP Actions Euro	Insurance
BNPP Actions Monde	Insurance
BNPP Actions PME ETI	Insurance
BNPP Agility Capital	Principal Investments
BNPP Agility Fund Equity SLP	Principal Investments
BNPP Agility Fund Private Debt SLP	Principal Investments
BNPP AM International Hedged Strategies	Asset Management
BNPP Antilles Guyane	Retail Banking
BNPP Aqua	Insurance
BNPP Arbitrage	Corporate and Institutional Banking
BNPP Asset Management France	Asset Management
BNPP Asset Management Holding	Asset Management
BNPP Asset Management Services Grouping	Asset Management
BNPP Best Selection Actions Euro	Insurance
BNPP Cardif	Insurance
BNPP Convictions	Insurance
BNPP CP Cardif Private Debt	Insurance
BNPP CP Infrastructure Investments Fund	Insurance
BNPP Dealing Services	Asset Management
BNPP Deep Value	Insurance
BNPP Développement	Retail Banking
BNPP Développement Humain	Insurance
BNPP Développement Oblig	Retail Banking
BNPP Diversiflex	Asset Management
BNPP Diversipierre	Insurance
BNPP Factor	Retail Banking
BNPP France Crédit	Insurance
BNPP Global Senior Corporate Loans	Insurance
BNPP Home Loan SFH	Property Companies (Property used in operations) and Others
BNPP Immobilier Résidences Services	Real Estate Services
BNPP Immobilier Résidentiel	Real Estate Services
BNPP Indice Amerique du Nord	Insurance
BNPP IRB Participations	Europe-Mediterranean
BNPP Lease Group	Leasing Solutions
BNPP Moderate Focus Italia	Insurance
BNPP Monétaire Assurance	Insurance
BNPP Multistratégies Protection 80	Insurance
BNPP Next Tech	Insurance
BNPP Nouvelle Calédonie	Retail Banking
BNPP Partners for Innovation	Property Companies (Property used in operations) and Others
BNPP Personal Finance	Personal Finance
BNPP Procurement Tech	Property Companies (Property used in operations) and Others
BNPP Protection Monde	Insurance
BNPP Public Sector SA	Property Companies (Property used in operations) and Others
BNPP Real Estate	Real Estate Services
BNPP Real Estate Conseil Habitation & Hospitality	Real Estate Services
BNPP Real Estate Consult France	Real Estate Services
BNPP Real Estate Financial Partner	Real Estate Services
BNPP Real Estate Investment Management France	Real Estate Services
BNPP Real Estate Property Management France SAS	Real Estate Services

Locations	Business
BNPP Real Estate Transaction France	Real Estate Services
BNPP Real Estate Valuation France	Real Estate Services
BNPP Réunion	Retail Banking
BNPP Sélection Dynamique Monde	Insurance
BNPP Smallcap Euroland	Insurance
BNPP Social Business France	Insurance
C Santé	Insurance
Cafineo	Personal Finance
Camgestion Obliflexible	Insurance
Capital France Hotel	Insurance
Cardif Alternatives Part I	Insurance
Cardif Assurance Vie	Insurance
Cardif Assurances Risques Divers	Insurance
Cardif BNPP AM Emerging Bond	Insurance
Cardif BNPP AM Global Senior Corporate Loans	Insurance
Cardif BNPP IP Signatures	Insurance
Cardif BNPP IP Smid Cap Euro	Insurance
Cardif CPR Global Return	Insurance
Cardif Edrim Signatures	Insurance
Cardif IARD	Insurance
Cardif Retraite	Insurance
Cardif Vita Convex Fund Eur	Insurance
Cardimmo	Insurance
Carma Grand Horizon SARL	Insurance
Carrefour Banque	Personal Finance
Cedrus Carbon Initiative Trends	Insurance
Cent ASL	Arval
Centre Commercial Francilia	Insurance
CFH Bercy	Insurance
CFH Bercy Hotel	Insurance
CFH Bercy Intermédiaire	Insurance
CFH Boulogne	Insurance
CFH Cap d'Ail	Insurance
CFH Montmartre	Insurance
CFH Montparnasse	Insurance
Claas Financial Services	Leasing Solutions
CNH Industrial Capital Europe	Leasing Solutions
Cofica Bail	Personal Finance
Cofiparc	Arval
Cofiplan	Personal Finance
Compagnie pour le Financement des Loisirs	Retail Banking
Construction-Sale Companies[(3)]	Real Estate Services
Copartis	Retail Banking
Corosa	Insurance
Crédit Moderne Antilles Guyane	Personal Finance
Crédit Moderne Océan Indien	Personal Finance
Défense CB3 SAS	Insurance
Diversipierre DVP 1	Insurance
Domofinance	Personal Finance
DVP European Channel	Insurance
DVP Green Clover	Insurance
DVP Haussmann	Insurance
DVP Heron	Insurance
E Carat 10	Personal Finance
Eclair	Insurance
EP L	Insurance
EP1 Grands Moulins	Insurance

Locations	Business
Euro Securities Partners	Retail Banking
Eurotitrisation	Corporate and Institutional Banking
Evollis	Personal Finance
Exane	Corporate and Institutional Banking
Exane Asset Management	Corporate and Institutional Banking
Exane Derivatives	Corporate and Institutional Banking
Exane Derivatives Gerance	Corporate and Institutional Banking
Exane Finance	Corporate and Institutional Banking
FCT Juice	Corporate and Institutional Banking
FCT Lafayette 2021	Property Companies (Property used in operations) and Others
FCT Laffitte 2021	Property Companies (Property used in operations) and Others
FCT Opéra 2014	Property Companies (Property used in operations) and Others
FCT Pulse France 2022	Arval
FCT Pyramides 2022	Property Companies (Property used in operations) and Others
FDI Poncelet	Insurance
Financière des Italiens	Corporate and Institutional Banking
Financière des Paiements Électroniques	New Digital Businesses
Financière du Marché Saint Honoré	Corporate and Institutional Banking
Fleur SAS	Insurance
Floa	New Digital Businesses
Foncière Partenaires	Insurance
Fonds d’Investissements Immobiliers pour le Commerce et la Distribution	Insurance
Fortis Lease	Leasing Solutions
FP Cardif Convex Fund USD	Insurance
GIE BNPP Cardif	Insurance
GIE BNPP Real Estate (Ex- GIE Siège Issy)	Real Estate Services
GIE Groupement Auxiliaire de Moyens	Property Companies (Property used in operations) and Others
GIE Groupement d’Études et de Prestations	Property Companies (Property used in operations) and Others
GIE Ocean	Retail Banking
GPinvest 10	Insurance
Harmony Prime	Asset Management
Hemisphere Holding	Insurance
Hibernia France	Insurance
Icare	Insurance
Icare Assurance	Insurance
Iqera Services	Personal Finance
JCB Finance	Leasing Solutions
Jivago Holding	Retail Banking
Karapass Courtage	Insurance
Korian et Partenaires Immobilier 1	Insurance
Korian et Partenaires Immobilier 2	Insurance
Loisirs Finance	Personal Finance
Louveo	Arval
Lyf SA	New Digital Businesses
Lyf SAS	New Digital Businesses
MGF	Leasing Solutions
Nanterre Arboretum	Real Estate Services
Natio Assurance	Insurance
Natio Énergie 2	Leasing Solutions
Natio Fonds Ampère 1	Insurance
Natio Fonds Athènes Investissement N 5	Insurance
Natio Fonds Colline International	Insurance

Locations	Business
Natio Fonds Collines Investissement N 1	Insurance
Natio Fonds Collines Investissement N 3	Insurance
Natiocredibail	Leasing Solutions
Neuilly Contentieux	Personal Finance
New Alpha Cardif Incubator Fund	Insurance
Noria 2018-1	Personal Finance
Noria 2020	Personal Finance
Noria 2021	Personal Finance
Opel Bank	Personal Finance
Opéra Rendement	Insurance
Optichamps	Corporate and Institutional Banking
Parilease	Corporate and Institutional Banking
Partecis	Retail Banking
Participations Opéra	Corporate and Institutional Banking
Partner’s & Services	Real Estate Services
Paylib Services	Retail Banking
Permal Cardif Co Investment Fund	Insurance
Personal Finance Location	Personal Finance
Pixel 2021	Leasing Solutions
Portzamparc	Retail Banking
Preim Healthcare SAS	Insurance
Public Location Longue Durée	Arval
PWH	Insurance
Reumal Investissements	Insurance
Rueil Ariane	Insurance
Same Deutz Fahr Finance	Leasing Solutions
SAS HVP	Insurance
SCI 68/70 rue de Lagny - Montreuil	Insurance
SCI Alpha Park	Insurance
SCI Batipart Chadesrent	Insurance
SCI Biv Malakoff	Insurance
SCI BNPP Pierre I	Insurance
SCI BNPP Pierre II	Insurance
SCI Bobigny Jean Rostand	Insurance
SCI Bouleragny	Insurance
SCI Cardif Logement	Insurance
SCI Citylight Boulogne	Insurance
SCI Clichy Nuovo	Insurance
SCI Défense Étoile	Insurance
SCI Défense Vendôme	Insurance
SCI Étoile du Nord	Insurance
SCI Fontenay Plaisance	Insurance
SCI Imefa Velizy	Insurance
SCI Le Mans Gare	Insurance
SCI Nanterre Guilleraies	Insurance
SCI Nantes Carnot	Insurance
SCI Odyssée	Insurance
SCI Pantin Les Moulins	Insurance
SCI Paris Batignolles	Insurance
SCI Paris Cours de Vincennes	Insurance
SCI Paris Grande Armée	Insurance
SCI Paris Turenne	Insurance
SCI Portes de Claye	Insurance
SCI Rue Moussorgski	Insurance
SCI Rueil Caudron	Insurance
SCI Saint Denis Landy	Insurance
SCI Saint Denis Mitterrand	Insurance

Locations	Business
SCI Saint-Denis Jade	Insurance
SCI SCOO	Insurance
SCI Vendôme Athènes	Insurance
SCI Villeurbanne Stalingrad	Insurance
Secar	Insurance
Services Épargne Entreprise	Insurance
Services Logiciels d'Intégration Boursière	Securities Services
SNC Batipart Mermoz	Insurance
SNC Batipart Poncelet	Insurance
SNC Natiocredimurs	Leasing Solutions
SNC Taitbout Participation 3	Corporate and Institutional Banking
Société Francaise d'Assurances sur la Vie	Insurance
Société Orbaisienne de Participations	Corporate and Institutional Banking
Theam Quant Europe Climate Carbon Offset Plan	Asset Management
Tikehau Cardif Loan Europe	Insurance
Transvalor	Property Companies (Property used in operations) and Others
United Partnership	Personal Finance
Valeur Pierre Epargne	Insurance
Valtitres FCP	Insurance
Velizy Holding	Insurance
Germany	
Arval Deutschland GmbH	Arval
AssetMetrix	Securities Services
BGL BNPP (Germany branch)	Retail Banking
BNPP 3 Step IT (Germany branch)	Leasing Solutions
BNPP Asset Management France (Germany branch)	Asset Management
BNPP Emissions Und Handels GmbH	Corporate and Institutional Banking
BNPP Factor GmbH	Retail Banking
BNPP Lease Group (Germany branch)	Leasing Solutions
BNPP Real Estate Consult GmbH	Real Estate Services
BNPP Real Estate GmbH	Real Estate Services
BNPP Real Estate Holding GmbH	Real Estate Services
BNPP Real Estate Investment Management Germany GmbH	Real Estate Services
BNPP Real Estate Property Development & Services GmbH	Real Estate Services
BNPP Real Estate Property Management GmbH	Real Estate Services
BNPP SA (Germany branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Germany branch)	Insurance
Cardif Assurances Risques Divers (Germany branch)	Insurance
Claas Financial Services (Germany branch)	Leasing Solutions
CNH Industrial Capital Europe (Germany branch)	Leasing Solutions
Diversipierre Germany GmbH	Insurance
Exane (Germany branch)	Corporate and Institutional Banking
Financière des Paiements Électroniques (Germany branch)	New Digital Businesses
Fortis Lease Deutschland GmbH	Leasing Solutions
Horizon Development GmbH	Insurance
ID Cologne A1 GmbH	Insurance
ID Cologne A2 GmbH	Insurance
JCB Finance (Germany branch)	Leasing Solutions
MGF (Germany branch)	Leasing Solutions
OC Health Real Estate GmbH	Insurance
Opel Bank (Germany branch)	Personal Finance
PF Services GmbH	Personal Finance
Seniorenzentren Reinbeck Oberursel München Objekt GmbH	Insurance
Seniorenzentrum Butzbach Objekt GmbH	Insurance
Seniorenzentrum Heilbronn Objekt GmbH	Insurance
Seniorenzentrum Kassel Objekt GmbH	Insurance

Locations	Business
Seniorenzentrum Wolfratshausen Objekt GmbH	Insurance
Greece	
Arval Hellas Car Rental SA	Arval
BNPP SA (Greece branch)	Corporate and Institutional Banking
Hungary	
Arval Magyarorszag KFT	Arval
BNPP SA (Hungary branch)	Corporate and Institutional Banking
Cardif Biztosito Magyarorszag ZRT	Insurance
Magyar Cetelem Bank ZRT	Personal Finance
Ireland	
Aries Capital DAC	Corporate and Institutional Banking
BGZ Poland ABS1 DAC	Europe-Mediterranean
BNPP Fund Administration Services Ireland Ltd	Securities Services
BNPP Ireland Unlimited Co	Corporate and Institutional Banking
BNPP Prime Brokerage International Ltd	Corporate and Institutional Banking
BNPP Real Estate Advisory and Property Management Ireland Ltd	Real Estate Services
BNPP SA (Ireland branch)	Corporate and Institutional Banking
BNPP Vartry Reinsurance DAC	Corporate and Institutional Banking
Darnell DAC	Insurance
G C Thematic Opportunities II	Insurance
Greenval Insurance DAC	Arval
Madison Arbor Ltd	Corporate and Institutional Banking
Matchpoint Finance PLC	Corporate and Institutional Banking
SME Alternative Financing DAC	Asset Management
Utexam Logistics Ltd	Corporate and Institutional Banking
Utexam Solutions Ltd	Corporate and Institutional Banking
Italy	
Artigiancassa SPA	Retail Banking
Arval Service Lease Italia SPA	Arval
AutoFlorence 1 SRL	Personal Finance
AutoFlorence 2 SRL	Personal Finance
Banca Nazionale Del Lavoro SPA	Retail Banking
BNL Leasing SPA	Leasing Solutions
BNPP 3 Step IT (Italy branch)	Leasing Solutions
BNPP Asset Management France (Italy branch)	Asset Management
BNPP Cardif Vita Compagnia di Assicurazione E Riassicurazione SPA	Insurance
BNPP Lease Group (Italy branch)	Leasing Solutions
BNPP Lease Group Leasing Solutions SPA	Leasing Solutions
BNPP Partners for Innovation Italia SRL	Property Companies (Property used in operations) and Others
BNPP Real Estate Advisory Italy SPA	Real Estate Services
BNPP Real Estate Investment Management Germany GmbH (Italy branch)	Real Estate Services
BNPP Real Estate Investment Management Italy SPA	Real Estate Services
BNPP Real Estate Property Management Italy SRL	Real Estate Services
BNPP Rental Solutions SPA	Leasing Solutions
BNPP SA (Italy branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Italy branch)	Insurance
Cardif Assurances Risques Divers (Italy branch)	Insurance
CFH Algonquin Management Partners France Italia	Insurance
CFH Milan Holdco SRL	Insurance
Claas Financial Services (Italy branch)	Leasing Solutions
CNH Industrial Capital Europe (Italy branch)	Leasing Solutions
Diamante Re SRL	Corporate and Institutional Banking
EMF IT 2008 1 SRL	Retail Banking
Era Uno SRL	Retail Banking
Eutimm SRL	Retail Banking

Locations	Business
Exane (Italy branch)	Corporate and Institutional Banking
Financit SPA	Retail Banking
Findomestic Banca SPA	Personal Finance
Florence Real Estate Developments SPA	Personal Finance
Florence SPV SRL	Personal Finance
Fundamenta	Insurance
Horti Milano SRL	Real Estate Services
Immera SRL	Retail Banking
International Factors Italia SPA	Retail Banking
JCB Finance (Italy branch)	Leasing Solutions
MGF (Italy branch)	Leasing Solutions
Opel Bank (Italy branch)	Personal Finance
Permicro SPA	Retail Banking
Servizio Italia SPA	Retail Banking
Sviluppo HQ Tiburtina SRL	Retail Banking
Sviluppo Residenziale Italia SRL	Real Estate Services
Tierre Securitisation SRL	Retail Banking
Vela OBG SRL	Retail Banking
Vela RMBS SRL	Retail Banking
Worldline Merchant Services Italia SPA (Ex- Axepta SPA)	Retail Banking
Luxembourg	
Arval Luxembourg SA	Arval
Batipart Participations SAS	Insurance
BGL BNPP	Retail Banking
BNPP Asset Management Luxembourg	Asset Management
BNPP Easy	Asset Management
BNPP Flexi I	Asset Management
BNPP Fortis Funding SA	Retail Banking
BNPP Funds	Asset Management
BNPP Lease Group Luxembourg SA	Retail Banking
BNPP Leasing Solutions	Leasing Solutions
BNPP Real Estate Advisory & Property Management Luxembourg SA	Real Estate Services
BNPP Real Estate Investment Management Luxembourg SA	Real Estate Services
BNPP SA (Luxembourg branch)	Corporate and Institutional Banking
BNPP SB Re	Retail Banking
Cardif Lux Vie	Insurance
CFH Berlin Holdco SARL	Insurance
Cofhylux SA	Retail Banking
Compagnie Financière Ottomane SA	Retail Banking
Exane Solutions Luxembourg SA	Corporate and Institutional Banking
Greenstars BNPP	Corporate and Institutional Banking
Le Sphinx Assurances Luxembourg SA	Retail Banking
Luxhub SA	Retail Banking
Rubin SARL	Insurance
Schroder European Operating Hotels Fund 1	Insurance
Securasset SA	Corporate and Institutional Banking
Seniorenzentren Deutschland Holding SARL	Insurance
Single Platform Investment Repackaging Entity SA	Corporate and Institutional Banking
Société Immobilière du Royal Building SA	Insurance
Theam Quant	Asset Management
Visalux	Retail Banking
Netherlands	
Arval BV	Arval
BNPP 3 Step IT (Netherlands branch)	Leasing Solutions
BNPP Asset Management France (Netherlands branch)	Asset Management
BNPP Asset Management NL Holding NV	Asset Management

Locations	Business
BNPP Cardif BV	Insurance
BNPP Factoring Support	Retail Banking
BNPP Islamic Issuance BV	Corporate and Institutional Banking
BNPP Issuance BV	Corporate and Institutional Banking
BNPP Leasing Solutions NV	Leasing Solutions
BNPP Personal Finance BV	Personal Finance
BNPP Real Estate Advisory Netherlands BV	Real Estate Services
BNPP SA (Netherlands branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Netherlands branch)	Insurance
Cardif Assurances Risques Divers (Netherlands branch)	Insurance
CNH Industrial Capital Europe BV	Leasing Solutions
Fortis Vastgoedlease BV	Leasing Solutions
Heffiq Heftruck Verhuur BV	Leasing Solutions
Opel Finance NV	Personal Finance
Personal Car Lease BV	Arval
Phedina Hypotheken 2010 BV	Personal Finance
Terberg Busines Lease Group BV	Arval
Poland	
Arval Service Lease Polska SP ZOO	Arval
BNPP Bank Polska SA	Europe-Mediterranean
BNPP Faktoring Spolka ZOO	Europe-Mediterranean
BNPP Group Service Center SA	Europe-Mediterranean
BNPP Lease Group SP ZOO	Leasing Solutions
BNPP Leasing Services	Leasing Solutions
BNPP Real Estate Poland SP ZOO	Real Estate Services
BNPP SA (Poland branch)	Corporate and Institutional Banking
Cardif Assurances Risques Divers (Poland branch)	Insurance
Cardif Polska Towarzystwo Ubezpieczen Na Zycie SA	Insurance
Claas Financial Services (Poland branch)	Leasing Solutions
CNH Industrial Capital Europe (Poland branch)	Leasing Solutions
Portugal	
Arval Service Lease Aluger Operational Automoveis SA	Arval
BNPP Factor Sociedade Financeira de Credito SA	Retail Banking
BNPP Lease Group (Portugal branch)	Leasing Solutions
BNPP Personal Finance (Portugal branch)	Personal Finance
BNPP Real Estate Investment Management Germany GmbH Lisbon Representative Office	Real Estate Services
BNPP Real Estate Portugal Unipersonal LDA	Real Estate Services
BNPP SA (Portugal branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Portugal branch)	Insurance
Cardif Assurances Risques Divers (Portugal branch)	Insurance
Cardif Services AEIE	Insurance
Exeo Aura & Echo Offices Lda	Real Estate Services
Expo Atlantico EAII Investimentos Imobiliarios SA	Corporate and Institutional Banking
Expo Indico EIII Investimentos Imobiliarios SA	Corporate and Institutional Banking
Financière des Paiements Electroniques (Portugal branch)	New Digital Businesses
Fortis Lease Portugal	Leasing Solutions
Romania	
Arval Service Lease Romania SRL	Arval
BNPP Leasing Solutions IFN SA	Leasing Solutions
BNPP Personal Finance (Romania branch)	Personal Finance
BNPP SA (Romania branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Romania branch)	Insurance
Cardif Assurances Risques Divers (Romania branch)	Insurance
Central Europe Technologies SRL	Personal Finance
Slovakia	
Arval Slovakia SRO	Arval

Locations	Business
BNPP Personal Finance (Slovakia branch)	Personal Finance
Poistovna Cardif Slovakia AS	Insurance
Spain	
Arval Service Lease SA	Arval
Autonoria Spain 2019	Personal Finance
Autonoria Spain 2021 FT	Personal Finance
Autonoria Spain 2022 FT	Personal Finance
Banco Cetelem SA	Personal Finance
BNPP Factor (Spain branch)	Retail Banking
BNPP Fortis (Spain branch)	Corporate and Institutional Banking
BNPP Lease Group (Spain branch)	Leasing Solutions
BNPP Real Estate Investment Management Germany GmbH (Spain branch)	Real Estate Services
BNPP Real Estate Investment Management Spain SA	Real Estate Services
BNPP Real Estate Spain SA	Real Estate Services
BNPP SA (Spain branch)	Corporate and Institutional Banking
Cardif Assurance Vie (Spain branch)	Insurance
Cardif Assurances Risques Divers (Spain branch)	Insurance
Cariboo Development SL	Real Estate Services
Cetelem Gestion AIE	Personal Finance
Cetelem Servicios Informaticos AIE	Personal Finance
Claas Financial Services (Spain branch)	Leasing Solutions
CNH Industrial Capital Europe (Spain branch)	Leasing Solutions
Ejesur SA	Corporate and Institutional Banking
Exane (Spain branch)	Corporate and Institutional Banking
Financière des Paiements Électroniques (Spain branch)	New Digital Businesses
Fortis Lease Iberia SA	Leasing Solutions
GCC Consumo Establecimiento Financiero de Credito SA	Personal Finance
International Development Resources AS Services SA	Personal Finance
Noria Spain 2020 FT	Personal Finance
Opel Bank (Spain branch)	Personal Finance
Ribera Del Loira Arbitrage	Corporate and Institutional Banking
Securitisation funds UCI and RMBS Prado(2)	Personal Finance
Servicios Financieros Carrefour EFC SA	Personal Finance
Union de Creditos Inmobiliarios SA	Personal Finance
Wapiti Development SL	Real Estate Services
XFERA Consumer Finance EFC SA	Personal Finance
Sweden	
Alfred Berg Kapitalforvaltning AS (Sweden branch)	Asset Management
Arval AB	Arval
BNPP Cardif Livforsakring AB	Insurance
BNPP Leasing Solutions AB	Leasing Solutions
BNPP SA (Sweden branch)	Corporate and Institutional Banking
Cardif Forsakring AB	Insurance
Cardif Nordic AB	Insurance
Dreams Sustainable AB	Europe-Mediterranean
Ekspres Bank AS (Sweden branch)	Personal Finance
Exane (Sweden branch)	Corporate and Institutional Banking
2. Other European countries	
Guernsey	
BNPP SA (Guernsey branch)	Corporate and Institutional Banking
BNPP Suisse SA (Guernsey branch)	Corporate and Institutional Banking
Jersey	
BNPP SA (Jersey branch)	Corporate and Institutional Banking
Monaco	
BNPP SA (Monaco branch)	Retail Banking
BNPP Wealth Management Monaco	Wealth Management

Locations	Business
Norway	
Alfred Berg Kapitalforvaltning AS	Asset Management
Arval AS Norway	Arval
BNPP Cardif Livforsakring AB (Norway branch)	Insurance
BNPP Leasing Solution AS	Leasing Solutions
BNPP SA (Norway branch)	Corporate and Institutional Banking
Cardif Forsakring AB (Norway branch)	Insurance
Drypnir AS	Asset Management
Ekspres Bank AS (Norway branch)	Personal Finance
Russia	
Arval LLC	Arval
BNPP Bank JSC	Corporate and Institutional Banking
BNPP Technology LLC	Corporate and Institutional Banking
Cardif Insurance Co LLC	Insurance
Serbia	
TEB SH A	Europe-Mediterranean
Switzerland	
Arval Schweiz AG	Arval
BNPP Leasing Solutions Suisse SA	Leasing Solutions
BNPP SA (Switzerland branch)	Corporate and Institutional Banking
BNPP Suisse SA	Corporate and Institutional Banking
Cardif Assurance Vie (Switzerland branch)	Insurance
Cardif Assurances Risques Divers (Switzerland branch)	Insurance
Exane (Switzerland branch)	Corporate and Institutional Banking
Exane Derivatives (Switzerland branch)	Corporate and Institutional Banking
Opel Finance SA	Personal Finance
United Kingdom	
Allfunds Group PLC	Securities Services
Arval UK Group Ltd	Arval
Arval UK Leasing Services Ltd	Arval
Arval UK Ltd	Arval
BNP PUK Holding Ltd	Corporate and Institutional Banking
BNPP 3 Step IT (United Kingdom branch)	Leasing Solutions
BNPP Asset Management UK Ltd	Asset Management
BNPP Commercial Finance Ltd	Retail Banking
BNPP Fleet Holdings Ltd	Arval
BNPP Lease Group PLC	Leasing Solutions
BNPP Leasing Solutions Ltd	Leasing Solutions
BNPP Net Ltd	Corporate and Institutional Banking
BNPP Real Estate Advisory & Property Management UK Ltd	Real Estate Services
BNPP Real Estate Facilities Management Ltd	Real Estate Services
BNPP Real Estate Investment Management Ltd	Real Estate Services
BNPP Real Estate Investment Management UK Ltd	Real Estate Services
BNPP Real Estate Property Development UK Ltd	Real Estate Services
BNPP Rental Solutions Ltd	Leasing Solutions
BNPP SA (United Kingdom branch)	Corporate and Institutional Banking
BNPP Trust Corp UK Ltd	Securities Services
Cardif Pinnacle Insurance Holdings PLC	Insurance
Claas Financial Services Ltd	Leasing Solutions
CNH Industrial Capital Europe Ltd	Leasing Solutions
Creation Consumer Finance Ltd	Personal Finance
Creation Financial Services Ltd	Personal Finance
E Carat 11 PLC	Personal Finance
E Carat 12 PLC	Personal Finance
Exane (United Kingdom branch)	Corporate and Institutional Banking
Exane Derivatives (United Kingdom branch)	Corporate and Institutional Banking

Locations	Business
Fortis Lease UK Ltd	Leasing Solutions
Harewood Helena 1 Ltd	Asset Management
Harewood Helena 2 Ltd	Insurance
Impax Asset Management Group PLC	Asset Management
JCB Finance Holdings Ltd	Leasing Solutions
Kantox Holding Ltd (Ex- Kantox Ltd)	Corporate and Institutional Banking
Manitou Finance Ltd	Leasing Solutions
Parker Tower Ltd	Real Estate Services
Pinnacle Pet Holding Ltd	Insurance
REPD Parker Ltd	Real Estate Services
Vauxhall Finance PLC	Personal Finance
Ukraine	
Joint Stock Company Ukrsibbank	Europe-Mediterranean
3. Africa & Mediterranean basin	
Algeria	
BNPP El Djazair	Europe-Mediterranean
Cardif El Djazair	Insurance
Bahrain	
BNPP SA (Bahrain branch)	Corporate and Institutional Banking
Botswana	
RCS Botswana Pty Ltd	Personal Finance
Ivory Coast	
Banque Internationale pour le Commerce et l’Industrie de la Côte d’Ivoire	Europe-Mediterranean
BICI Bourse	Europe-Mediterranean
Kuwait	
BNPP SA (Kuwait branch)	Corporate and Institutional Banking
Morocco	
Arval Maroc SA	Arval
Banque Marocaine pour le Commerce et l’Industrie	Europe-Mediterranean
Banque Marocaine pour le Commerce et l’Industrie Banque Offshore	Europe-Mediterranean
BDSI	Europe-Mediterranean
BMCI Leasing	Europe-Mediterranean
Namibia	
RCS Investment Holdings Namibia Pty Ltd	Personal Finance
Qatar	
BNPP SA (Qatar branch)	Corporate and Institutional Banking
Saudi Arabia	
BNPP Investment Co KSA	Corporate and Institutional Banking
BNPP SA (Saudi Arabia branch)	Corporate and Institutional Banking
Senegal	
Banque Internationale pour le Commerce et l’Industrie du Sénégal	Europe-Mediterranean
South Africa	
BNPP Personal Finance South Africa Ltd	Personal Finance
BNPP SA (South Africa branch)	Corporate and Institutional Banking
RCS Cards Pty Ltd	Personal Finance
Türkiye	
Bantas Nakit AS	Europe-Mediterranean
BNPP Cardif Emeklilik AS	Insurance
BNPP Cardif Hayat Sigorta AS	Insurance
BNPP Cardif Sigorta AS	Insurance
BNPP Finansal Kiralama AS	Leasing Solutions
BNPP Fortis Yatirimlar Holding AS	Europe-Mediterranean
BNPP Yatirimlar Holding AS	Europe-Mediterranean
TEB ARF Teknoloji Anonim Sirketi	Europe-Mediterranean
TEB Arval Arac Filo Kiralama AS	Arval

Locations	Business
TEB Faktoring AS	Europe-Mediterranean
TEB Finansman AS	Personal Finance
TEB Holding AS	Europe-Mediterranean
TEB Yatirim Menkul Degerler AS	Europe-Mediterranean
Turk Ekonomi Bankasi AS	Europe-Mediterranean
United Arab Emirates	
BNPP Real Estate (United Arab Emirates branch)	Real Estate Services
BNPP SA (United Arab Emirates branch)	Corporate and Institutional Banking
4. Americas	
Argentina	
BNPP SA (Argentina branch)	Corporate and Institutional Banking
Cardif Seguros SA	Insurance
Bermuda	
Decart Re Ltd	Corporate and Institutional Banking
Brazil	
Arval Brasil Ltda	Arval
Banco BNPP Brasil SA	Corporate and Institutional Banking
Banco Cetelem SA	Personal Finance
BGN Mercantil E Servicos Ltda	Personal Finance
BNPP Asset Management Brasil Ltda	Asset Management
BNPP EQD Brazil Fund Fundo de Investmento Multimercado	Corporate and Institutional Banking
BNPP Proprietario Fundo de Investimento Multimercado	Corporate and Institutional Banking
Cardif do Brasil Seguros e Garantias SA	Insurance
Cardif do Brasil Vida e Previdencia SA	Insurance
Cardif Ltda	Insurance
Cetelem America Ltda	Personal Finance
Cetelem Servicos Ltda	Personal Finance
Luizaseg	Insurance
NCVP Participacoes Societarias SA	Insurance
Canada	
BNPP Canada Corp	Corporate and Institutional Banking
BNPP IT Solutions Canada Inc	Corporate and Institutional Banking
BNPP Leasing Solutions Canada Inc	Retail Banking
BNPP SA (Canada branch)	Corporate and Institutional Banking
Chile	
Arval Relsa SPA	Arval
Bancoestado Administradora General de Fondos SA	Asset Management
BNPP Cardif Seguros de Vida SA	Insurance
BNPP Cardif Seguros Generales SA	Insurance
BNPP Cardif Servicios y Asistencia Ltda	Insurance
Colombia	
BNPP Colombia Corporacion Financiera SA	Corporate and Institutional Banking
Cardif Colombia Seguros Generales SA	Insurance
Mexico	
BNPP Mexico Holding	Corporate and Institutional Banking
BNPP Mexico SA Institucion de Banca Multiple	Corporate and Institutional Banking
Cardif Mexico Seguros de Vida SA de CV	Insurance
Cardif Mexico Seguros Generales SA de CV	Insurance
Cetelem SA de CV	Personal Finance
Peru	
BNPP Cardif Compania de Seguros y Reaseguros SA	Insurance
Cardif Servicios SAC	Insurance
USA	
BancWest Holding Inc	Retail Banking
BancWest Holding Inc Grantor Trust ERC Subaccount	Retail Banking

Locations	Business
Bancwest Holding Inc Umbrella Trust	Retail Banking
BancWest Investment Services Inc	Retail Banking
Bank of the West	Retail Banking
Bank of the West Auto Trust 2019-1	Retail Banking
Bank of the West Auto Trust 2019-2	Retail Banking
BNPP Asset Management USA Holdings Inc	Asset Management
BNPP Asset Management USA Inc	Asset Management
BNPP Capital Services Inc	Corporate and Institutional Banking
BNPP Financial Services LLC	Securities Services
BNPP Fortis (United States branch)	Corporate and Institutional Banking
BNPP FS LLC	Corporate and Institutional Banking
BNPP RCC Inc	Corporate and Institutional Banking
BNPP SA (United States branch)	Corporate and Institutional Banking
BNPP Securities Corp	Corporate and Institutional Banking
BNPP US Investments Inc	Corporate and Institutional Banking
BNPP US Wholesale Holdings Corp	Corporate and Institutional Banking
BNPP USA Inc	Corporate and Institutional Banking
BNPP VPG Brookline Cre LLC	Corporate and Institutional Banking
BNPP VPG EDMC Holdings LLC	Corporate and Institutional Banking
BNPP VPG Express LLC	Corporate and Institutional Banking
BNPP VPG I LLC	Corporate and Institutional Banking
BNPP VPG II LLC	Corporate and Institutional Banking
BNPP VPG III LLC	Corporate and Institutional Banking
BNPP VPG Master LLC	Corporate and Institutional Banking
BOW Auto Receivables LLC	Retail Banking
BWC Opportunity Fund 2 Inc	Retail Banking
BWC Opportunity Fund Inc	Retail Banking
CFB Community Development Corp	Retail Banking
Claas Financial Services LLC	Retail Banking
Commercial Federal Affordable Housing Inc	Retail Banking
Dale Bakken Partners 2012 LLC	Corporate and Institutional Banking
Exane Inc	Corporate and Institutional Banking
First Santa Clara Corp	Retail Banking
FSI Holdings Inc	Corporate and Institutional Banking
Starbird Funding Corp	Corporate and Institutional Banking
United California Bank Deferred Compensation Plan Trust	Retail Banking
Ursus Real Estate Inc	Retail Banking
5. Asia & Pacific	
Australia	
BNPP Fund Services Australasia Pty Ltd	Securities Services
BNPP SA (Australia branch)	Corporate and Institutional Banking
China	
Bank of Nanjing	Europe-Mediterranean
BNPP China Ltd	Corporate and Institutional Banking
BOB Cardif Life Insurance Co Ltd	Insurance
BON BNPP Consumer Finance Co Ltd (Ex-Suning Consumer Finance Co Ltd)	Personal Finance
Cetelem Business Consulting Shanghai Co Ltd	Personal Finance
Genius Auto Finance Co Ltd	Personal Finance
Haitong Fortis Private Equity Fund Management Co Ltd	Asset Management
HFT Investment Management Co Ltd	Asset Management
Zhejiang Wisdom Puhua Financial Leasing Co Ltd	Personal Finance
Hong Kong	
BNPP Arbitrage Hong Kong Ltd	Corporate and Institutional Banking
BNPP Asset Management Asia Ltd	Asset Management
BNPP Finance Hong Kong Ltd	Corporate and Institutional Banking
BNPP SA (Hong Kong branch)	Corporate and Institutional Banking

Locations	Business
BNPP Securities Asia Ltd	Corporate and Institutional Banking
India	
Baroda BNPP AMC Private Ltd (Ex- BNPP Asset Management India Private Ltd)	Asset Management
BNPP Global Securities Operations Private Ltd	Securities Services
BNPP India Holding Private Ltd	Corporate and Institutional Banking
BNPP India Solutions Private Ltd	Corporate and Institutional Banking
BNPP SA (India branch)	Corporate and Institutional Banking
BNPP Securities India Private Ltd	Corporate and Institutional Banking
Espresso Financial Services Private Limited	Personal Investors
Geojit Technologies Private Ltd	Personal Investors
Human Value Developers Private Ltd	Personal Investors
Sharekhan BNPP Financial Services Ltd	Personal Investors
Sharekhan Ltd	Personal Investors
Indonesia	
Bank BNPP Indonesia PT	Corporate and Institutional Banking
BNPP Asset Management PT	Asset Management
BNPP Sekuritas Indonesia PT	Corporate and Institutional Banking
Pt Andalan Multi Guna	Corporate and Institutional Banking
Japan	
BNPP Asset Management Japan Ltd	Asset Management
BNPP SA (Japan branch)	Corporate and Institutional Banking
BNPP Securities Japan Ltd	Corporate and Institutional Banking
Cardif Life Insurance Japan	Insurance
Cardif Non Life Insurance Japan	Insurance
Malaysia	
BNPP Malaysia Berhad	Corporate and Institutional Banking
BNPP SA (Malaysia branch)	Corporate and Institutional Banking
New Zealand	
BNPP Fund Services Australasia Pty Ltd (New Zealand branch)	Securities Services
Philippines	
BNPP SA (Philippines branch)	Corporate and Institutional Banking
Rep. of Korea	
BNPP SA (Republic of Korea branch)	Corporate and Institutional Banking
BNPP Securities Korea Co Ltd	Corporate and Institutional Banking
Cardif Life Insurance Co Ltd	Insurance
Singapore	
BNPP Real Estate Singapore Pte Ltd	Real Estate Services
BNPP SA (Singapore branch)	Corporate and Institutional Banking
BPP Holdings Pte Ltd	Corporate and Institutional Banking
Taiwan	
BNPP Cardif TCB Life Insurance Co Ltd	Insurance
BNPP SA (Taiwan branch)	Corporate and Institutional Banking
BNPP Securities Taiwan Co Ltd	Corporate and Institutional Banking
Cardif Assurance Vie (Taiwan branch)	Insurance
Cardif Assurances Risques Divers (Taiwan branch)	Insurance
Paris Management Consultant Co Ltd	Insurance
Thailand	
BNPP SA (Thailand branch)	Corporate and Institutional Banking
Viet Nam	
BNPP SA (Viet Nam branch)	Corporate and Institutional Banking

(1) At 31 December 2022, 14 Private Equity investment entities versus 11 Private Equity investment entities at 31 December 2021.

(2) At 31 December 2022, the securitisation funds UCI and RMBS Prado include 14 funds (FCC UCI 11, 12, 14 to 17, RMBS Prado V to X, Green Belem I and RMBS Belem No 2) versus 15 funds (FCC UCI 11, 12, 14 to 17, Fondo de Titulizacion Structured Covered Bonds, RMBS Prado III to IX and Green Belem I) at 31 December 2021.

(3) At 31 December 2022, 125 Construction-sale companies (91 Full and 34 Equity) versus 115 Construction-sale companies (89 Full and 26 Equity) at 31 December 2021.

II. PROFIT AND LOSS ACCOUNT ITEMS AND HEADCOUNT BY COUNTRY

	FY 2022(*) (in millions of euros)						Financial headcount(**) as at 31 December 2022
	Revenues	Public subsidies received	Income before Tax	Current tax expense	Deferred tax	Corporate income tax	
European Union member States							
Austria	60	0	3	(2)	0	(2)	152
Belgium	4,856	0	1,983	(203)	(219)	(422)	12,766
Bulgaria	80	0	33	(3)	0	(3)	786
Czech Republic	130	0	52	(6)	(7)	(13)	618
Denmark	103	0	10	(3)	0	(3)	319
Finland	11	0	4	(1)	(1)	(2)	45
France	15,140	0	1,056	(308)	(356)	(664)	55,471
Germany	2,238	0	727	(202)	(30)	(232)	5,896
Greece	9	0	1	0	0	0	75
Hungary	55	0	8	(2)	(2)	(4)	422
Ireland	248	0	110	(19)	4	(15)	506
Italy	5,227	0	1,799	(290)	(230)	(520)	16,100
Luxembourg	1,450	0	668	(131)	(11)	(142)	3,535
Netherlands	294	0	29	(41)	27	(14)	1,214
Portugal	219	0	57	(23)	5	(18)	7,907
Poland	1,354	0	287	(104)	(7)	(111)	9,725
Romania	94	0	31	(5)	(4)	(9)	913
Slovakia	26	0	11	0	(2)	(2)	463
Spain	1,164	0	483	(99)	(32)	(131)	4,400
Sweden	115	0	(40)	(2)	7	5	395
Other European countries							
Guernsey	11	0	3	0	0	0	24
Jersey	32	0	5	0	0	0	218
Monaco	67	0	28	(1)	(1)	(2)	73
Norway	61	0	10	(1)	1	0	180
Russia	130	0	76	(43)	21	(22)	230
Serbia	44	0	23	(2)	0	(2)	608
Switzerland	357	0	(28)	(12)	(2)	(14)	1,033
Ukraine(1)	35	0	13	(1)	0	(1)	0
United Kingdom	4,963	0	2,378	(595)	13	(582)	7,348
Africa & Mediterranean basin							
Algeria	97	0	42	(17)	3	(14)	1,211
Bahrain	59	0	13	0	0	0	261
Botswana	3	0	2	0	0	0	8
Burkina Faso	0	0	0	0	0	0	0
Guinea	0	0	0	0	0	0	0
Ivory Coast	74	0	18	(3)	1	(2)	650
Kuwait	7	0	1	0	0	0	17
Morocco	280	0	70	(14)	(14)	(28)	2,983
Namibia	1	0	1	0	0	0	10
Qatar	24	0	10	(1)	0	(1)	25
Saudi Arabia	31	0	9	(1)	0	(1)	52

	FY 2022(*) (in millions of euros)						Financial headcount(**) as at 31 December 2022
	Revenues	Public subsidies received	Income before Tax	Current tax expense	Deferred tax	Corporate income tax	
Senegal	50	0	9	(3)	(3)	(6)	447
South Africa	177	0	37	(13)	2	(11)	1,506
Türkiye	996	0	485	(326)	39	(287)	9,772
United Arab Emirates	68	0	15	(2)	(7)	(9)	139
Americas							
Argentina	42	0	17	0	5	5	80
Bermuda	0	0	0	0	0	0	0
Brazil	511	0	28	(32)	8	(24)	1,537
Canada	52	0	37	(16)	(3)	(19)	1,101
Chile	95	0	45	(6)	(2)	(8)	498
Colombia	104	0	59	(22)	1	(21)	565
Mexico	158	0	93	(19)	5	(14)	898
United States of America	5,536	0	1,599	(222)	62	(160)	12,498
Asia & Pacific							
Australia	244	0	86	(15)	(9)	(24)	490
China	171	0	61	0	(9)	(9)	517
Hong Kong	848	0	52	(18)	3	(15)	2,315
India	299	0	196	(72)	(11)	(83)	12,466
Indonesia	49	0	24	(7)	0	(7)	166
Japan	588	0	380	(88)	(30)	(118)	666
Malaysia	33	0	17	(4)	0	(4)	98
New Zealand	1	0	(9)	0	0	0	48
Philippines	0	0	0	0	0	0	0
Republic of Korea	137	0	56	(1)	(14)	(15)	351
Singapore	814	0	345	(24)	(1)	(25)	1,871
Taiwan	217	0	92	(12)	(7)	(19)	615
Thailand	41	0	25	(5)	(1)	(6)	83
Viet Nam	39	0	16	(4)	1	(3)	101
GROUP TOTAL	**50,419**	**0**	**13,751**	**(3,046)**	**(807)**	**(3,853)**	**185,467**
Reclassification of discontinued activities (note 7.d)	(2,788)	0	(823)	203	(66)	137	
Total continuing activities	**47,631**	**0**	**12,928**	**(2,843)**	**(873)**	**(3,716)**	**176,547**

(*) The financial data correspond to the contribution income of fully consolidated entities under exclusive control.
(**) Financial headcount: Full-Time Equivalents (FTE) at 31 December 2022 in wholly controlled, fully consolidated entities.
(1) No financial headcount in Ukraine since the loss of control of Ukrsibbank.

8.7 Founding documents and Articles of association

SECTION I

FORM – NAME – REGISTERED OFFICE – CORPORATE PURPOSE

Article 1

BNP PARIBAS is a French Public Limited Company (*société anonyme*) licensed to conduct banking operations under the French Monetary and Financial Code, Book V, Section 1 (*Code Monétaire et Financier, Livre V, Titre 1er*) governing banking sector institutions.

The Company was founded pursuant to a decree dated 26 May 1966. Its legal life has been extended to 99 years with effect from 17 September 1993.

Apart from the specific rules relating to its status as an establishment in the banking sector (Book V, Section 1 of the French Monetary and Financial Code – *Code Monétaire et Financier, Livre V, Titre 1er*), BNP PARIBAS shall be governed by the provisions of the French Commercial Code (*Code de Commerce*) concerning commercial companies, as well as by these Articles of Association.

Article 2

The registered office of BNP PARIBAS shall be located in PARIS (9th arrondissement), at 16, Boulevard des Italiens (France).

Article 3

The purpose of BNP PARIBAS shall be to provide and carry out the following services with any individual or legal entity, in France and abroad, subject to compliance with the French laws and regulations applicable to credit institutions licensed by the Credit Institutions and Investment Firms Committee (*Comité des Etablissements de Crédit et des Entreprises d'Investissement*):

- any and all investment services;
- any and all services related to investment services;
- any and all banking transactions;
- any and all services related to banking transactions;
- any and all equity investments,

as defined in the French Monetary and Financial Code Book III – Section 1 (*Code Monétaire et Financier, Livre III, Titre 1er*) governing banking transactions and Section II (Titre II) governing investment services and related services.

On a regular basis, BNP PARIBAS may also conduct any and all other activities and any and all transactions in addition to those listed above, in particular any and all arbitrage, brokerage and commission transactions, subject to compliance with the regulations applicable to banks.

In general, BNP PARIBAS may, on its own behalf, and on behalf of third parties or jointly therewith, perform any and all financial, commercial, industrial or agricultural, personal property or real estate transactions directly or indirectly related to the activities set out above or which further the accomplishment thereof.

SECTION II

SHARE CAPITAL - SHARES

Article 4

The share capital of BNP PARIBAS shall stand at 2,468,663,292 euros divided into 1,234,331,646 fully paid-up shares with a nominal value of 2 euros each.

Article 5

The fully paid-up shares shall be held in registered or bearer form at the shareholder's discretion, subject to the French laws and regulations in force.

The shares shall be registered in an account in accordance with the terms and conditions set out in the applicable French laws and regulations in force. They shall be assigned by transfer from one account to another.

The Company may request disclosure of information concerning the ownership of its shares in accordance with the provisions of Article L.228-2 of the French Commercial Code (*Code de Commerce*).

Without prejudice to the legal thresholds set in Article L.233-7, paragraph 1 of the French Commercial Code (*Code de Commerce*), any shareholder, whether acting alone or in concert, who comes to directly or indirectly hold at least 0.5% of the share capital or voting rights of BNP PARIBAS, or any multiple of that percentage less than 5%, shall be required to notify BNP PARIBAS by registered letter with return receipt within the timeframe set out in Article L.233-7 of the French Commercial Code (*Code de Commerce*).

Above 5%, the disclosure obligation provided for in the previous paragraph shall apply to 1% increments of the share capital or voting rights.

The disclosures described in the previous two paragraphs shall also apply when the shareholding falls below the above-mentioned thresholds.

Failure to report either legal or statutory thresholds shall result in the loss of voting rights as provided for by Article L.233-14 of the French Commercial Code (*Code de Commerce*) at the request of one or more shareholders jointly holding at least 2% of the Company's share capital or voting rights.

Article 6

Each share shall grant a right to a part of ownership of the Company's assets and any liquidation surplus that is equal to the proportion of share capital that it represents.

In cases where it is necessary to hold several shares in order to exercise certain rights, and in particular where shares are exchanged, combined or allocated, or following an increase or reduction in share capital, regardless of the terms and conditions thereof, or subsequent to a merger or any other transaction, it shall be the responsibility of those shareholders owning less than the number of shares required to exercise those rights to combine their shares or, if necessary, to purchase or sell the number of shares or voting rights leading to ownership of the required percentage of shares.

SECTION III

GOVERNANCE

Article 7

The Company shall be governed by a Board of Directors composed of:

1/ Directors appointed by the Ordinary General Shareholders' Meeting

There shall be at least nine and no more than eighteen Directors. Directors representing employees as well as Directors representing employee shareholders shall not be included when calculating the minimum and maximum number of Directors.

They shall be appointed for a three-year term.

When a Director is appointed to replace another Director, in accordance with applicable French laws and regulations in force, the new Director's term of office shall be limited to the remainder of the predecessor's term.

A Director's term of office shall end at the close of the Ordinary General Shareholders' Meeting convened to deliberate on the financial statements for the previous financial year and held in the year during which the Director's term of office expires.

Directors may be re-appointed, subject to the provisions of French law, in particular with regard to their age.

Each Director, with the exception of Directors representing employees and Directors representing employee shareholders, must own at least 10 Company shares.

2/ Directors elected by BNP PARIBAS SA employees

The status of these Directors and the related election procedures shall be governed by Articles L. 225-27 to L. 225-34 of the French Commercial Code (*Code de Commerce*) as well as by the provisions of these Articles of Association.

There shall be two such Directors – one representing executive staff and the other representing non-executive staff.

They shall be elected by BNP PARIBAS SA employees.

They shall be elected for a three-year term.

Elections shall be organised by the Executive Management. The timetable and terms and conditions for elections shall be drawn up by the Executive Management in consultation with the national trade union representatives within the Company such that the second round of elections shall be held no later than fifteen days before the end of the term of office of the outgoing Directors.

Each candidate shall be elected on a majority basis after two rounds held in each of the electoral colleges.

Each application submitted during the first round of elections shall include both the candidate's name and the name of a substitute, if any.

Applications may not be amended during the second round of elections.

The candidates shall belong to the electoral college where they stand for election.

Applications other than those presented by a trade union representative within the Company must be submitted together with a document including the names and signatures of one hundred electors belonging to the electoral college where the candidate is presenting for election.

3/ Director representing employee shareholders

Where the report presented by the Board of Directors at the Annual General Meeting, in accordance with article L.225-102 of the French Commercial Code, establishes that shares held by company employees or by employees of related companies within the meaning of article L.225-180 of said Code, account for over 3% of the Company's share capital, a Director representing the employee shareholders is appointed by the Ordinary Shareholders' Meeting in accordance with the procedures set out in current regulations as well as by these Articles of association.

Candidates for election to the office of Director representing employee shareholders are selected on the following basis:

- when the voting right attached to the shares held by the employees, and former employees, referred to in article L.225-102 of the French Commercial Code is exercised by the Supervisory Board, or Boards, of one, or more, mutual funds (FCPE), the Board, or Boards, of the FCPE or FCPEs, jointly selects two candidates;
- when the voting right attached to the shares, held directly or *via* an FCPE by the employees, and where applicable, former employees, as referred to in article L.225-102 of the French Commercial Code, is exercised directly by said employees, they appoint two candidates, given that each employee shareholder will have the same number of votes as the number of shares that they directly, or indirectly, hold. The two employees with the most votes are appointed as candidates.

Only employee shareholders or employees who are members of the Supervisory Board of an FCPE holding company shares may be selected as candidates.

Each candidate must be presented together with a replacement who meets the same requirements as said candidate.

The Board of Directors presents the candidates to the Annual General Meeting under separate resolutions and, where applicable, approves the resolution relating to its preferred candidate. The Ordinary General Meeting of Shareholders decides, under the conditions of quorum and majority applicable to the appointment of any member of the Board of Directors, on the appointment of the Director representing the employee shareholders. Of the candidates referred to above, the one who has received the most votes from shareholders present, or represented, at the Ordinary General Meeting of Shareholders, will be appointed as Director representing employee shareholders.

This Director's term and the conditions under which the term of office is exercised are exactly the same as for Directors appointed by the Annual General Meeting.

Should the Director cease to be an employee, or in the event of a vacancy arising due to death or resignation of office, the term of office of the Director representing employee shareholders ends automatically.

Under these circumstances, the Director representing the employee shareholders shall be replaced at the next Ordinary Annual General Meeting.

Should the next Annual General Meeting be held within four months of the date on which the term of office is expected to end, the replacement is appointed at the next Annual General Meeting.

The new Director is appointed by the Annual General Meeting for the remainder of his/her predecessor's term of office.

Should the Director cease to be an employee, or in the event of a vacancy arising due to death or resignation from office, the replacement's term of office automatically ends and new candidates must be selected as described above. The candidates selected by this process shall be voted on by shareholders at the next Annual General Meeting. The new Director is appointed by the Annual General Meeting as described above. This Director's term of office and the conditions under which the directorship is exercised are identical to Directors appointed by the Annual General Meeting. Should the next Annual General Meeting be held within six months of the date on which the replacement's term of office is due to end, the replacement is appointed at the next Annual General Meeting.

Under the different circumstances mentioned above, the Board of Directors may meet and validly deliberate until the date on which the Director representing the employee shareholders is replaced.

The provisions of the first paragraph of 3/ shall cease to apply when, at year-end, the percentage of capital owned by Company employees and employees of related companies under the aforementioned article L.225-102, accounts for less than 3% of the share capital, given that the term of office of any Director appointed in accordance with this article shall end on its expiry date.

Detailed procedures relating to the organisation and holding of the vote by all the shareholders referred to in the aforementioned article L.225-102, particularly with regard to the timetable for the selection of candidates, are approved by the Executive Management directly, or by delegation.

Article 8

The Chairman of the Board of Directors shall be appointed from among the members of the Board of Directors.

Upon proposal from the Chairman, the Board of Directors may appoint one or more Vice-Chairmen.

Article 9

The Board of Directors shall meet as often as necessary in the best interests of the Company. Board meetings shall be convened by the Chairman. Where requested by at least one-third of the Directors, the Chairman may convene a Board meeting with respect to a specific agenda, even if the last Board meeting was held less than two months before. The Chief Executive Officer (CEO) may also request that the Chairman convene a Board meeting to discuss a specific agenda.

Board meetings shall be held either at the Company's registered office, or at any other location specified in the notice of meeting.

Notices of meetings may be communicated by any means, including verbally.

The Board of Directors may meet and make valid decisions at any time, even if no notice of meeting has been communicated, provided all its members are present or represented.

Article 10

Board meetings shall be chaired by the Chairman, by a Director recommended by the Chairman for such purpose or, failing this, by the oldest Director present.

Any Director may attend a Board meeting and take part in its deliberations by videoconference (*visioconférence*) or all telecommunications and remote transmission means, including Internet, subject to compliance with the conditions set out in applicable legislation at the time of its use.

Decisions within the remit of the Board of Directors referred to by article L.225-37 French Commercial Code (*Code de Commerce*) may be taken by means of written consultation.

Any Director who is unable to attend a Board meeting may ask to be represented by a fellow Director, by granting a written proxy, valid for only one specific meeting of the Board. Each Director may represent only one other Director.

At least half of the Board members must be present for decisions taken at Board meetings to be valid.

Should one or both of the offices of Director elected by employees remain vacant, for whatever reason, without the possibility of a replacement as provided for in Article L.225-34 of the French Commercial Code (*Code de Commerce*), the Board of Directors shall be validly composed of the members elected by the General Shareholders' Meeting and may validly meet and vote.

Members of the Company's Executive Management may, at the request of the Chairman, attend Board meetings in an advisory capacity.

A permanent member of the Company's Central Social and Economic Committee, appointed by said Committee, shall attend Board meetings in an advisory capacity, subject to compliance with the provisions of French laws in force.

Decisions shall be made by a majority of Directors present or represented. In the event of a split decision, the Chairman of the meeting shall have the casting vote, except as regards the proposed appointment of the Chairman of the Board of Directors.

The Board of Directors' deliberations shall be recorded in minutes entered in a special register prepared in accordance with French laws in force and signed by the Chairman of the meeting and one of the Directors who attended the meeting.

The Chairman of the meeting shall appoint the Secretary to the Board, who may be chosen from outside the Board's members.

Copies or excerpts of Board minutes may be signed by the Chairman, the Chief Executive Officer, the Chief Operating Officers (COOs) or any representative specifically authorised for such purpose.

Article 11

The Ordinary General Shareholders' Meeting may grant Directors' remuneration under the conditions provided for by French law.

The Board of Directors shall split these fees among its members.

The Board of Directors may grant exceptional compensation for specific assignments or duties performed by the Directors under the conditions applicable to agreements subject to approval, in accordance with the provisions of Articles L.225-38 to L.225-43 of the French Commercial Code (*Code de Commerce*). The Board may also authorise the reimbursement of travel and business expenses and any other expenses incurred by the Directors in the interests of the Company.

SECTION IV

DUTIES OF THE BOARD OF DIRECTORS, THE CHAIRMAN, THE EXECUTIVE MANAGEMENT AND THE NON-VOTING DIRECTORS (CENSEURS)

Article 12

The Board of Directors shall determine the business strategy of BNP PARIBAS and supervise the implementation thereof. Subject to the powers expressly conferred on the Shareholders' Meetings and within the limit of the corporate purpose, the Board shall handle any issue concerning the smooth running of BNP PARIBAS and settle matters concerning the Company pursuant to its deliberations. The Board of Directors shall receive from the Chairman or the Chief Executive Officer all of the documents and information required to fulfil its duties.

The Board of Directors' decisions shall be carried out either by the Chairman, the Chief Executive Officer or the Chief Operating Officers, or by any special representative appointed by the Board.

Upon proposal from the Chairman, the Board of Directors may decide to set up committees responsible for performing specific tasks.

Article 13

The Chairman shall organise and manage the work of the Board of Directors and report thereon to the General Shareholders' Meeting. The Chairman shall also oversee the smooth running of BNP PARIBAS's management bodies and ensure, in particular, that the Directors are in a position to fulfil their duties.

The remuneration of the Chairman of the Board shall be freely determined by the Board of Directors.

Article 14

The Board of Directors shall decide how to organise the Executive Management of the Company: the Executive Management of the Company shall be conducted, under his responsibility, either by the Chairman of the Board of Directors or by another individual appointed by the Board of Directors and who shall have the title of Chief Executive Officer.

Shareholders and third parties shall be informed of this choice in accordance with the regulatory provisions in force.

The Board of Directors shall have the right to decide that this choice be for a fixed term.

In the event that the Board of Directors decides that the Executive Management shall be conducted by the Chairman of the Board, the provisions of these Articles of Association concerning the Chief Executive Officer shall apply to the Chairman of the Board of Directors who will, in such case, have the title of Chairman and Chief Executive Officer. He shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-five years of age.

In the event that the Board of Directors decides to dissociate the functions of Chairman and Chief Executive Officer, the Chairman shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches seventy-two years of age. However, the Board may decide to extend the term of office of the Chairman of the Board until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches seventy-three years of age. The Chief Executive Officer shall be deemed to have automatically resigned at the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-five years of age. However, the Board may decide to extend the term of office of the Chief Executive Officer until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which he reaches sixty-six years of age.

Article 15

The Chief Executive Officer shall be vested with the broadest powers to act in all circumstances in the name of BNP PARIBAS. He shall exercise these powers within the limit of the corporate purpose and subject to those powers expressly granted by French law to Shareholders' Meetings and the Board of Directors.

He shall represent BNP PARIBAS in its dealings with third parties. BNP PARIBAS shall be bound by the actions of the Chief Executive Officer even if such actions are outside the scope of the corporate purpose, unless BNP PARIBAS can prove that the third party knew that the relevant action was outside the scope of the corporate purpose or had constructive knowledge thereof in view of the circumstances. The publication of the Company's Articles of Association alone shall not constitute such proof.

The Chief Executive Officer shall be responsible for the organisation and procedures of internal control and for all information required by French law regarding the internal control report.

The Board of Directors may limit the powers of the Chief Executive Officer, but such limits shall not be binding as against third parties.

The Chief Executive Officer may delegate partial powers, on a temporary or permanent basis, to as many persons as he sees fit, with or without the option of redelegation.

The remuneration of the Chief Executive Officer shall be freely determined by the Board of Directors.

The Chief Executive Officer may be removed from office by the Board of Directors at any time. Damages may be payable to the Chief Executive Officer if he is removed from office without a valid reason, except where the Chief Executive Officer is also the Chairman of the Board of Directors.

In the event that the Chief Executive Officer is a Director, the term of his office as Chief Executive Officer shall not exceed that of his term of office as a Director.

Article 16

Upon proposal from the Chief Executive Officer, the Board of Directors may, within the limits of French law, appoint one or more individuals, who shall have the title of Chief Operating Officer, responsible for assisting the Chief Executive Officer.

In agreement with the Chief Executive Officer, the Board of Directors shall determine the scope and term of the powers granted to the Chief Operating Officers. However, as far as third parties are concerned, the Chief Operating Officers shall have the same powers as the Chief Executive Officer.

When the Chief Executive Officer ceases to perform his duties or is prevented from doing so, the Chief Operating Officers shall, unless the Board of Directors decides otherwise, retain their functions and responsibilities until a new Chief Executive Officer is appointed.

The remuneration of the Chief Operating Officers shall be freely determined by the Board of Directors, at the proposal of the Chief Executive Officer.

The Chief Operating Officers may be removed from office by the Board of Directors at any time, at the proposal of the Chief Executive Officer. Damages may be payable to the Chief Operating Officers if they are removed from office without a valid reason.

Where a Chief Operating Officer is a Director, the term of his office as Chief Operating Officer may not exceed that of his term of office as a Director.

The term of office of the Chief Operating Officers shall expire at the latest at the close of the General Shareholders' Meeting convened to approve the financial statements for the year in which the Chief Operating Officers reach sixty-five years of age. However, the Board may decide to extend the term of office of the Chief Operating Officers until the close of the General Shareholders' Meeting held to approve the financial statements for the year in which they reach sixty-six years of age.

Article 17

Upon proposal from the Chairman, the Board of Directors may appoint one or two non-voting Directors (*censeurs*).

Non-voting Directors shall be convened to and take part in Board meetings in an advisory capacity.

They shall be appointed for six years and may be reappointed for further terms. They may also be removed at any time under similar conditions.

They shall be selected from among the Company's shareholders and may receive a remuneration determined by the Board of Directors.

SECTION V

SHAREHOLDERS' MEETINGS

Article 18

General Shareholders' Meetings shall be composed of all shareholders.

General Shareholders' Meetings shall be convened and deliberate subject to compliance with the provisions of the French Commercial Code (*Code de Commerce*).

As an exception to the last paragraph of article L.225-123 of the French Commercial Code (*Code de Commerce*), each share carries one voting right, and no double voting rights are conferred.

They shall be held either at the registered office or at any other location specified in the notice of meeting.

They shall be chaired by the Chairman of the Board of Directors, or, in his absence, by a Director appointed for this purpose by the Shareholders' Meeting.

Any shareholder may, subject to providing proof of identity, attend a General Shareholders' Meeting, either in person, or by returning a postal vote or by designating a proxy.

Taking part in the meeting is subject to the shares having been entered either in the BNP PARIBAS' registered share accounts in the name of the shareholder, or in the bearer share accounts held by the authorised intermediary, within the timeframes and under the conditions provided for by the French regulations in force. In the case of bearer shares, the authorised intermediary shall provide a certificate of participation for the shareholders concerned.

The deadline for returning postal votes shall be determined by the Board of Directors and stated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires* – BALO).

At all General Shareholders' Meetings, the voting right attached to the shares bearing beneficial rights shall be exercised by the beneficial owner.

If the Board of Directors so decides at the time that the General Shareholders' Meeting is convened, the public broadcasting of the entire General Shareholders' Meeting by videoconference (*visioconférence*) or all telecommunications and remote transmission means, including Internet, shall be authorised. Where applicable, this decision shall be communicated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires* – BALO).

Any shareholder may also, if the Board of Directors so decides at the time of convening the General Shareholders' Meeting, take part in the vote by videoconference (*visioconférence*) or all telecommunications and remote transmission means, including Internet, subject to compliance with the conditions set out in the applicable laws at the time of its use. If an electronic voting form is used, the shareholder's signature may be in the form of a secured digital signature or a reliable identification process safeguarding the link with the document to which it is attached and may consist, in particular, of a user identifier and a password. Where applicable, this decision shall be communicated in the notice of meeting published in the French Bulletin of Compulsory Legal Announcements (*Bulletin des Annonces Légales Obligatoires* – BALO).

SECTION VI

STATUTORY AUDITORS

Article 19

At least two principal auditors shall be appointed by the General Shareholders' Meeting for a term of six financial years. Their term of office shall expire after approval of the financial statements for the sixth financial year.

SECTION VII

ANNUAL FINANCIAL STATEMENTS

Article 20

The Company's financial year shall start on 1 January and end on 31 December.

At the end of each financial year, the Board of Directors shall draw up annual financial statements and write a management report on the Company's financial position and its business activities during the previous year.

Article 21

Net income for the year is composed of income for the year minus costs, depreciation, amortisations and impairment.

The distributable profit is made up of the year's profit, minus previous losses as well as the sums to be allocated to the reserves in accordance with French law, plus the profit carried forward.

The General Shareholders' Meeting is entitled to levy all sums from the distributable profit to allocate them to all optional, ordinary or extraordinary reserves or to carry them forward.

The General Shareholders' Meeting may also decide to distribute sums levied from the reserves at its disposal.

However, except in the event of a capital reduction, no amounts may be distributed to the shareholders if the shareholders' equity is, or would become following such distribution, lower than the amount of capital plus the reserves which is not open to distribution pursuant to French law or these Articles of Association.

In accordance with the provisions of Article L.232-18 of the French Commercial Code (*Code de Commerce*), a General Shareholders' Meeting may offer to the shareholders an option for the payment, in whole or in part, of dividends or interim dividends through the issuance of new shares in the Company.

SECTION VIII

DISSOLUTION

Article 22

Should BNP PARIBAS be dissolved, the shareholders shall determine the form of liquidation, appoint the liquidators at the proposal of the Board of Directors and, in general, take on all of the duties of the General Shareholders' Meeting of a French Public Limited Company (*société anonyme*) during the liquidation and until such time as it has been completed.

SECTION IX

DISPUTES

Article 23

Any and all disputes that may arise during the life of BNP PARIBAS or during its liquidation, either between the shareholders themselves or between the shareholders and BNP PARIBAS, pursuant to these Articles of Association, shall be ruled on in accordance with French law and submitted to the courts having jurisdiction.

8.8 Statutory Auditors' special report on related party agreements

Annual General Meeting for the approval of the financial statements for the year ended 31 December 2022

This is a free translation into English of the Statutory Auditors' special report on related party agreements issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of BNP Paribas SA, we hereby report to you on related party agreements.

It is our responsibility to report to shareholders, based on the information provided to us, on the main terms and conditions of agreements that have been disclosed to us or that we may have identified as part of our engagement, as well as the reasons given as to why they are beneficial for the Company, without commenting on their relevance or substance or identifying any undisclosed agreements. Under the provisions of article R.225-31 of the French Commercial Code (*Code de commerce*), it is the responsibility of shareholders to determine whether the agreements are appropriate and should be approved.

Where applicable, it is also our responsibility to provide shareholders with the information required by article R.225-31 of the French Commercial Code in relation to the implementation during the year of agreements already approved by the Annual General Meeting.

We performed the procedures that we deemed necessary in accordance with professional standards applicable in France to such engagements. These procedures consisted in verifying that the information given to us is consistent with the underlying documents.

AGREEMENTS TO BE SUBMITTED FOR THE APPROVAL OF THE ANNUAL GENERAL MEETING

We were not informed of any agreement authorised and entered into during the year to be submitted for approval at the Annual General Meeting in accordance with article L.225-38 of the French Commercial Code.

AGREEMENTS PREVIOUSLY APPROVED BY THE ANNUAL GENERAL MEETING

Agreements approved in previous years

In accordance with article R.225-30 of the French Commercial Code, we were informed that the following agreement, previously approved by the Annual General Meeting on 26 May 2016, was implemented during the year.

Non-compete agreement between BNP Paribas and Jean-Laurent Bonnafé (authorised by the Board of Directors on 25 February 2016)

Director concerned:

Jean-Laurent Bonnafé, Director

Chief Executive Officer of BNP Paribas

At its meeting on 25 February 2016, the Board of Directors of BNP Paribas authorised the implementation of a non-compete agreement between BNP Paribas and Jean-Laurent Bonnafé.

Under this agreement, in the event that Jean-Laurent Bonnafé ceases to hold a position with BNP Paribas or carry out any work on its behalf, he undertakes not to exercise, directly or indirectly, any professional activity for a period of 12 months on behalf of a banking, investment or insurance firm whose shares are traded on a regulated market in France or abroad, or on behalf of a banking, investment or insurance firm in France whose shares are not traded on a regulated market. As consideration for this non-compete obligation, Jean-Laurent Bonnafé will receive a payment equal to 1.2 times the total of the fixed and variable remuneration (excluding multi-annual variable remuneration) he received during the year preceding his departure. One-twelfth of the indemnity would be paid each month.

This agreement was concluded to protect the interests of BNP Paribas and its shareholders in the event of Jean-Laurent Bonnafé's departure.

Paris La Défense, Neuilly-sur-Seine and Courbevoie, 13 March 2023

The Statutory Auditors

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
Laurence Dubois	Patrice Morot	Virginie Chauvin

9 STATUTORY AUDITORS

9.1 Statutory Auditors

Deloitte & Associés	PricewaterhouseCoopers Audit	Mazars
6, place de la Pyramide	63, rue de Villiers	61, rue Henri-Regnault
92908 Paris-La Défense Cedex	92208 Neuilly-sur-Seine Cedex	92400 Courbevoie

- Deloitte & Associés was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 23 May 2006.

  Deloitte & Associés is represented by Laurence Dubois.

  Deputy:

  Société BEAS, 6, place de la Pyramide, Paris-La Défense Cedex (92), France, SIREN No. 315 172 445, Nanterre trade and companies register.

- PricewaterhouseCoopers audit was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 26 May 1994.

  PricewaterhouseCoopers Audit is represented by Patrice Morot.

  Deputy:

  Jean-Baptiste Deschryver, 63, rue de Villiers, Neuilly-sur-Seine (92).

- Mazars was re-appointed as Statutory Auditor at the Annual General Meeting of 24 May 2018 for a six-year period expiring at the close of the Annual General Meeting called in 2024 to approve the financial statements for the year ending 31 December 2023. The firm was first appointed at the Annual General Meeting of 23 May 2000.

  Mazars is represented by Virginie Chauvin.

  Deputy:

  Charles de Boisriou, 61, rue Henri-Regnault, Courbevoie (92).

  Deloitte & Associés, PricewaterhouseCoopers and Mazars are registered as Statutory Auditors with the Versailles Regional Association of Statutory Auditors, under the authority of the French National Accounting Oversight Board (*Haut Conseil du Commissariat aux Comptes*).

10 QUARTERLY FINANCIAL INFORMATION

10.1 First quarter 2023 results

SOLID RESULTS

The Group's diversified and integrated model and its ability to accompany clients and the economy in a comprehensive way by mobilising its teams, resources and capabilities, continued to drive strong growth in activity and results in the first quarter 2023.

BNP Paribas' solid model, reinforced by its long-term approach and its prudent and proactive risk management, thus generated a distributable net income[1] of 2,845 million euros in the first quarter 2023.

These results reflect the Group's robust intrinsic performance and constitute a solid base for achieving the objectives of the GTS 2025 plan.

BNP Paribas benefits more than ever from the strengths of its model and thus, reiterates its 2025 objectives, as revised upward in February 2023. In particular, the Group confirms that it anticipates an increase in distributable net income[1] in 2023 in line with the objective of the GTS 2025 plan, i.e., an increase of more than 9% compared to its 2022 reported results. The Group also confirms its objective of a growth in distributable earnings per share[2] in 2023 exceeding the objective of the GTS 2025 plan, i.e., an increase of more than 12% higher than 2022 reported results.

The Group has stepped up its policy of engaging with society. It deploys a comprehensive approach and alongside its clients, is committed to transitioning towards a sustainable and low-carbon economy. It has taken the measures necessary for aligning its loan portfolios in compliance with its commitments to carbon neutrality. In doing so, BNP Paribas was ranked number 1 worldwide in green bond issuance in the first quarter 2023[3]. The Group has also set ambitious targets in social responsibility and in developing its employees' potential and commitment. It has thus set a target of having 40% of senior management positions occupied by women by 2025 (35.2% at end-2022). The Group also pays very close attention to training. 97.4% of employees took at least four training sessions in 2022, or 21.8 hours on average for the year.

All in all, revenues, at 12,032 million euros, rose by 1.4% compared to the first quarter 2022. It included in the first quarter 2023, the exceptional negative impact of the adjustments of hedges related to changes in TLTRO terms and conditions decided by the European Central Bank in the fourth quarter 2022 (-403 million euros).

Up by 5.3% compared to the first quarter 2022, revenues adjusted to derive the distributable net income as announced in February 2023 amounted to 12,492 million euros in the first quarter 2023 as a result of a correction of +403 million euros of the exceptional negative impact and a complementary adjustment of +57 million euros.

In the operating divisions, revenues rose by 4.4% compared to the first quarter 2022. They increased in all divisions. They rose by 4.0% at Corporate & Institutional Banking (CIB), driven by the very strong increase in Global Banking revenues (+15.6%), the very good performance of Securities Services (+6.7%) and revenues at Global Markets remaining at a very high level. Revenues rose sharply by 5.9%[4] at Commercial, Personal Banking & Services (CPBS), driven by strong growth in Commercial & Personal Banking (+6.8%[1]) and the increase of revenues at specialised businesses (+4.5%), Arval in particular. The context is less favourable at Personal Finance. Lastly, revenues at Investment & Protection Services (IPS) were up by 0.6%, driven by strong growth in revenues at Insurance and Wealth Management offset by the impact of an unfavourable environment on asset management[5] businesses and Real Estate.

[1] Distributable net income (€2,845m in 1Q23) adjusted in accordance with announcements made in February 2023, i.e., reported net income excluding exceptional items (the capital gain on the sale of Bank of the West closed on 01.02.23 (+€2,947m), the negative impact of the adjustment in hedges related to changes in TLTRO's terms and conditions decided by the ECB in 4Q22 (-€403m)), and the upward adjustment of €954m in distributable net income (anticipation of the end of the ramp-up of the Single Resolution Fund (+€797m) and complementary adjustments (+€157m) – see slide 44 of the 1Q23 results presentation

[2] Calculated on the basis of distributable net income

[3] Source: Bloomberg, bookrunner in volume as at 31.03.23

[4] Including 100% of Private Banking (excluding PEL/CEL effects)

[5] Asset Management and Principal Investments

The Group's operating expenses, at 9,191 million euros, were up by 5.0% compared to the first quarter 2022. This quarter, they included the impact of exceptional costs for a total of 361 million euros (72 million euros in the first quarter 2022).

Operating expenses adjusted to derive the distributable net income rose by 3.8% compared to the first quarter 2022, excluding the impact of taxes subject to IFRIC 21 and exceptional costs. To reflect the Group's intrinsic performance and in particular the anticipation of the end of the ramp-up of the Single Resolution Fund, operating expenses have been adjusted in order to derive the distributable net income in the amount of -897 million euros and amounted to 8,294 million euros in the first quarter 2023.

In the first quarter 2023, the Group registered the exceptional impact of overall adaptation costs at Personal Finance (236 million euros), restructuring and adaptation costs (30 million euros) and IT reinforcement costs (95 million euros) for a total of 361 million euros (72 million euros in the first quarter 2022). In application of IFRIC 21 "Taxes", operating expenses included in the amount of 1,601 million euros the whole amount of taxes and contributions for the year (1,789 million euros in the first quarter 2022), out of which mainly the estimated contribution to the Single Resolution Fund (997 million euros in the first quarter 2023, 1,256 million euros in the first quarter 2022).

In the operating divisions, operating expenses increased by 4.1% compared to the first quarter 2022. The jaws effect was positive. Operating expenses at CIB increased by 3.1%, driven by growth in activity. The jaws effect was positive (+0.9 point). Operating expenses were up by 4.7% at CPBS[1]. The jaws effect was positive (+1.2 point). Operating expenses were up by 3.3% in Commercial & Personal Banking[1], with a positive jaws effect (3.5 points) and by 8.1% in Specialised Businesses, with a positive jaws effect (10.9 points) at Arval and Leasing Solutions. Lastly, at IPS, operating expenses rose by 5.4%.

The Group's gross operating income thus came to 2,841 million euros. It amounted to 3,114 million euros in the first quarter 2022. The gross operating income came to 4,198 million euros when adjusted in order to derive the distributable net income in the first quarter 2023.

At 642 million euros, the cost of risk decreased by 1.4% compared to the first quarter 2022 and stood at 28 basis points of customer loans outstanding. It was at a very low level that reflects low provisions on non-performing loans (stage 3) and releases of provisions on performing loans (stages 1 and 2).

The Group's operating income came to 2,199 million euros. In the first quarter 2022 it amounted to 2,463 million euros. The operating income came to 3,556 million euros when adjusted to derive the distributable net income in the first quarter 2023.

The Group's pre-tax income amounted to 2,377 million euros. In the first quarter 2022, it amounted to 2,625 million euros. When adjusted to calculate distributable net income it came to 3,734 million euros in the first quarter 2023.

The average corporate income tax rate stood at 36.0%, due in particular to the first-quarter recognition of taxes and contributions for the year in accordance with IFRIC 21 "Taxes", a large portion of which is not deductible. The average corporate income tax rate stood at 36.5% in the first quarter 2022.

The Group closed the sale of Bank of the West on 1 February 2023. The conditions of this transaction announced on 20 December 2021 fall within the scope of application of IFRS 5 relating to groups of assets and liabilities held for sale. In accordance with IFRS 5, the result of discontinued activities amounted to 2,947 million euros in the first quarter 2023 (229 million euros in the first quarter 2022). In the first quarter 2023, this result reflects the capital gain on the sale of Bank of the West and is treated as an extraordinary item and thus excluded from the distributable net income.

Net income, Group share thus came to 4,435 million euros in the first quarter 2023. In the first quarter 2022, it amounted to 1,840 million euros. Distributable net income amounted to 2,845 million euros in the first quarter 2023. It reflects the Group's solid intrinsic performance after the sale of Bank of the West and after the end of the contribution to the ramp-up of the Single Resolution Fund.

The non-revaluated return on tangible equity stood at 14.1% (13.5% in the first quarter 2022).

As at 31 March 2023, the common equity Tier 1 ratio stood at 13.6%[1]. The Liquidity Coverage Ratio (end of period) amounted to 139% as at 31 March 2023 (129% as at 31 December 2022). The Group's immediately available liquidity reserve amounted to 466 billion euros, equivalent to more than one year of room to manoeuvre compared to market resources. The leverage ratio[2] stood at 4.4%.

Net tangible book value[3] per share came to 84.8 euros, equivalent to a compound annual growth rate of 7.6% since 31 December 2008, illustrating steady value creation throughout economic cycles.

[1] CRD5, including IFRS 9 transitional arrangements

[2] Calculated in accordance with Regulation (EU) 2019/876

[3] Revaluated

The Group continues to mobilise around social challenges and in supporting clients in the energy and environmental transition.

Lastly, the Group continues to strengthen its internal controls set-up.

CORPORATE AND INSTITUTIONAL BANKING (CIB)

CIB achieved very good results, driven by strong client activity in all its business lines. Business drive was very strong, leveraging a diversified and integrated model to meet clients' needs.

CIB has confirmed its leadership positions in EMEA[1] in syndicated loans and bond issues[2], transaction banking (cash management and trade finance[3]) as well as on multi-dealer electronic platforms.

Financing businesses achieved very good business activity, in particular in bond issuance. Client demand was very strong in rates, foreign exchange and credit markets. Activity on equity markets was good, despite a decrease in volumes from a very high base in the first quarter 2022. Securities Services also achieved very strong business drive and a high level of transactions.

At 4,873 million euros, CIB revenues rose by 4.0% compared to the first quarter 2022, driven by a strong increase at Global Banking (+15.6%), a very good performance at Global Markets (-1.8% vs. a very high first quarter 2022 base) and a continued very good increase at Securities Services (+6.7%).

Global Banking revenues rose by 15.6% compared to the first quarter 2022, to 1,455 million euros. They were up in all global business lines (Capital Markets, Transaction Banking and Advisory) and in all three regions, with even higher growth in the Americas. Transaction Banking revenues achieved a very strong increase (+59.8%), in particular in cash management. There was a very good level of activity in an overall more favourable environment marked by a strong rebound in EMEA[1] bond markets (+92% compared to the fourth quarter 2022, +7% compared to a high first quarter 2022 base[4]). At 182 billion euros, loans outstanding[5] were up by 6.1%. At 216 billion euros, deposits[5] were up by 11.3% compared to the first quarter 2022 and by 1.3%[5] compared to the fourth quarter 2022.

At 2,764 million euros, Global Markets revenues remained at a very high level, driven by client activity that was very robust on the whole. Revenues decreased by 1.8% from a very high base of comparison in the first quarter 2022. Client demand on rates, foreign exchange and commodities markets was very strong, particularly on rates and foreign exchange products. Equity business achieved an overall good level of activity despite lower volumes than the very high first quarter 2022 base. On the credit markets, volumes were up and there was a rebound on the primary and secondary bond markets, particularly in EMEA[1].

Revenues at FICC[6] came to 1,906 million euros, a 9.0% increase compared to the first quarter 2022, driven by very good performances in rates, foreign exchange and credit activities, in particular with the rebound in primary and secondary bond markets.

Equity and Prime Services revenues, at 857 million euros, decreased by 19.5% from a very high first quarter 2022 base.

VaR (1 day, 99%), which measures the level of market risks, held at a stable and low level compared to the fourth quarter 2022 due to prudent management and despite a spike in interest-rate volatility in March. It amounted to 33 million euros.

At 655 million euros, Securities Services achieved a continued strong increase in revenues, which rose by 6.7% compared to the first quarter 2022. They were driven by the favourable impact of the interest-rate environment and by the high-level stability of transaction volumes. Average assets decreased by 4.9% compared to the first quarter 2022 but increased by 4.5% compared to the fourth quarter 2022, due to the rebound in the markets late in the period. Securities Services set a record for transaction volumes at 39 million transactions in the first quarter 2023.

CIB's operating expenses, at 3,440 million euros, were up by 3.1% compared to the first quarter 2022, in relation with business development. The jaws effect was positive (+0.9 point).

At 1,433 million euros, CIB's gross operating income rose by 6.3% compared to the first quarter 2022.

At 1 million euros, CIB's cost of risk was very low. It improved by 1 million euros at Global Banking, driven by releases of provisions on performing loans (stages 1 and 2) and a low cost of risk on non-performing loans (stage 3).

CIB thus achieved pre-tax income of 1,428 million euros, up by 5.7% compared to the first quarter 2022.

[1] Europe, Middle East and Africa
[2] Source: Dealogic as at 31.03.23, bookrunner market share in volume
[3] Source: CoalitionGreenwich Share Leader 2022 Europe Large Corporate Trade Finance, 2022 Europe Large Corporate Cash Management
[4] Source: Dealogic; change in total volume of bond issuance in EMEA
[5] Average outstandings, change at constant scope and exchange rates
[6] Fixed Income, Currencies and Commodities

COMMERCIAL, PERSONAL BANKING & SERVICES (CPBS)

CPBS achieved a strong increase in results and a positive jaws effect, driven in particular by the good performance at Commercial & Personal Banking and growth at Arval. Loans outstanding rose by 4.4% compared to the first quarter 2022 (+9.6% compared to the first quarter 2021) and increased in both Commercial & Personal Banking and Specialised Businesses. Deposits were up by 1.2% compared to the first quarter 2022 (+9.1% compared to the first quarter 2021). Private Banking achieved very strong net asset inflows of almost 4.4 billion euros in the first quarter 2023.

Revenues[1], at 6,666 million euros, rose by 5.9% compared to the first quarter 2022. The performance was good at Commercial & Personal Banking (+6.8% compared to the first quarter 2022), driven by the strong increase in net interest income. Revenues at Specialised Businesses rose by 4.5% compared to the first quarter 2022 overall and by 20.4% excluding Personal Finance.

Operating expenses[1], at 4,585 million euros, were up by 4.7% compared to the first quarter 2022. The jaws effect was positive (+1.2 point) and was very positive at Commercial & Personal Banking (+3.5 points) and Arval and Leasing Solutions (+10.9 points).

Gross operating income[1], at 2,081 million euros, rose sharply by 8.6% compared to the first quarter 2022.

At 650 million euros, the cost of risk[1] rose by 9% compared to the first quarter 2022.

As a result, after allocating one third of Private Banking's net income to Wealth Management (IPS division), CPBS achieved pre-tax income[2] of 1,468 million euros, up strongly by 7.7% compared to the first quarter 2022.

Commercial & Personal Banking in France (CPBF)

CPBF's results rose, and it achieved a positive jaws effect. Business drive was good. Loans outstanding rose by 4.7% compared to the first quarter 2022, with an increase across all customer segments. Selectivity was maintained in mortgage loans, with a gradual improvement in margins. Deposits were up by 1.0% compared to the first quarter 2022. Individual customer deposits rose, and the exposure to regulated savings is low. Corporate and private banking client deposits were almost unchanged (-0.3% compared to the first quarter 2022). Margins held up well. Off-balance sheet savings rose by 3.3% compared to the 31 March 2022 in an unfavourable market context in 2022. Private Banking attracted very good net asset inflows of 1.2 billion euros.

Revenues[1] amounted to 1,670 million euros, up by 4.2% compared to the first quarter 2022. Net interest income was up by 6.8%, thanks to the interest-rate environment. Fees were up by 1.4% compared to the first quarter 2022, supported by banking fees, particularly in means of payment and cash management.

Operating expenses[1], at 1,276 million euros, rose by 3.0% compared to the first quarter 2022, in support of growth but were contained by the ongoing impact of cost-savings measures. The jaws effect was positive (+1.2 point).

Gross operating income[1] amounted to 394 million euros, a strong increase of 8.4% compared to the first quarter 2022.

The cost of risk[1] stood at 75 million euros, an improvement of 17 million euros compared to the first quarter 2022. It reflects a release of provisions on performing loans (stages 1 and 2). At 13 basis points of customer loans outstanding, it is low.

As a result, after allocating one third of Private Banking's net income to Wealth Management (IPS division), CPBF achieved pre-tax income[3] of 282 million euros, up very sharply by 18.0% compared to the first quarter 2022.

BNL banca commerciale (BNL bc)

Results were up at BNL bc and its risk profile is steadily improving. Loans outstanding decreased by 1.8% compared to the first quarter 2022 and increased by 0.2% on the perimeter excluding non-performing loans. Growth was sustained by mid- and long-term loans across all segments. Deposits rose by 1.1% compared to the first quarter 2022, driven by the growth in deposits by corporate clients. Net asset inflows at Private Banking were very good (1.2 billion euros), supported by synergies with the corporate segment.

Revenues[2] increased by 3.2% compared to the first quarter 2022 to 675 million euros. Net interest income was up by 3.0%, thanks to the positive impact of the interest-rate environment and despite pressures on margins. Fees were up by 3.5%, driven by the sustained increase in banking fees, in particular from corporate clients.

Operating expenses[2], at 464 million euros, were up by 2.3% compared to the first quarter 2022. The jaws effect was positive (+0.9 point), thanks to the transformation of the operating model and targeted initiatives.

Gross operating income[2] thus came to 211 million euros, up by 5.3% compared to the first quarter 2022.

[1] Including 100% of Private Banking excluding PEL/CEL effects (+€3m in 1Q23, +€11m in 1Q22 in revenues)
[2] Including 2/3 of Private Banking excluding PEL/CEL effects
[3] Including 2/3 of Private Banking (excluding PEL/CEL effects in France)

The cost of risk[2] stood at 98 million euros, down by 30 million euros compared to the first quarter 2022. The cost of risk is improving steadily and reflects lower provisions of non-performing loans (stage 3) and releases of provisions on performing loans (stages 1 and 2). It stood at a low level of 49 basis points of customer loans outstanding.

As a result, after allocating one third of Private Banking's net income to Wealth Management (IPS division), BNL bc achieved pre-tax income[1] of 106 million euros, up very sharply, by 63.1% compared to the first quarter 2022.

Commercial & Personal Banking in Belgium (CPBB)

CPBB achieved a strong increase in results and a largely positive jaws effect. Business drive was good. Loans outstanding rose by 6.0% compared to the first quarter 2022, driven by the increase in loans to individuals and corporates. Deposits decreased by 0.4% compared to the first quarter 2022. Deposits of individual and Private Banking clients increased on the whole, while margins held up well. Off-balance sheet savings decreased by 5.8% compared to 31 March 2022 in an unfavourable market context in 2022. Net asset inflows in Private Banking were good (1.5 billion euros).

At 1,016 million euros, revenues[2] were up by 8.6% compared to the first quarter 2022. Net interest income grew strongly by 15.6% compared to the first quarter 2022, driven by the improvement in margins on deposits. Fees decreased by 5.9% compared to a high base in the first quarter 2022.

Operating expenses[1], at 945 million euros, were up by 4.5% compared to the first quarter 2022, driven up by inflation but contained by the effect of cost-savings measures and the optimisation of the set-up. The jaws effect was very positive (+4.2 points).

Gross operating income[2], at 70 million euros, rose very sharply (30 million euros in the first quarter 2022).

The cost of risk[2] amounted to 8 million euros in the first quarter 2023, due to releases of provisions on non-performing loans (stage 3). The cost of risk was very low, at 2 basis points of customer loans outstanding.

After allocating one third of Private Banking's net income to Wealth Management (IPS division), CPBB achieved pre-tax income[2] of 52 million euros, up strongly by 24.0% compared to the first quarter 2022. In the first quarter 2023 it reflected the impact of taxes subject to IFRIC 21 for -379 million euros[3].

Commercial & Personal Banking in Luxembourg (CPBL)

CPBL's results were up sharply. Loans outstanding rose by 3.8% compared to the first quarter 2022, driven by an increase in corporate and mortgage loans. Deposits increased by 0.5% compared to the first quarter 2022.

At 145 million euros, revenues[2] rose by 26.6% compared to the first quarter 2022. Net interest income was up very sharply by 36.3%, driven by stronger volumes and margins on deposits by corporate clients held up well. Fees decreased by 5.3% from a high first quarter 2022 base.

Operating expenses[2], at 88 million euros, were up by 9.4% compared to the first quarter 2022 in relation to business development. The jaws effect was very largely positive (+17.2 points).

Gross operating income[2], at 58 million euros, was up very strongly (+66.5% compared to the first quarter 2022).

The cost of risk[2] was very low at 1 million euros (release of 5 million euros in the first quarter 2022).

After allocating one third of Private Banking's net income to Wealth Management (IPS division), CPBL achieved pre-tax income[1] of 55 million euros (40 million in the first quarter 2022).

Europe-Mediterranean

Europe-Mediterranean confirmed its very good business drive. Loans outstanding were up by 6.6%[4] compared to the first quarter 2022, driven by increased volumes with corporate clients, particularly in Poland. Origination was prudent and targeted, particularly in Türkiye, and for individual customers in Poland. Deposits rose by 13.8%[3] compared to the first quarter 2022 and were up in Poland and in Türkiye across all segments.

[1] Including 100% of Private Banking
[2] Including 2/3 of Private Banking
[3] Including 100% of Private Banking
[4] At constant scope and exchange rates

Revenues at Europe-Mediterranean[2], at 648 million euros, rose strongly, by 18.8%[1] compared to the first quarter 2022, driven by a strong increase in net interest income in deposits, particularly in Poland. There was a non-recurring positive item in Türkiye during the quarter.

Operating expenses[2], at 435 million euros, rose by 9.5%[4] compared to the first quarter 2022, driven particularly by high inflation. The jaws effect was very positive (+9.3 points[4]).

Gross operating income[2], at 212 million euros, increased very strongly by 44.3%[4] compared to the first quarter 2022.

At 49 million euros, the cost of risk[2] was higher than in the first quarter 2022 (41 million euros). Il amounted to 53 basis points of customer loans outstanding, a low level supported by a decrease in provisions on non-performing loans (stage 3) compared to the fourth quarter 2022.

After allocating one third of Private Banking's results in Türkiye and Poland to Wealth Management (IPS division), Europe-Mediterranean achieved pre-tax income[1] of 280 million euros, a very strong increase of 42.4%[2] compared to the first quarter 2022, accentuated by the capital gain on the sale of businesses in Ivory Coast on 15 February 2023.

Specialised Businesses – Personal Finance

Personal Finance continued to transform and adapt its business activities. Loans outstanding rose (+4.7% compared to the first quarter 2022) and were up across all segments. Margins at production were under pressure.

Revenues, at 1,288 million euros, decreased by 7.2% compared to the first quarter 2022, due to lower margins and despite higher volumes.

Driven by business development investments and targeted projects, operating expenses came to 810 million euros, up by 4.5% compared to the first quarter 2022.

Gross operating income thus came to 477 million euros, down by 22.1% compared to the first quarter 2022.

At 358 million euros, the cost of risk increased by 42 million euros compared to the first quarter 2022. It stood at 145 basis points of customer loans outstanding. Provisions on non-performing loans decreased compared to the fourth quarter 2022.

Pre-tax income at Personal Finance thus came to 122 million euros, down by 60.0% compared to the first quarter 2022.

Specialised Businesses – Arval & Leasing Solutions

Arval and Leasing Solutions once again performed very well this quarter.

With 1.6 million financed vehicles[3], Arval's financed fleet achieved very good growth, by 8.8% compared to the first quarter 2022. Used car prices are still very high.

At 23.1 billion euros, Leasing Solutions' outstandings rose by 6.0%[4] compared to the first quarter 2022. Business drive is holding up well, particularly in Technology & Lifecycle Solutions.

Revenues at Arval and Leasing Solutions rose strongly by 20.9% compared to the first quarter 2022, to 982 million euros, driven by a very good performance at Arval, with very high used car prices and the strong increase in outstandings at Leasing Solutions.

Operating expenses rose by 10.0% compared to the first quarter 2022, at 403 million euros. The jaws effect was very positive (+10.9 points).

Gross operating income rose very sharply by 29.9% compared to the first quarter 2022, to 579 million euros.

Pre-tax income at Arval and Leasing Solutions together thus rose sharply by 17.4% compared to the first quarter 2022, to 517 million euros.

Specialised Businesses – New Digital Businesses and Personal Investors

New Digital Businesses and Personal Investors performed very well.

Nickel pursued its ongoing roll-out in Europe and its continued strong pace of account openings, with about 3.2 million accounts opened[5] as at 31 March 2023, an increase of 25.9% compared to the 31 March 2022.

[1] At constant scope and exchange rates, excluding Türkiye at historical exchange rates, in accordance with the application of IAS 29
[2] At constant scope and exchange rates, excluding Türkiye at historical exchange rates, in accordance with the application of IAS 29
[3] Fleet at the end of the period
[4] At constant scope and exchange rates
[5] Since inception, total for all countries

Floa, the French leader in Buy Now, Pay Later, had 3.8 million customers (+10.8% compared to 31 March 2022). It has a good level of loan production with a tightening in credit standards. As a reminder, Floa's contribution has been 50% consolidated since 1 February 2022.

Personal Investors achieved strong growth in deposits at 6.2% compared to the first quarter 2022 and a strong increase in customer numbers (more than 80,000 new clients).

Revenues[1] in New Digital Businesses and Personal Investors came to 243 million euros, a strong increase of 18.5% compared to the first quarter 2022, in relation to the steep increase in New Digital Businesses, driven by business development and the positive impact of the interest-rate environment on Personal Investors deposits.

At 164 million euros, operating expenses[2] increased strongly by 24.1% compared to the first quarter 2022, in relation with the development strategy of the New Digital Businesses.

Gross operating income[2] increased sharply by 8.4% to 79 million euros.

The cost of risk[2] amounted to 23 million euros (12 million euros in the first quarter 2022).

Pre-tax income[2] of New Digital Businesses and Personal Investors taken together decreased by 7.0% compared to the first quarter 2022, to 54 million euros.

INVESTMENT & PROTECTION SERVICES (IPS)

IPS's business drive was good on the whole, sustained in particular by net asset inflows. IPS achieved very strong net asset inflows (+19.4 billion euros in the first quarter 2023), particularly in Wealth Management and Asset Management. The Insurance business achieved good momentum in Protection in France and internationally. The environment was less favourable at Real Estate, compared to very strong first quarter 2022, particularly in Advisory.

At 1,409 million euros, revenues rose by 0.6% compared to the first quarter 2022, driven by a strong increase in Insurance revenues and a very good growth in Wealth Management revenues, but offset by a lower performance in asset management[3] businesses in a lacklustre environment.

Operating expenses, at 897 million euros, were up by 5.4%, in relation with support for business development and targeted initiatives.

Gross operating income amounted to 512 million euros, down by 6.7% compared to the first quarter 2022.

Pre-tax income at IPS thus came to 578 million euros, down by 7% from a high first quarter 2022 base, due mainly to the negative base effect caused by a capital gain related to the creation of a joint venture in the first quarter 2022.

As at 31 March 2023, assets under management[4] stood at 1,213 billion euros. They rose compared to the 31 December 2022 (1,172 billion euros), due mainly to a market performance effect of +27.1 billion euros, an unfavourable foreign-exchange effect of -3.7 billion euros and very good net asset inflows of +19.4 billion euros. Net asset inflows were driven in particular by inflows into money-market funds at Asset Management and very good inflows at Wealth Management.

As at 31 March 2023, assets under management[2] consisted of 555 billion euros at Asset Management and Real Estate, 406 billion euros at Wealth Management and 251 billion euros at Insurance.

Insurance got off to a good start in 2023 under the new IFRS 17 standard. Savings achieved good business drive in France, with gross asset inflows of 6.2 billion euros in the first quarter 2023. Protection continued to grow in France, with good momentum in affinity insurance and property & casualty. Internationally, activity expanded, particularly in Latin America.

IFRS 17 "Insurance contracts" has replaced IFRS 4 "Insurance contracts" since 1 January 2023. IFRS 17 entered into force together with the implementation of IFRS 9 for insurance activities.

The main effects are as follows:

- Operating expenses deemed "attributable to insurance activities" are recognised in deduction of revenues and no longer booked in operating expenses. These accounting entries apply only to Insurance and to Group entities (other than in the Insurance business line) that distribute insurance contracts (i.e., internal distributors) and have no impact on gross

[1] Including 100% of Private Banking in Germany
[2] Including 2/3 of Private Banking in Germany

[3] Asset Management, Real Estate and Principal Investments
[4] Including distributed assets

operating income. The impact of entries for internal distributors is presented in the Corporate Centre, in order not to disrupt the readability of their financial performance. In the first quarter 2023, attributable operating expenses in Insurance came to 221 million euros;

- The impact of the volatility generated by the fair value accounting of certain assets through profit and loss (IFRS 9) is presented in Corporate Centre and therefore has no impact on Insurance revenues.

In the first quarter 2023, Insurance revenues were up by 6.9% compared to the first quarter 2022, at 524 million euros, driven by the increase in revenues of Protection.

Insurance operating expenses, at 202 million euros, increased by 2.7% compared to the first quarter 2022 in support of business development and targeted projects. The jaws effect was very positive.

At 381 million euros, Insurance pre-tax income rose strongly by 19.2% compared to the first quarter 2022. In the first quarter 2023, this included an increase in the contribution by associates, particularly in Latin America and Europe.

Net asset inflows at Wealth and Asset Management[1] were solid. Wealth Management achieved strong net asset inflows, particularly in Commercial & Personal Banking in France, Italy, Belgium and internationally with high-net-worth individuals. Growth at Wealth Management was strong in all geographical regions, driven by the positive impact of the improvement in deposit margins.

Net asset inflows at Asset Management were very good (13.6 billion euros), driven in particular by strong net asset inflows into money-market funds. Assets under management increased in both monetary funds and medium and long-term vehicles.

Real Estate achieved a good performance in Investment Management and Property Management activities and a lower performance in Advisory.

At 885 million euros, revenues at Wealth and Asset Management decreased by 2.7% compared to the first quarter 2022. Wealth Management achieved a very strong increase in revenues (+10.6%), driven by strong growth in net interest income. Revenues at Asset Management (including Principal Investments) and Real Estate decreased in lacklustre environments and compared to a very high base in the first quarter 2022.

At 695 million euros, operating expenses at Wealth and Asset Management rose by 6.2% compared to the first quarter 2022. The jaws effect was very positive (+4.2 points) at Wealth Management. Operating expenses at Asset Management (including Principal Investments) increased with an unfavourable base effect in the first quarter 2022.

Pre-tax income at Wealth and Asset Management thus came to 198 million euros, a 34.7% decrease compared to the first quarter 2022, impacted by a negative base effect generated by a capital gain related to the creation of a joint venture in the first quarter 2022.

CORPORATE CENTRE

IFRS 17 “Insurance contracts” has replaced IFRS 4 “Insurance contracts” since 1 January 2023. IFRS 17 entered into force together with the implementation of IFRS 9 for insurance activities.

The main effects are as follows:

- Operating expenses deemed “attributable to insurance activities” are recognised in deduction of revenues and no longer booked in operating expenses. These accounting entries apply only to Insurance and to Group entities (other than in the Insurance business line) that distribute insurance contracts (i.e., internal distributors) and have no impact on gross operating income. The impact of these entries for internal distributors is presented in the Corporate Centre, in order not to disrupt the reading of their financial performance. In the first quarter 2023, attributable operating expenses came to 250 million euros for Corporate Centre (259 million euros in the first quarter of 2022);

- The impact of the volatility generated by the fair value accounting of certain assets through profit and loss (IFRS 9) is presented in the Corporate Centre and therefore has no impact on Insurance business line revenues. In the first quarter of 2023, the impact of the generated volatility was -16 million euros for Corporate Centre (-158 million euros in the first quarter 2022), due to unfavourable market performances in the first quarter of 2022.

As of 01.01.23, Corporate Centre thus includes restatements which for a better readability will be reported separately each quarter.

[1] Wealth Management, Asset Management, Real Estate and Principal Investments

Revenues from restatements related to insurance activities in Corporate Centre came to -266 million euros (-417 million euros in the first quarter 2022). These included the -250-million-euro impact of the restatement of "attributable" operating expenses of internal distributors (-259 million euros in the first quarter 2022) and the -16-million-euro impact of restatement of Insurance volatility caused by fair value accounting (IFRS 9) (-158 million euros in the first quarter 2022).

Operating expenses from restatements related to insurance activities in Corporate Centre came to 250 million euros in the first quarter 2023 (+259 million euros in the first quarter 2022). They included +250 million euros from the restatement of "attributable" operating expenses of internal distributors (+259 million euros in the first quarter 2022).

Corporate Centre's pre-tax profits from restatements related to insurance activities thus came to -16 million euros (-158 million euros in the first quarter 2022), up sharply due to the impact of market performances in the first quarter 2022.

Corporate Centre's revenues excluding restatements related to insurance activities came to -478 million euros (+52 million euros in the first quarter 2022). In the first quarter 2023, they included the exceptional -403-million-euro impact of the adjustment in hedges related to changes in TLTRO's terms and conditions decided by the European Central Bank in the fourth quarter 2022. They also included, in the first quarter 2023, a revaluation of proprietary credit risk included in derivatives (DVA) in the amount of -54 million euros (+93 million euros in the first quarter 2022).

Corporate Centre's operating expenses excluding restatements related to insurance activities came to -624 million euros in the first quarter 2023 (-542 million euros in the first quarter 2022). In the first quarter 2023, they included the exceptional impact of overall adaptation costs in Personal Finance (236 million euros), restructuring and adaptation costs for 30 million euros (26 million euros in the first quarter 2022) and IT reinforcement costs for 95 million euros (45 million euros in the first quarter 2022).

Corporate Centre's cost of risk excluding restatements related to insurance activities showed a release of 6 million euros. It amounted to 54 million euros in the first quarter 2022.

Corporate Centre's other non-operating items excluding restatements related to insurance activities came to -1 million euros in the first quarter 2023 (-42 million euros in the first quarter 2022). In the first quarter 2022, they included the -159-million-euro impairment of Ukrsibbank shares and the negative -274-million-euro impact of the reclassification to profit-and-loss of exchange differences[1], offset partly by the positive impact of badwill related to bpost bank amounting to +244 million euros and a +204-million-euro capital gain on the sale of a stake.

Corporate Centre's pre-tax profit excluding restatements related to insurance activities thus came to -1,084 million euros (-564 million euros in the first quarter 2022), a decrease due in particular to the exceptional impact of the adjustment in hedges related to changes in TLTRO's terms and conditions decided by the European Central Bank in the fourth quarter 2022 and adaptation costs in Personal Finance overall.

FINANCIAL STRUCTURE

The Group has a solid financial structure.

The common equity Tier 1 ratio stood at 13.6%[2] as at 31 March 2023, up by 130 basis points compared to 31 December 2022, due mainly to:

- the closing of the sale of Bank of the West on 1 February 2023 (+170 basis points),
- the placing of the first quarter 2023's results into reserves after taking a 60% pay-out ratio into account, net of organic growth in risk-weighted assets (0 bps),
- the effect of the adjustment of 2023 distributable income (-10bp),
- the launch of the first tranche of the share buyback (-20 bps)
- and impacts related to the application of IFRS17, to the updating of models and to regulations[3] (-10 bps).

The impact of other effects on the ratio were limited overall.

The leverage ratio[4] stood at 4.4% as at 31 March 2023.

The Liquidity Coverage Ratio[5] (end-of-period) stood at the high level of 139% as at 31 March 2023 (129% as at 31 December 2022).

The immediately available liquidity reserve[1] amounted to 466 billion euros as at 31 March 2023, equivalent to more than one year of room to manoeuvre compared to market resources.

[1] Previously recorded in consolidated equity
[2] CRD5, including IFRS9 transitional arrangements
[3] Including IFRS9 phasing
[4] Calculated in accordance with Regulation (EU) 2019/876
[5] Calculated in accordance with Regulation (CRR) 575/2013 art. 451a

FIRST QUARTER 2023 RESULTS

3 May 2023

BNP PARIBAS

The bank for a changing world

Disclaimer

The figures included in this presentation are unaudited.

On 2 May 2023, BNP Paribas reported restated quarterly series for 2022 to reflect for each quarter: (i) the application of IFRS 5 relating to disposal groups of assets and liabilities held for sale, following the sale of Bank of the West on 1 February 2023; (ii) the application of IFRS 17 (Insurance Contracts) and the application of IFRS 9 for insurance entities, effective 1 January 2023; (iii) the application of IAS 29 (Financial Reporting in Hyperinflationary Economies) to Türkiye, effective 1 January 2022; and (iv) the internal transfers of activities and results at Global Markets and Commercial & Personal Banking in Belgium. The quarterly series for 2022 have been restated for these effects as if they had occurred on 1 January 2022. This presentation includes these quarterly series for 2022 as restated.

This presentation includes forward-looking statements based on current beliefs and expectations about future events. Forward-looking statements include financial projections and estimates and their underlying assumptions, statements regarding plans, objectives and expectations with respect to future events, operations, products and services, and statements regarding future performance and synergies. Forward-looking statements are not guarantees of future performance and are subject to inherent risks, uncertainties and assumptions about BNP Paribas and its subsidiaries and investments, developments of BNP Paribas and its subsidiaries, banking industry trends, future capital expenditures and acquisitions, changes in economic conditions globally, or in BNP Paribas' principal local markets, the competitive market and regulatory factors. Those events are uncertain; their outcome may differ from current expectations which may in turn significantly affect expected results. Actual results may differ materially from those projected or implied in these forward-looking statements. Any forward-looking statement contained in this presentation speaks as of the date of this presentation.

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[1] Liquid market assets or eligible assets in central banks (counterbalancing capacity), taking into account prudential standards, notably US standards, minus intra-day payment system needs

1Q23: Very solid results driven by the strength of BNP Paribas' model

Strong growth in revenues supported by all divisions

- Increase in **Corporate & Institutional Banking (+4.0%)**
- Growth in **Commercial, Personal Banking & Services[1] (+5.9%)**
- Rise in revenues in **Investment & Protection Services (+0.6%)**

Positive underlying[2] jaws effect (+1.5 pt)

Underlying **revenues**[2]: +5.3% vs. 1Q22[3]
Underlying **operating expenses**[2]: +3.8% vs. 1Q22[3]

Low level of risk throughout the cycle

Solid financial structure

Prudent, proactive and long-term risk management combined with the Group's strong diversification and favourable positioning (by geography, sector, business line and client segment)

Cost of risk: 28 bps[4]

CET1: 13.6%[5]

Liquidity Coverage Ratio: 139%[5]

Distributable Net Income[6] reflecting the Group's intrinsic performance

(1Q23 net income as reported: €4,435m, including the capital gain on the sale of Bank of the West and exceptional and extraordinary items)

Launch of the first €2.5bn tranche of the 2023 share buyback programme on 31.03.23 – a second €2.5bn tranche is planned for 2H23[7]

distributable Net Income[6]: €2,845m

distributable EPS[8]: €2.19 (+18.3% annualised[9])

Confirmation of a trajectory of strong growth in 2023 distributable EPS[8] higher than the plan's objective (CAGR 22-25 >+12%[9])

1. Including 100% of Private Banking in Commercial & Personal Banking (excluding PEL/CEL effects in France); 2. Distributable basis (see slide 44) excluding taxes subject to IFRIC 21 and exceptional costs to reflect the Group's intrinsic perfomance in 1Q23; 3. 1Q22 restated - see slide 42 ; 4. Cost of risk / customer loans outstanding at the beginning of the period (in bps); 5. See slide 15 - LCR end of period; 6. Distributable Net Income, Group share - See slide 9 and 44; 7. Upon customary condition precedents, including ECB authorisations; 8. Earnings per share based on 2023 distributable net income; 9. Calculated on the basis of 2022 reported results (IFRS 4, including Bank of the West) ; 10. Annualised growth reflecting the annualisation of the SRF adjustment (+797m) and overall after-tax adaptation costs related to Personal Finance (+€175m)

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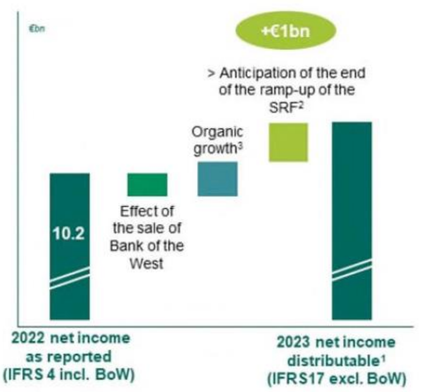
A unique positioning

2023 distributable net income[1] in line with GTS 2025 growth objectives

Confirmation of the growth trajectory in 2023 distributable net income[1], as announced in February 2023



Distributable net income reflecting the Group's intrinsic performance: €2,845m in 1Q23[1]

Organic growth in 1Q23 offsetting the effets of the sale of Bank of the West[3]

+

Upward adjustment in distributable net income by +€1bn[4] in 1Q23

+

Offsetting of the extraordinary negative impact of the adjustments to hedges related to changes in TLTRO terms & conditions decided by the ECB in 4Q22: **+€403m in 1Q23[5]**

1. 2023 distributable net income, i.e., 2023 net income excluding extraordinary items (capital gain on the sale of Bank of the West and adjustments to hedges) and after the €954m upward adjustment in distributable net income made in 1Q23; see slides 9 and 44; 2. SRF: Single Resolution Fund; 3. See slide 41; 4. See slide 44 - €954m adjustment in accordance with the February 2023 announcement: effect of anticipation of the end of the ramp-up of the SRF (+€797m) and complementary adjustments (+€157m) taking into account a level of the SRF in 1Q23 lower than anticipated in February 2023; 5. Reminder: a similar offsetting is expected in 2Q23, as announced in February 2023

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Continuous and strong value creation throughout the cycle

€5bn in share buyback programmes planned in 2023
of which €4bn with the objective of compensating the dilution related to the sale of Bank of the West

- 1st €2.5bn tranche launched on 31.03.23[2]
- 2nd €2.5bn tranche planned for 2H23[3]

Ordinary distribution: 60% of 2023 distributable net income[1]

- calculated on the basis of net income, Group share adjusted for extraordinary items and increased by €1bn in 1Q23 (distributable net income)
- 50% in the form of a dividend paid in cash and 10% in the form of a share buyback programme[3] in 2024

Expected growth in distributable 2023 EPS[4] and 2023 DPS higher than the plan's objective (CAGR 22-25>12%[5])

1. 2023 distributable net income, Group share (see slide 4) after taking into account the remuneration net of tax of Undated Super Subordinated Notes ('TSSDI'); 2. €962m related to the ordinary distribution of the 2022 results and €1.54bn related to the sale of Bank of the West; 3. Upon customary condition precedents, including ECB authorisations; 4. Earnings per share calculated on the basis of 2023 distributable net income; 5. CAGR calculated on the basis of 2022 reported results (IFRS 4, including Bank of the West)

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GTS 2025 plan
Confirmation of 2025 ambitions

Growth potential confirmed

Redeployment of capital released by the sale of Bank of the West (~€7.6bn, or ~110 bp of CET1[1])

~+€3.0bn (C/I ~60% and ROTE[6] ~12%) of additional revenues by 2025 compared to the initial assumptions of the GTS 2025 plan

Combined with the positive impact of the rise in interest rates in 2022

>+€2.0bn (~80% benefiting CPBS) of additional revenues by 2025 compared to the initial assumptions of the GTS 2025 plan

2025 objectives confirmed

- Net income[2]: CAGR 22-25[3] >+9%
- EPS[4]: CAGR 22-25 >+12%, or 40% over the period[3]
- 2025 ROTE[6]: ~12%
- Positive jaws effect every year > 2 pts on average[5]
- Cost of risk <40 bps every year

1. After share buyback programmes related to the sale of Bank of the West; 2. Group share; 3. Calculated on the basis of 2022 results as reported (IFRS 4 including Bank of the West; 4. Earnings per share; 5. CAGR 22-25 revenues minus CAGR 22-25 operating expenses excluding the positive impact of changes in accounting standards; 6. Return on tangible equity

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BNP PARIBAS

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1Q23 DETAILED RESULTS

APPENDICES

Main exceptional and extraordinary items – 1Q23

	1Q23	1Q22
Exceptional items		
Operating expenses		
• Overall adaptation costs related to Personal Finance (Corporate Centre)	-€236m	
• Restructuring costs and adaptation costs (Corporate Centre)	-€30m	-€26m
• IT reinforcement costs (Corporate Centre)	-€95m	-€45m
Total exceptional operating expenses	**-€361m**	**-€72m**
Other non-operating items		
• Badwill (bpost bank) (Corporate Centre)		+€244m
• Capital gain on the sale of a stake (Corporate Centre)		+€204m
• Impairment and reclassification to profit-and-loss of exchanges differences[1] (Ukrsibbank) (Corporate Centre)		-€433m
Total exceptional other non-operating items		**+€15m**
Total exceptional items (pre-tax)	**-€361m**	**-€57m**
Total exceptional items (after tax)[2]	**-€269m**	**-€40m**
Extraordinary items (excluded from distributable income)		
Revenues		
• Adjustment of hedges in 1Q23 related to changes in the TLTRO's terms and conditions decided by the ECB in 4Q22 (Corporate Centre)	-€403m	
Net income from discontinued activities, in accordance with IFRS 5		
• Capital gain on the sale of Bank of the West closed on 01.02.23	+€2,947m	

1. Previously recorded in Consolidated Equity; 2. Group share

BNP PARIBAS The bank for a changing world

1Q23 – Consolidated Group

1Q23 distributable income reflecting the Group's intrinsic performance

	1Q23 (distributable[3])	1Q22 (restated[4])	Variation	1Q23 (reported)
Revenues[1]	**€12,492m**	**€11,868m**	**+5.3%**	**€12,032m**
Operating expenses[1]	**-€8,294m**	**-€8,754m**	**-5.3%**	**-€9,191m**
Underlying operating expenses[2]	-€7,154m	-€6,894m	+3.8%	
reminder: contribution to the SRF	*-€200m*	*-€1,256m*		*-€997m*
Gross operating income[1]	**€4,198m**	**€3,114m**	**+34.8%**	**€2,841m**
Cost of risk[1]	-€642m	-€651m	-1.4%	-€642m
Operating income[1]	**€3,556m**	**€2,463m**	**+44.4%**	**€2,199m**
Non-operating items[1]	€178m	€162m	+9.9%	€178m
Pre-tax income[1]	**€3,734m**	**€2,625m**	**+42.2%**	**€2,377m**
Capital gain from the sale of Bank of the West				*€2,947m*
Net income, Group share	**€2,845m**	**€1,840m**		**€4,435m**

1. Excluding results of Bank of the West sold on 01.02.23 in accordance with IFRS 5; 2. Operating expenses excluding taxes subject to IFRIC 21 and exceptional costs; 3. After excluding extraordinary items ((capital gain on the sale of Bank of the West and adjustments to hedges) and taking into account the €954m upward adjustment in 1Q23 distributable net income - see slide 44; 4. Restatement related mainly to the application of IFRS17 standard with the implementation of IFRS9 in Insurance activities, effective 01.01.23, of IAS 29, effective 01.01.22 and application of IFRS 5 standard as a result of the sale of Bank of the West – see slide 42 and document detailing the 2022 restatements available at: https://invest.bnpparibas

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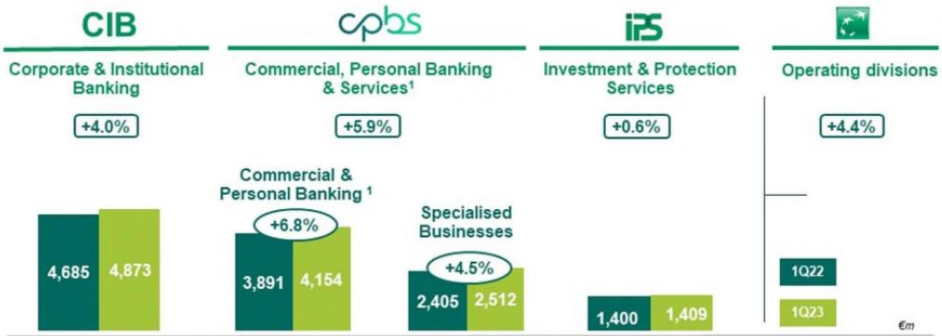
1Q23 – Revenues

Revenue growth in all divisions



- CIB: rise driven by the very strong increase in Global Banking and the very good performance of Securities Services – revenues remaining at a very high level in Global Markets
- CPBS: strong growth in Commercial & Personal Banking, driven by the strong increase in net interest income – a very strong rise in revenues at Arval and a less favourable context for Personal Finance
- IPS: increase driven by strong growth in revenues in Insurance and Wealth Management offset by an unfavourable environment in asset management businesses[2] and Real Estate

1. Including 100% of Private Banking in Commercial & Personal Banking (excluding PEL/CEL effect in France); 2. Asset Management and Principal Investments

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1Q23 – Operating expenses

Positive jaws effects in operating divisions globally

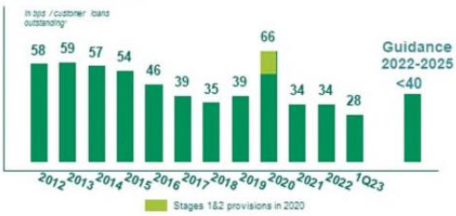
CIB	cpbs	IPS	Operating divisions
Corporate & Institutional Banking	Commercial, Personal Banking & Services[1]	Investment & Protection Services	Operating divisions
+3.1%	+4.7%	+5.4%	+4.1%

- **CIB:** support for business growth – positive jaws effect (+0.9 pt)
- **CPBS:** operating expenses contained – positive jaws effect (+1.2 pt)
- **IPS:** support for business development and targeted initiatives

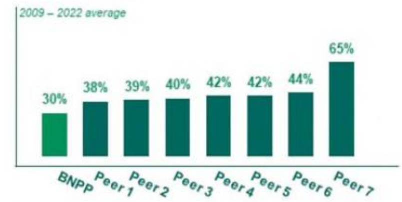
1. Including 100% of Private Banking in Commercial & Personal Banking

A prudent and diversified risk profile

Proactive and long-term management reflected in a low cost of risk

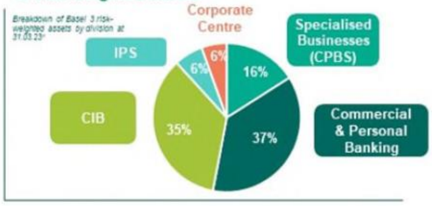


Prudent approach: CoR / GOI ratio among the lowest in Europe[2]



Prudent growth of market activities: VaR[3] (a measure of market risk) **stable**

Diversification of risks and balanced distribution of risk-weighted assets



1. Perimeter excluding Bank of the West from 1Q22; 2. Source: publications of Eurozone banks: BBVA, Crédit Agricole SA, Deutsche Bank, Intesa SP, Santander, Société Générale, Unicredit; 3. VaR (1 day, 99%); 4. CRD5

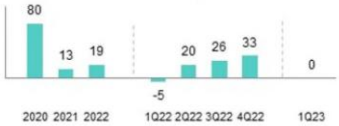
Cost of risk – 1Q23 (1/2)

Cost of risk / Customer loans outstanding at the beginning of the period (in bps)

Group[1]

- Cost of risk: €642m (-€55m vs. 4Q22; -€9m vs. 1Q22)
- Cost of risk at a very low level
- Provisions on non-performing loans (stage 3) at a low level
- Release of provisions on performing loans (stages 1 & 2)

CIB – Global Banking



- Cost of risk: -€1m (-€156m vs. 4Q22; +€18m vs. 1Q22)
- Release of provisions on performing loans (stages 1 & 2) and cost of risk on non-performing loans (stage 3) at a low level

CPBF[3]

- Cost of risk: €75m (+€96m vs. 4Q22; -€17m vs. 1Q22)
- Cost of risk at a low level - Release of provisions on performing loans (stages 1 & 2)

1. Perimeter excluding Bank of the West from 1Q22 ; 2. Excluding the exceptional impact of the "Act on Assistance to Borrowers" in Poland; 40 bps including this impact; 3. Including 100% of Private Banking

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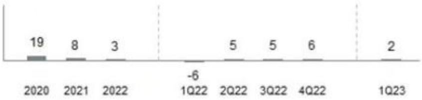
Cost of risk – 1Q23 (2/2)

Cost of risk vs. Customer loans outstanding at the beginning of the period (in bps)

CPBB[1]

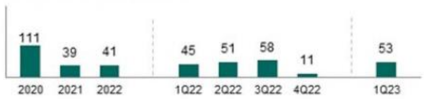


- Cost of risk: €8m (-€12m vs. 4Q22; +€26m vs. 1Q22)
- Cost of risk at a low level with the releases of provisions on non-performing loans (stage 3)

BNL bc[1]

- Cost of risk: €98m (-€16m vs. 4Q22; -€30m vs. 1Q22)
- Ongoing decline in cost of risk with a decrease in provisions on non-performing loans (stage 3) and releases of provisions on performing loans (stages 1 & 2)

Europe-Mediterranean[1]



- Cost of risk: €49m (+€39m vs. 4Q22; +€8m vs. 1Q22)
- Low cost of risk and decrease in provisions on non-performing loans (stage 3) vs.4Q22

Personal Finance

- Cost of risk: €358m (-€55m vs. 4Q22; +€42m vs. 1Q22)
- Decrease in provisions on non-performing loans (stage 3) vs. 4Q22

1. Including 100% of Private Banking

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2023 – A solid financial structure

- **CET1 ratio: 13.6%[1] at 31.03.23 (+130 bps vs. 31.12.22)**
  - Closing of the sale of Bank of the West on 01.02.23: +170 bps
  - 1Q23 results after taking into account a 60% payout ratio, net of changes in risk-weighted assets: +0 bp
  - Effect of the upward adjustment in 1Q23 distributable income: -10 bps
  - Launch of the 1st tranche of the share buyback: -20 bps
  - Impact of the application of IFRS 17 and from the updating of models and regulations[2]: -10 bps
  - Overall limited impact of other effects on the ratio
- **Leverage ratio[3]: 4.4% as at 31.03.23**
- **High Liquidity Coverage Ratio[4]: 139% as at 31.03.23 (129% as at 31.12.22)**

  High-quality liquid assets (HQLA): €426bn at 31.03.23 (€419bn as at 31.12.22)
  - 75% in deposits at central banks
  - 25% in mostly "level 1" debt securities
- **Immediately available liquidity reserve[5]: €466bn as at 31.03.22**
  - Room to manoeuvre >1 year in terms of wholesale funding
  - Of which €324bn in deposits at central banks

1. CRD5; including IFRS9 transitional arrangements; see slide 72; 2. Including IFRS9 phasing; 3. Calculated in accordance with Regulation (EU) 2019/876; 4. LCR at the end of the period calculated in accordance with Regulation (CRR) 575/2013, Art. 451a; 5. Liquid market assets or eligible assets in central banks (counterbalancing capacity), taking into account prudential standards, notably US standards, minus intra-day payment system needs

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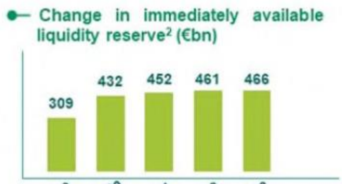
Liquidity: a diversified base of deposits and disciplined, prudent and proactive management

Favourable positioning and integrated & diversified model supporting stability of resources

- **Base of deposits supported by the Group's diversification, its long-term approach to clients, and its leading positions in flows**
  - **#1 European in cash management – #1 in securities services in EMEA – #1 private bank in the Eurozone**
  - **Deposits diversified by geographies, entities and currencies:** CPBF (26%), CPBB (18%), other Commercial & Personal Banks (19%), Global Banking (23%), Securities Services (11%) and IPS (5%)
  - **Deposits diversified by client segment:** 46% from retail deposits, of which ~2/3 insured, 43% from corporates, of which 19% operational, and 12% from financial clients[1], of which 83% operational
- **Prudent and proactive management**
  - **Measures and monitoring done at various levels (consolidated, sub-consolidated and by entity):** by currencies, on horizons from 1 day to 20+ years, using internal and regulatory metrics, and based on normal and stressed conditions
  - **Indicators integrated into the operating management of business lines** (budgetary process, customer follow-up, origination, pricing, etc.)



1. Excluding non-operational deposits under one month; 2. Liquid market assets or eligible assets in central banks (counterbalancing capacity), taking into account prudential standards, notably US standards, minus intra-day payment system needs

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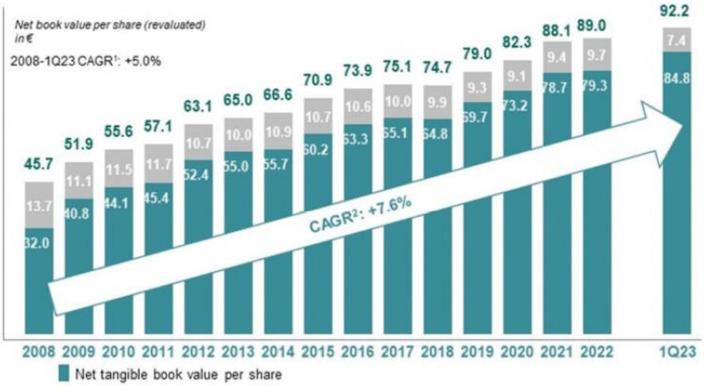
Constant and sustained value creation throughout the cycle

Steady increase in tangible equity per share: €84.8
+€4.7 (+5.9%) vs. 31.03.22



1. Of net book value per share; 2. Of net tangible book value per share from 2008 to 1Q23

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Sustainable finance

Group mobilisation and external recognition

Mobilised alongside clients to support them in the transition towards a sustainable economy and to align portfolios with the commitment to carbon neutrality

Sustainable loans to Corporates, Institutionals & Individuals dedicated to sustainable projects[1]	€94.9bn as of end-March 2023	2025 target: €150bn
Sustainable bonds *issued for BNP Paribas clients between 2022 & 2025*[2]	€46.8bn as of end-March 2023	2025 target: €200bn
Assets under management in SFDR Article 8 and 9 funds *in 2025*[3]	€241.7bn as of end-March 2023	2025 target: €300bn
Amount of support *enabling clients to* **transition to a low-carbon economy**[4]	€56bn as of end-March 2023	2025 target: €200bn

N°1 worldwide[5] in sustainable bonds[6] with $14.2bn as of end-March 2023

N°1 worldwide[5] in green bonds with $9bn as of end-March 2023

N°3 worldwide[5] in sustainability-linked loans with $3.2bn as of end-March 2023

IFR AWARDS 2022 — **2022 Bank of the Year and Bank of Sustainability**

GLOBAL 100 — **France's top-ranked bank; world's fourth-ranked bank in the 2023 ranking of the "100 most sustainable corporations"**

1. Amount of sustainable loans related to environmental or social issues granted by BNP Paribas to its clients; 2. 2022-2025 cumulative amount of all types of sustainable bonds (total amount divided by the number of bookrunners); 3. BNP Paribas Asset Management open-ended funds distributed in Europe and classified Article 8 or 9 under SFDR; 4. Green loans, green bonds, and all financing supporting low-carbon technologies, such as renewable energies, green hydrogen, etc.; 5. Source: Bloomberg, bookrunner in volume as at 31.03.23; 6. Including green bonds

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Social responsibility

Developing employee's potential and commitment in 2022 based on the People Strategy 2025

Diversity and Inclusion

- **% of women among SMPs**[1]: **35.2%** *(2025 target: 40%)*
- **% women among board members**: **53%** (8 women out of 15 members)
- **Gender equality index at BNP Paribas SA in France**[2]: **86 / 100**
- **Number of solidarity hours performed by employees**: **1,126,142 h** (2021 and 2022)

Human capital

- **Launch of the Sustainability Academy:** a set of initiatives to raise employees' awareness of sustainable finance
- **% of employees who completed at least 4 training courses during the year**: **97.4%**
- **Average number of hours of training per employee during the year**: **21.8 h**
- **Number of mobilities worldwide during the year**: **24,911**

External recognition

- **Only bank among the Top 10** employers in France that is certified **Top Employer Europe 2022** for the ninth consecutive year
- **First and only bank in France holding AFNOR's "Alliance" certification**, which combines the Diversity and Professional Equality labels
- **82 / 100** (80 /100 in 2021) **Bloomberg** Gender Equality Index

1. SMP: Senior Management Position; 2. Annual index of 100 points measuring gender wage inequalities in French companies. It is based on five metrics: gender compensation gaps (40 points); gender gap in wage hikes (20 points); gender gap in promotions (15 points); percentage of women getting raises after maternity leave (15 points); number of women among the 10 highest-paid employees (10 points)

A reinforced Internal Control Set-up

- **An even more solid control and compliance set-up and ongoing efforts in inserting a reinforced compliance culture into daily operations**
  - **Ongoing improvement of the operating model for combating money laundering and terrorism financing:**
    - A standards-based, risk-adjusted approach, with a risk management set-up shared between business lines and Compliance (know-your-client, reviewing unusual transactions, etc.)
    - Reinforced Group-level steering with regular reporting to monitoring and supervisory bodies
  - **Ongoing reinforcement of set-up for complying with international financial sanctions:**
    - Thorough and diligent implementation of measures necessary for enforcing international sanctions as soon as they have been published
    - Broad dissemination of the procedures and intense centralisation, guaranteeing effective and consistent coverage of the surveillance perimeter
    - Continuous optimisation of cross-border transaction filtering tools and screening of relationship databases
  - **Ongoing improvement of the anti-corruption framework with increased integration into the Group's operational processes**
  - **Intensified on-line training programme:** compulsory programmes for all employees on financial security (Sanctions & Embargos, Combating Money Laundering & Terrorism Financing), on combating corruption, protecting clients' interests, market integrity, and all topics dealt in the Group's Code of Conduct.
  - **Ongoing missions of the General Inspection dedicated to insuring financial security within entities generating USD flows.** These successive missions have been conducted since the start of 2015 in the form of 18-month cycles. The first five cycles achieved a steady improvement in processing and audit mechanisms. The sixth cycle was begun in August 2022 on the same timeframe and will be completed in December 2023.
- **The remediation plan agreed as part of the June 2014 comprehensive settlement with the US authorities is now mostly completed**

BNP PARIBAS

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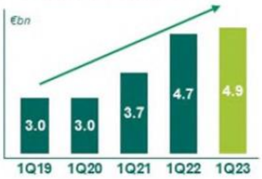
APPENDICES

Corporate & Institutional Banking – 1Q23

Increase in results sustained by strong client activity in all business lines

- **Very good business drive, leveraging a diversified and integrated model**
  - **Financing:** very good business activity, in particular in bond issuance
  - **Markets:** very strong client demand on rates, foreign exchange and credit markets; good activity on equity markets, despite a decrease in volumes from a very high 1Q22 base
  - **Securities Services:** continued very strong business drive and high level of transactions
- **Confirmation of leadership positions[1]**
  - European leader in **syndicated loans** and **bond issues** as well as in **Transaction Banking** (cash management and trade finance)
  - Global and European leader in **sustainable financing**
  - **Leadership** positions **on multi-dealer electronic platforms** in markets activities

- **Growth in revenues**



- **Acknowledged leadership**

IFR AWARDS 2022

Bank of the Year
Bank for Sustainability

Revenues: €4,873m (+4.0% vs. 1Q22)	**Operating expenses: €3,440m (+3.1% vs. 1Q22)**
• Strong growth at Global Banking in a generally more favourable context (+15.6%) • Very good performance of Global Markets (-1.8% vs. a very high 1Q22 base) • Continued very good growth at Securities Services (+6.7%)	• Positive jaws effect (+0.9 pt) • Increase driven by business development

Pre-tax income: €1,428m (+5.7% vs. 1Q22)

1. Source: see details on the slides devoted to each business line

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CIB – Global Banking – 1Q23

Very good business momentum and strong increase in revenues

Very good level of activity in an overall more favourable environment

- Very good momentum in activity, in particular with a strong rebound in EMEA bond markets[1] (+92% vs. 4Q22; +7% vs. a high 1Q22 base)
- **Transaction Banking:** very good activity in all three regions
- **Loans** (€182bn, +6.1%[2] vs. 1Q22): further increase in loans outstanding
- **Deposits** (€216bn, +11.3%[2] vs. 1Q22): further growth in deposits (+1.3%[2] vs. 4Q22)

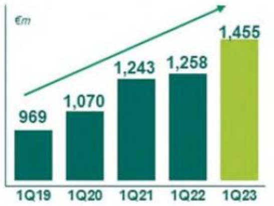
Confirmation of leadership positions

- Leader in **Transaction Banking** (trade finance and cash management)[3] with large corporate clients in Europe
- Consolidated leadership positions in **syndicated loans** and **bond issues** in EMEA[4]
- Global and European leader in **sustainable financing**[5]

Revenues: €1,455m
(+15.6% vs. 1Q22)

- Growth in all global business lines (Capital Markets, Transaction Banking and Advisory)
- Increases in all three regions, in particular in the Americas
- Very strong increase in Transaction Banking (+59.8% vs. 1Q22), in particular in cash management

Continued growth in revenues



Acknowledged European leader

1. Source: Dealogic; change in total volume of bond issuance in EMEA ; 2. Average outstandings, change at constant scope and exchange rates; 3. Source: CoalitionGreenwich Share Leader, 2022 Europe Large Corporate Trade Finance, 2022 Europe Large Corporate Cash Management; 4. Source: Dealogic as at 31.03.23, bookrunner market share in volume; 5. Source: Dealogic – All ESG Fixed Income, Global & EMEA sustainable financing (ESG Bonds and Loans), bookrunner by volume, 1Q23

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CIB – Global Markets – 1Q23

Very strong commercial activity and continued high revenues

Very robust client activity on the whole

- **Fixed income, currencies & commodities:** very strong client demand, in particular on rates and foreign exchange products
- **Equity markets:** overall good activity despite lower volumes than the very high 1Q22 base
- **Credit markets:** volumes up and rebound on the primary and secondary bond markets, in particular in EMEA; n°1 worldwide in euro bond issuance[1]; n°1 worldwide in green bond issuance[1]

Consolidation of leadership positions

- Leader in multi-dealer electronic platforms: Forex markets (#1 in NDFs[2] and swaps[3]), Rates (#2 in government bonds in euros[3]), Credit (#1 in iTraxx CDS indices in euros[3])
- *Equity Derivatives House of the Year, Euro Bond House of the Year* and *SSAR Bond House of the Year* (IFR Awards 2022)

Revenues: €2,764m
(-1.8% vs. 1Q22)

- FICC (+9.0%): increase vs. an already very high 1Q22; very good performance in rates, foreign-exchange, and credit activities, in particular with the rebound in the bond markets (both primary and secondary)
- Equity & Prime Services (-19.5%): decrease from a very high 1Q22 base

Revenues trend

E-transaction volumes

1. Source: Dealogic as at 31.03.23; bookrunner in volume; 2. Bloomberg, 360T and FXALL, 1Q23; 3. Bloomberg 1Q23

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CIB – Securities Services – 1Q23

Robust activity and strong increase in revenues

- **Very good business drive supported by a diversified model**
  - Sustained sales & marketing development in particular with new mandates in EMEA
  - Launch of a partnership in asset servicing with Riyad Bank
  - Continued very good momentum in Private Capital and in the financial intermediary segment
  - Transaction volumes stable at a high level
- **Very good resilience of assets**
  - Change in average assets: -4.9% vs. 1Q22; +4.5% vs. 4Q22
  - Increase in assets late in the period, due to the rebound in the markets

Revenues: €655m (+6.7% vs. 1Q22)

- Continued strong increase in revenues
- Favourable impact of the interest-rate environment and stability at a high level of transaction volumes

- **Transaction volumes**

- **Assets under custody** (AuC) **and under administration** (AuA)

Commercial, Personal Banking & Services – 1Q23

Strong increase in results and positive jaws effect

- **Good business drive**
  - **Loans:** +4.4% vs. 1Q22 (+9.6% vs. 1Q21), increase in Commercial & Personal Banking and Specialised Businesses
  - **Arval:** very good increase in the financed fleet (+8.8%[1] vs. 31.03.22)
  - **Deposits:** +1.2% vs. 1Q22 (+9.1% vs. 1Q21), increase in Commercial & Personal Banking
  - **Private Banking:** very strong net asset inflows (€4.4bn)
- **Ongoing digitalisation and sales & marketing drive**
  - **~288m monthly connexions** to the mobile apps[2] (+15.4% vs. 31.03.22), or an average frequency of 22 times per month
  - **Development of customer acquisition with Hello bank![3]:** 146,000 new customers as at 31.03.23 (+39% vs. 31.03.22) and **fast pace of account openings at Nickel** (+26% vs. 31.03.22)
  - **Mobility:** deploying a technological platform for partners and their clients providing Group's diversified offering through digitalised & integrated customer journeys

Revenues[4]: €6,666m (+5.9% vs. 1Q22)	Operating expenses[4]: €4,585m (+4.7% vs. 1Q22)
• Good performance at Commercial & Personal Banking (+6.8%), driven by the strong increase in net interest income • Growth in Specialised Businesses (+4.5%; +20.4% excluding Personal Finance)	• Positive jaws effect (+1.2 pt) • Very positive jaws effect (+3.5 pts) at Commercial & Personal Banking, and at Arval and Leasing Solutions (+10.9 pts)

- **Loans**

- **Deposits**

Pre-tax income[5]: €1,468m (+7.7% vs. 1Q22)

1. Increase in the fleet at the end of the period in thousands of vehicles, +6.0% excluding the acquisition of Terberg Business Lease and BCR; 2. Perimeter: individual, professional and private banking clients of Commercial & Personal Banking and digital banks, Nickel and Personal Finance; 3. Excluding Austria and Italy; 4. Including 100% of Private Banking excluding PEL/CEL effects; 5. Including 2/3 of Private Banking excluding PEL/CEL effects

CPBS – Commercial & Personal Banking in France – 1Q23

Increase in results and positive jaws effect

Strong business drive

- **Loans:** +4.7% vs. 1Q22, increase across all customer segments; selectivity maintained in mortgage loans and gradual improvement in margins
- **Deposits:** +1.0% vs. 1Q22, increase in individual customer deposits and low relative exposure to regulated savings; corporate and private banking client deposits almost unchanged (-0.3% vs. 1Q22); margins holding up very well
- **Off-balance sheet savings:** +3.3% vs. 31.03.22 in an unfavourable market context
- **Private Banking:** very good net asset inflows of €1.2bn

Supporting business development for corporate clients

- **Financing the recovery:** top French player with €1bn in *Prêts Participatifs Relance* (Equity loans) granted as at 31.03.23 , i.e. a 45% market share[1]
- **Expanded digital offering in partnership with fintechs:** solutions for e-billing, professional expenses, access to public support and, insurance and management of cyber risk

Loans

Fees[2]

Revenues[2]: €1,670m (+4.2% vs. 1Q22)	Operating expenses[2]: €1,276m (+3.0% vs. 1Q22)	Pre-tax income[3]: €282m (+18.0% vs. 1Q22)
• Net interest income: +6.8%, increase driven by the impact of the interest rate environment • Fees: +1.4%, increase supported by banking fees, particularly in means of payment and cash management	• Positive jaws effect (+1.2 pt) • Support for growth and ongoing impact of cost-savings measures	• Decrease in the cost of risk

1. Source : Eurotitrisation as of 24.03.23; 2. Including 100% of Private Banking excluding PEL/CEL effects (+€3m in 1Q23, +€11m in 1Q22); 3. Including 2/3 of Private Banking excluding PEL/CEL effects

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CPBS – BNL banca commerciale – 1Q23

Increase in results and improvement in the risk profile

Business activity

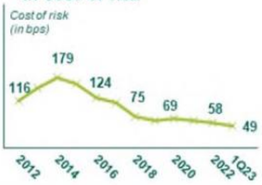
- **Loans:** -1.8% vs. 1Q22, +0.2% on the perimeter excluding non-performing loans, growth supported by mid- and long-term loans across all segments
- **Deposits:** +1.1% vs. 1Q22, increase driven by the growth in deposits by corporate clients
- **Private Banking:** very good net asset inflows of €1.2bn supported by synergies with the corporate segment

Acceleration of the development of the Corporate franchise

- **Deployment of the transversal initiative to support innovative companies in Italy:** 106 new clients since the start of 2022
- **Significant increase in fees from corporate clients**, development of flow businesses and support to corporate customers in their energy transition
- **N°1 in Italy for innovative banking services** to corporates[1]

Deposits

Constant improvement in cost of risk



Revenues[2]: €675m (+3.2% vs. 1Q22)	Operating expenses[2]: €464m (+2.3% vs. 1Q22)	Pre-tax income[3]: €106m (+63.1% vs. 1Q22)
• Net interest income: +3.0%, positive impact of the interest-rate environment despite pressure on margins • Fees: +3.5%, driven by the sustained increase in banking fees in particular from corporate clients	• Positive jaws effect (+0.9 pt) • Effect of the transformation of the operating model and targeted initiatives	• Decrease of the cost of risk

1. 'Premio Innovazione per i Clienti Corporate' by the Italian Banking Association (IBA); 2. Including 100% of Private Banking; 3. Including 2/3 of Private Banking

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CPBS – Commercial & Personal Banking in Belgium – 1Q23

Strong increase in results and largely positive jaws effect

- **Good business drive**
  - **Loans**: +6.0% vs. 1Q22, increase in loans to individuals and corporates
  - **Deposits**: -0.4% vs. 1Q22, increase in deposits of individual and Private Banking clients on the whole; margins holding up
  - **Off-balance sheet savings**: -5.8% vs. 31.03.22, in an unfavourable market context in 2022 but an increase in 1Q23 (+1.2% vs. 31.12.22)
  - **Private Banking:** good net asset inflows of €1.5bn
- **New commercial set-up to support the transformation and development of leading client franchises**
  - **Commercial set-up transformed, with adapted service models** to develop added value and enhance the quality of service
  - **Best Bank in Belgium** according to *Global Finance Magazine*, **N°1** in the **individuals**[1] segment, **No.1** in **Private Banking**[2], **N°1** in **Corporate Banking**[3]

Loans

Off-balance sheet savings

Revenues[4]: €1,016m (+8.6% vs. 1Q22)	Operating expenses[4]: €945m (+4.5% vs. 1Q22)	Pre-tax income[5]: €52m (+24.0% vs. 1Q22)
• Net interest income: +15.6%, very strong growth driven by the improvement in margins on deposits • Fees: -5.9%, decrease in commissions from a high 1Q22 base	• Very positive jaws effect (+4.2 pts) • Impact of inflation contained by the effect of cost-savings measures and the optimisation of the set-up	• Write-back of provisions in 1Q22 • Impact of taxes subject to IFRIC 21: -€379m[4]

1. Source: Financial Market Data Monitor 2022; 2. In amounts of assets under management as reported by the main banks as at 31.12.22; 3. Source: CoalitionGreenwich Share Leader 2022 Europe Large Corporate Cash Management; 4. Including 100% of Private Banking; 5. Including 2/3 of Private Banking

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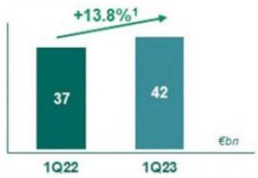
CPBS – Europe Mediterranean – 1Q23

Good business drive

- **Commercial activity**
  - **Loans:** +6.6%[1] vs. 1Q22, increased volumes in corporate clients, particularly in Poland – prudent and targeted origination, particularly in Türkiye and for individual customers in Poland
  - **Deposits**: +13.8%[1] vs. 1Q22, up in Poland and Türkiye in all segments
- **Ongoing transformation**
  - **Sale of businesses** in sub-Saharian Africa: closing of the sale of businesses in Ivory Coast[2] on 15.02.23, sale of businesses in Senegal closed on 28.04.23
  - **Mobility**: launch in Poland of a digital platform of financing solutions & services with Arval, Personal Finance, Cardif and Leasing Solutions
- **Limited overall impact from the implementation of IAS 29** and from the efficiency of the hedging in Türkiye: +€6m on pre-tax income in 1Q23

Loans[1]

Deposits[1]



Revenues[3]: €648m (+18.8%[5] vs. 1Q22)	Operating expenses[3]: €435m (+9.5%[5] vs. 1Q22)	Pre-tax income[4]: €280m (+42.4%[5] vs. 1Q22)
• Strong increase in net interest income[5] in deposits, particularly in Poland; non-recurring positive item in Türkiye	• Increase driven particularly by high inflation • Very positive jaws effect (+9.3 pts[5])	• Capital gain related to the sale of businesses in Ivory Coast

1. At constant scope and exchange rates; 2. 59.79% stake in BICICI; 3. Including 100% of Private Banking; 4. Including 2/3 of Private Banking; 5. At constant scope and exchange rates, excluding Türkiye at historical exchange rates, in accordance with the application of IAS 29

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CPBS – Specialised Businesses – Personal Finance – 1Q23

Further transformation and adaptation of activities

- **Growth in outstandings and implementation of partnerships**
  - **Loans:** +4.7% vs. 1Q22, increase across all segments; pressure on margins at production
  - **Ongoing implementation of strategic partnerships** in auto loans to converge towards a constant improvement in the risk profile throughout the cycle
  - **Signing of a new exclusive partnership with Stellantis** for financing activities in Germany, Austria and the UK on 04.04.23 (contribution of €5bn in outstandings as at 30.06.23)
- **Geographical refocusing of activities and reorganisation of the operating model**
  - **Geographical refocusing** of activities in Western Europe and in the UK
  - **Reorganisation of activities in progress in Central Europe** and sale of businesses in Bulgaria on 09.12.22

- **Loans**

- **Structural improvement of cost of risk with the product mix**

Revenues: €1,288m (-7.2% vs. 1Q22)	Operating expenses: €810m (+4.5% vs. 1Q22)
• Impact of lower margins, despite higher volumes	• Driven by targeted projects and further development investments

Pre-tax income: €122m (-60.0% vs. 1Q22)

1. Between 31.12.2016 and 31.03.2023; 2. 2019-1Q23 average calculated on the basis of management figures and average outstandings excluding Floa

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CPBS – Specialised Businesses – Arval & Leasing Solutions – 1Q23

Very strong performance and positive jaws effect

- **Arval**
  - **Very good growth in the financed fleet** (+8.8%[1] vs. 31.03.22) **and continued very high used car prices**
  - **Sustained business drive:** increase in orders (+7.3% at 31.03.23 vs. 31.03.22)
  - **Acceleration in automation of processes** with more than 230 robots in production at 31.03.23 (+86 vs. 31.03.22)
- **Leasing Solutions**
  - **Increase in outstandings** (+6.0%[3] vs. 1Q22) and **good momentum in business activity** particularly in Technology & Lifecycle Solutions
  - **Acknowledged expertise:** European Lessor of the year for the 7th time and Best Energy Transition Financing Program of the year at the Leasing Life Awards in 2022

- **Arval: growth in the financed fleet²**

- **Leasing Solutions: increase in outstandings**

Revenues: €982m (+20.9% vs. 1Q22)	Operating expenses: €403m (+10.0% vs. 1Q22)
• Very good performance at Arval (continued very high used car prices) • Good growth at Leasing Solutions with the increase in outstandings	• Very positive jaws effect (+10.9 pts)

Pre-tax income: €517m (+17.4% vs. 1Q22)

1. Increase in the fleet as at the end of the period in thousands of vehicles, +6.0% excluding the acquisition of Terberg Business Lease and BCR; 2. Fleet at the end of the period; 3. At constant scope and exchange rates

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CPBS – Specialised Businesses – New Digital Businesses & Personal Investors - 1Q23

Client acquisition engines

NICKEL, a payment offering accessible to everyone

- Ongoing roll-out in Europe and continued strong pace of account openings (~57,000 / month in 1Q23, ~49,000 / month in 1Q22)[1]
- ~3.2m accounts opened[2] as at 31.03.23 (+25.9% vs. 31.03.22) at more than 9,000 points of sale[2] (+24.4% vs. 31.03.22)

FLOA, the French leader in Buy Now Pay Later

- 3.8m clients at 31.03.23 (+10.8% vs. 31.03.22)
- Good level of production with a tightening in credit standards

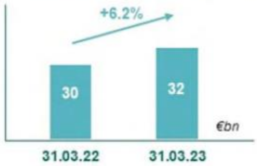
BNP PARIBAS PERSONAL INVESTORS, a specialist in digital banking and investment services

- A still high level of order numbers, strong growth in customer numbers (> 80,000 new clients) and deposits (+6.2% vs. 31.03.22)

Nickel: expansion in Europe

~3.2m accounts opened[2] as at 31.03.23 (~+661k vs. 31.03.22)

Personal Investors: deposits



Revenues[3]: €243m (+18.5% vs. 1Q22)

- Steep increase in New Digital Businesses, driven by business development
- Reminder: consolidation of 50% of Floa's contribution, effective 01.02.22
- Positive impact of the interest-rate environment on Personal Investors deposits

Operating expenses[3]: €164m (+24.1% 1Q22)

- Driven by the development strategy of New Digital Businesses

Pre-tax income[4]: €54m (-7.0% vs. 1Q22)

1. On average on the quarter in all countries; 2. Since inception; total for all countries; 3. Including 100% of Private Banking in Germany; 4. Including 2/3 of Private Banking in Germany

BNP PARIBAS The bank for a changing world First quarter 2023 results | 33

Investment & Protection Services – 1Q23

Good level of business drive

Business momentum sustained in particular by net asset inflows

- **Strong net asset inflows (+€19.4bn in 1Q23),** particularly in Wealth Management and Asset Management
- **Good drive of the Insurance business in Protection in France and internationally**
- **A less favourable environment at Real Estate**, compared to a very strong 1Q22, particularly in Advisory

Recognised expertise & development of the investment solutions offering with a sustainable approach

- BNP Paribas Asset management ranked N°2 for the quality of its **responsible investment process** by ShareAction[2]
- **Employee savings schemes**: new fund focusing on social thematics (Multipar Inclusive Growth)

Assets under management[1]

Revenues: €1,409m (+0.6% vs. 1Q22)

- Strong increase in Insurance revenues
- Very good increase in Wealth Management revenues offset by lower performance in asset management[3] and Real Estate businesses in a less favourable environment

Operating expenses: €897m (+5.4% vs. 1Q22)

- Support for business development and targeted initiatives

Pre-tax income: €578m (-7.0% vs. 1Q22)

- Negative base effect (capital gain related to the creation of a JV in 1Q22)
- Increase in the contribution by associates

1. Including distributed assets, with the exception of Bank of the West; 2. Source: 2023 ShareAction Responsible Investment Benchmark Report; 3. Asset Management and Principal Investments

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IPS – Asset inflows and AuM – 1Q23

Strong net asset inflows, particularly in money-market funds

Assets under management: €1,213bn as at 31.03.23

- **Market performance effect: +€27.1bn**
- **Net asset inflows: +€19.4bn,** very good asset inflows, driven in particular by inflows into money-market funds at Asset Management and very good inflows at Wealth Management
- **Foreign exchange effect: -€3.7bn**
- **Others: -€1.3bn**
- - 1% / 31.03.22

Change in assets under management[1]

Assets under management[2] as at 31.03.23, by business line

Assets under management[1] as at 31.03.23, by client segment

1. Including distributed assets; 2. Assets under management of Real Estate Investment Management: €29bn; Assets under management of Principal Investments included in Asset Management following the creation of the Private Assets franchise

IPS – Insurance – 1Q23

Good start in 2023 under the new IFRS 17 standard

Business activity

- **Savings:** gross asset inflows of €6.2bn in 1Q23, driven by a good business drive in France in particular in unit-linked policies
- **Protection:** good momentum in affinity insurance and property & casualty in France; internationally, strong growth in particular in Latin America

IFRS 17 came into effect on 01.01.23[1], with a joint implementation of IFRS 9[2]

- **Operating expenses deemed "attributable"** deducted from revenues and no longer included in operating expenses: resulting in a decrease in Insurance operating expenses (€221m) with an equivalent decrease in revenues
- **Impact of volatility** generated by fair value accounting (IFRS 9) on the financial result presented in the Corporate Center[2]
- Reporting of Insurance's results reflecting the **operating and intrinsic performance** (technical and financial)

A balanced model

Insurance revenues

Revenues: €524m (+6.9% vs. 1Q22)	Operating expenses: €202m (+2.7% vs. 1Q22)	Pre-tax income: €381m (+19.2% vs. 1Q22)
• Increase driven by the rise in revenues from Protection	• Very positive jaws effect • Support of business development and targeted projects	• Increase in the contribution by associates, particularly in Latin America and Europe

1. Document detailing the 2022 restatement available at https://invest.bnpparibas/; 2. See slides 60 and 62 for details on the impact

IPS – Wealth & Asset Management[1] – 1Q23

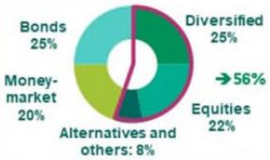
Solid net asset inflows

- **Wealth Management**
  - Strong net asset inflows (€5.6bn in 1Q23) especially in Commercial & Personal Banking in France, Italy and Belgium and internationally with high-net-worth clients
  - Strong growth in all geographical regions, driven by the positive impact of the improvement of deposit margins
- **Asset Management**
  - Very good net asset inflows (€13.6bn in 1Q23), driven in particular by strong net asset inflows into money-market funds
  - Increase in assets under management in both money-market funds and medium- and long-term vehicles in 1Q23
- **Real Estate**
  - Good performance by Investment Management and Property Management activities and lower performance in Advisory

- **Private Banking: acknowledged leadership**

16 Euromoney 2023 Awards, including:
- Europe's Best Private Bank[2]
- Europe's Best Private Bank for Digital[2]

- **Asset Management: €526bn of AuM at 31.03.23[3]**



Revenues: €885m (-2.7% vs. 1Q22)	Operating expenses: €695m (+6.2% vs. 1Q22)	Pre-tax income: €198m (-34.7% vs. 1Q22)
• Wealth Management: very strong increase (+10.6%) driven by strong growth in net interest income • Asset Management[3] and Real Estate: comparison to a high base and unfavourable impact of lacklustre environments	• Very positive jaws effect in Wealth Management (+4.2 pts) • Increase in operating expenses at Asset Management[3] with an unfavourable 1Q22 base	• Negative base effect (capital gain related to the creation of a JV in 1Q22)

1. Asset Management, Wealth Management, Real Estate and Principal Investments; 2. Euromoney Global Private Banking Awards 2023; 3. Including Principal Investments.

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BNP PARIBAS

GROUP RESULTS

DIVISION RESULTS

CONCLUSION

1Q23 DETAILED RESULTS

APPENDICES

Conclusion

A solid intrinsic performance reflected by the distributable net income
Distributable Net Income: €2,845m

Confirmation of a trajectory of strong growth in 2023 distributable EPS above the plan's objective (CAGR 22-25 >+12%)

Leadership affirmed in financing the energy transition

Strong mobilisation and commitment of the teams to support clients

BNP PARIBAS

GROUP RESULTS

DIVISION RESULTS

CONCLUSION

1Q23 DETAILED RESULTS

APPENDICES

1Q23 – BNP Paribas Group

Organic growth supported by the performance of the divisions

1Q23 Organic growth offsets the effect of the sale of Bank of the West

m€	
Net Income, Group share 1Q23 reported	**4,435**
Exceptional costs	-269
Adjustment of hedges related to changes in the TLTRO's terms & conditions (extraordinary)	-403
Capital gain on the sale of Bank of the West (extraordinary)	2,947
Net Income, Group share 1Q23 reported (excl. extraordinary & exceptional items[1] and excl. BoW)	**2,159**
Net Income, Group share 1Q22 reported (excl. exceptional items[1] and incl. BoW)	**2,148**

Organic growth supported by the good performance of the operating divisions

*Based on 2022 **restated** quarterly series and 1Q23 reported results*

(1Q23 vs. 1Q22)	At historical scope & exchange rates	At constant scope & exchange rates
Revenues	**+4.4%**	**+4.5%**
Operating expenses	+4.1%	+4.2%
Gross Operating Income	**+5.2%**	**+5.1%**
Cost of Risk	+8.6%	+7.5%
Operating Income	**+4.6%**	**+4.7%**
Pre-Tax income	**+3.9%**	**+3.7%**

1. See slide 8 – NB : no other adjustment

1Q23 - BNP Paribas Group

Effects of 1Q22 restatement

1Q22 restatement[1] : negative base effects in net income offset in 2023

- **Alignment of management data with the application of IFRS 5 standard as a consequence of the sale of Bank of the West**

→ -€378m impact on the 1Q22 pre-tax income : impact offset by 1Q23 organic growth

- **Application of IFRS 17 and IFRS 9 standards on insurance activities**

→ -€180m impact on 1Q22 net income, Group share: negative base effect specific to 1Q22 and quasi-entirely driven by market volatility in 1Q22

- **Retroactive application of IAS 29 standard as at 1st January 2022**

→ -€88m impact on 1Q22 net income, Group share: no impact on 1H22

€m	1Q22 (reported)	IFRS 5 effect	1Q22 (under IFRS 5)	IFRS 17 effect	IAS 29 effect	1Q22 (restated)
Group						
Revenues	**13,218**	**-642**	**12,576**	**-655**	**-53**	**11,868**
Operating Expenses and Dep.	-9,653	457	-9,196	447	-5	-8,754
Gross Operating Income	**3,565**	**-185**	**3,380**	**-208**	**-58**	**3,114**
Cost of Risk	-456	-193	-649	-1	-1	-651
Operating Income	**3,109**	**-378**	**2,731**	**-209**	**-59**	**2,463**
Share of Earnings of Equity-Method Entities	165		165	-1	-6	158
Other Non Operating Items	3		3		1	4
Pre-Tax Income	**3,277**	**-378**	**2,899**	**-210**	**-64**	**2,625**
Corporate Income Tax	-1,047	149	-898	30	-51	-919
Net Income Attributable to Minority Interests	-122		-122		27	-95
Net Income from discontinued activities		229	229			229
Net Income Attributable to Equity Holders	**2,108**		**2,108**	**-180**	**-88**	**1,840**

1. Document detailing the 2022 restatements available at: https://invest.bnpparibas

1Q23 – BNP Paribas Group

*Based on 2022 **restated** quarterly series and 1Q23 reported results*

€m	Distribuable 1Q23	1Q22	1Q23 distribuable / 1Q22	1Q23	1Q22	1Q23 / 1Q22	1Q23	1Q22	1Q23 / 1Q22
							(excl. exceptional & extraordinairy items[1])		
Group									
Revenues	12,492	11,868	+5.3%	12,032	11,868	+1.4%	12,435	11,868	+4.8%
Operating Expenses and Dep.	-8,294	-8,754	-5.3%	-9,191	-8,754	+5.0%	-8,830	-8,682	+1.7%
Gross Operating Income	4,198	3,114	+34.8%	2,841	3,114	-8.8%	3,605	3,186	+13.2%
Cost of Risk	-642	-651	-1.4%	-642	-651	-1.4%	-642	-651	-1.4%
Operating Income	3,556	2,463	+44.4%	2,199	2,463	-10.7%	2,963	2,535	+16.9%
Non Operating Items	178	162	+9.9%	178	162	+9.9%	178	147	+20.8%
Pre-Tax Income	3,734	2,625	+42.2%	2,377	2,625	-9.4%	3,141	2,682	+17.1%
Corporate Income Tax	-791	-919	-13.9%	-791	-919	-13.9%	-883	-936	-5.6%
Net Income Attributable to Minority Interests	-98	-95	+3.2%	-98	-95	+3.2%	-98	-95	+3.2%
Net Income from discontinued activities	0	229	n.s.	2,947	229	n.s.	0	229	n.s.
Net Income Attributable to Equity Holders	2,845	1,840	n.s.	4,435	1,840	n.s.	2,159	1,880	+14.9%
Cost/income	66.4%	73.8%		76.4%	73.8%		71.0%	73.2%	

- Corporate income tax: an average rate of 36.0%, impact of the booking in the first quarter of taxes and contributions for the year based on the application of IFRIC 21 "Taxes", of which a large part is not deductible

1. See slide 8 – NB : no other adjustment

Calculation of distributable Net Income – 1Q23

Reminder: capital gain on the sale of Bank of the West (€2,947m), an extraordinary item excluded from distributable Net Income

A +€954m upward adjustment in distributable net income in 1Q23

- Effect of the anticipation of the end of the ramp-up of the SRF (+€797m)
- Complementary adjustments (+€157m), given a contribution in 1Q23 lower than anticipated in February 2023

Revenues

- Complementary contribution[1] — +€57m

Operating expenses

- Effect of the anticipation of the end of the ramp up of the SRF — +€797m
- Complementary contribution[1] — +€100m

Total adjustments to 1Q23 Net Income (before excluding extraordinary items) — +€954m

Offsetting of the negative impact of the adjustments to hedges related to changes in TLTRO's terms and conditions decided by the ECB in 4Q22: **+€403m in 1Q23**

Revenues

- Impact of adjustments to hedges[2] — +€403m

Total adjustment to 1Q23 Net Income — +€403m

Total adjustments to 1Q23 Net Income (excluding capital gain on sale of BoW) — +€1,357m

1. Related in particular to the closing of the sale of Bank of the West; 2. Reminder: similar adjustment in 2Q23, as announced in February 2023

Corporate and Institutional Banking – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Corporate and Institutional Banking			
Revenues	**4,873**	**4,685**	**+4.0%**
Operating Expenses and Dep.	-3,440	-3,338	+3.1%
Gross Operating Income	**1,433**	**1,347**	**+6.3%**
Cost of Risk	-1	-2	-47.8%
Operating Income	**1,432**	**1,346**	**+6.4%**
Share of Earnings of Equity-Method Entities	3	4	-27.4%
Other Non Operating Items	-6	1	n.s.
Pre-Tax Income	**1,428**	**1,351**	**+5.7%**
Cost/Income	**70.6%**	**71.2%**	**-0.6 pt**

Allocated equity available in quarterly series

Corporate and Institutional Banking
Global Banking & Global Markets – 1Q23

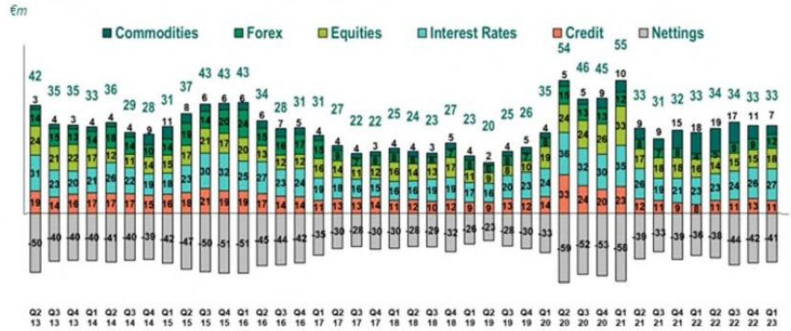
€m	1Q23	1Q22	1Q23 / 1Q22
Global Banking			
Revenues	**1,455**	**1,258**	**+15.6%**
Operating Expenses and Dep.	-849	-805	+5.5%
Gross Operating Income	**605**	**453**	**+33.6%**
Cost of Risk	1	20	-92.6%
Operating Income	**607**	**473**	**+28.3%**
Share of Earnings of Equity-Method Entities	1	1	+0.6%
Other Non Operating Items	0	0	n.s.
Pre-Tax Income	**608**	**474**	**+28.3%**
Cost/Income	**58.4%**	**64.0%**	**-5.6 pt**

€m	1Q23	1Q22	1Q23 / 1Q22
Global Markets			
Revenues	**2,764**	**2,814**	**-1.8%**
incl. FICC	*1,906*	*1,749*	*+9.0%*
incl. Equity & Prime Services	*857*	*1,065*	*-19.5%*
Operating Expenses and Dep.	-2,016	-1,994	+1.1%
Gross Operating Income	**748**	**819**	**-8.7%**
Cost of Risk	-4	-21	-83.5%
Operating Income	**744**	**798**	**-6.7%**
Share of Earnings of Equity-Method Entities	2	2	+9.3%
Other Non Operating Items	-7	1	n.s.
Pre-Tax Income	**740**	**801**	**-7.6%**
Cost/Income	**72.9%**	**70.9%**	**+2.0 pt**

Allocated equity available in quarterly series

Corporate and Institutional Banking
Market risks – 1Q23

- **Average 99% 1-day interval VaR (Value at Risk)**



- **Average VaR was stable at a low level this quarter, despite greater volatility late in the quarter[1]**
  - Low and stable vs. 4Q22
  - 1 theoretical back-testing event this quarter[2], due to a spike in interest-rate volatility in March
  - 3 theoretical back-testing events over the past 12 months and just 21 since 01.04.2013, a little more than two per year over a long period, including crises, in line with the internal (1 day, 99%) VaR calculation model

1. VaR calculated to monitor market limits; 2. With a theoretical loss that did not include the intraday result and commissions earned

Corporate and Institutional Banking
Securities Services – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Securities Services			
Revenues	**655**	**613**	**+6.7%**
Operating Expenses and Dep.	-575	-538	+6.9%
Gross Operating Income	**79**	**75**	**+5.8%**
Cost of Risk	1	0	n.s.
Operating Income	**81**	**75**	**+7.4%**
Share of Earnings of Equity-Method Entities	0	1	-97.1%
Other Non Operating Items	0	0	n.s.
Pre-Tax Income	**81**	**77**	**+5.6%**
Cost/Income	**87.9%**	**87.8%**	**+0.1 pt**

Allocated equity available in quarterly series

	31.03.23	31.03.22	%Var/ 31.03.22	31.12.22	%Var/ 31.12.22
Securities Services					
Assets under custody(€bn)	11,941	11,907	+0.3%	11,133	+7.3%
Assets under administration (€bn)	2,520	2,426	+3.9%	2,303	+9.4%
	1Q23	1Q22	1Q23/1Q22	4Q22	1Q23/4Q22
Number of transactions (in million)	38.6	38.6	-0.0%	36.9	+4.6%

Commercial, Personal Banking & Services – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Commercial, Personal Banking & Services - excl. PEL/CEL (including 100% of Private Banking) [1]			
Revenues	**6,666**	**6,296**	**+5.9%**
Operating Expenses and Dep.	-4,585	-4,380	+4.7%
Gross Operating Income	**2,081**	**1,916**	**+8.6%**
Cost of Risk	-650	-596	+9.0%
Operating Income	**1,431**	**1,320**	**+8.4%**
Share of Earnings of Equity-Method Entities	95	86	+10.0%
Other Non Operating Items	8	11	-28.2%
Pre-Tax Income	**1,534**	**1,417**	**+8.2%**
Income Attributable to Wealth and Asset Management	-66	-54	+21.2%
Pre-Tax Income of Commercial, Personal Banking & Services	**1,468**	**1,362**	**+7.7%**
Cost/Income	**68.8%**	**69.6%**	**-0.8 pt**

1. Including 100% of Private Banking for the Revenues to Pre-tax income line items – Allocated equity available in quarterly series

CPBS – Commercial & Personal Banking in France – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Commercial & Personal Banking in France - excl. PEL/CEL (including 100% of Private Banking) [1]			
Revenues	**1,670**	**1,602**	**+4.2%**
incl. net interest income	*893*	*836*	*+6.8%*
incl. fees	*777*	*766*	*+1.4%*
Operating Expenses and Dep.	-1,276	-1,239	+3.0%
Gross Operating Income	**394**	**363**	**+8.4%**
Cost of Risk	-75	-93	-18.8%
Operating Income	**318**	**270**	**+17.8%**
Share of Earnings of Equity-Method Entities	0	0	-58.3%
Other Non Operating Items	0	0	n.s.
Pre-Tax Income	**318**	**270**	**+17.8%**
Income Attributable to Wealth and Asset Management	-37	-31	+16.5%
Pre-Tax Income of Commercial & Personal Banking	**282**	**239**	**+18.0%**
Cost/Income	**76.4%**	**77.3%**	**-0.9 pt**

1. Including 100% of Private Banking for the Revenues to Pre-tax income line items – Allocated equity available in quarterly series

Average outstandings (€bn)	1Q23	%Var/1Q22	%Var/4Q22
LOANS	212.4	+4.7%	-0.5%
Individual Customers	111.7	+3.2%	-0.2%
Incl. Mortgages	100.0	+2.8%	-0.2%
Incl. Consumer Lending	11.8	+6.3%	-0.3%
Corporates	100.7	+6.5%	-0.8%
DEPOSITS AND SAVINGS	242.3	+1.0%	-1.7%
Current Accounts	144.6	-12.8%	-8.4%
Savings Accounts	68.1	+1.1%	-0.2%
Market Rate Deposits	29.6	n.s.	+44.7%

€bn	31.03.23	%Var/ 31.03.22	%Var/ 31.12.22
OFF BALANCE SHEET SAVINGS			
Life Insurance	103.5	+0.6%	+1.9%
Mutual Funds	42.7	+10.8%	+10.5%

CPBS – BNL banca commerciale – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
BNL bc (including 100% of Private Banking) [1]			
Revenues	675	654	+3.2%
incl. net interest income	392	380	+3.0%
incl. fees	284	274	+3.6%
Operating Expenses and Dep.	-464	-454	+2.3%
Gross Operating Income	211	201	+5.3%
Cost of Risk	-98	-128	-23.4%
Operating Income	113	73	+55.6%
Share of Earnings of Equity-Method Entities	0	0	+56.8%
Other Non Operating Items	0	0	-65.7%
Pre-Tax Income	113	73	+55.5%
Income Attributable to Wealth and Asset Management	-7	-8	-8.1%
Pre-Tax Income of BNL bc	106	65	+63.1%
Cost/Income	68.7%	69.3%	-0.6 pt

1. Including 100% of Private Banking for the Revenues to Pre-tax income line items – Allocated equity available in quarterly series

Average outstandings (€bn)	1Q23	%Var/1Q22	%Var/4Q22
LOANS	77.2	-1.8%	-2.0%
Individual Customers	38.3	+1.2%	-1.0%
Incl. Mortgages	27.5	+3.1%	+0.2%
Incl. Consumer Lending	5.0	+2.3%	-0.1%
Corporates	38.9	-4.5%	-2.9%
DEPOSITS AND SAVINGS	63.2	+1.1%	-1.5%
Individual Deposits	37.3	-1.4%	-0.2%
Incl. Current Accounts	36.0	-4.1%	-3.0%
Corporate Deposits	25.9	+4.9%	-3.3%

€bn	31.03.23	%Var/ 31.03.22	%Var/ 31.12.22
OFF BALANCE SHEET SAVINGS			
Life Insurance	24.2	-6.6%	-4.0%
Mutual Funds	15.2	-9.1%	+2.8%

CPBS – Commercial & Personal Banking in Belgium – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Commercial & Personal Banking in Belgium (including 100% of Private Banking) [1]			
Revenues	1,016	935	+8.6%
incl. net interest income	731	632	+15.6%
incl. fees	285	303	-5.9%
Operating Expenses and Dep.	-945	-905	+4.5%
Gross Operating Income	70	30	n.s.
Cost of Risk	-8	17	n.s.
Operating Income	62	47	+31.7%
Share of Earnings of Equity-Method Entities	0	0	n.s.
Other Non Operating Items	1	4	-74.1%
Pre-Tax Income	64	52	+23.5%
Income Attributable to Wealth and Asset Management	-12	-10	+21.7%
Pre-Tax Income of Commercial & Personal Banking in Belgium	52	42	+24.0%
Cost/Income	93.1%	96.8%	-3.7 pt

1. Including 100% of Private Banking for the Revenues to Pre-tax income line items – Allocated equity available in quarterly series

Average outstandings (€bn)	1Q23	%Var/1Q22	%Var/4Q22
LOANS	138.4	+6.0%	+0.0%
Individual Customers	77.9	+4.3%	+0.0%
Incl. Mortgages	66.4	+3.7%	+0.5%
Incl. Consumer Lending	0.1	n.s.	-16.2%
Incl. Small Businesses	11.4	+6.8%	-2.3%
Corporates and Local Governments	60.5	+8.3%	+0.0%
DEPOSITS AND SAVINGS	160.2	-0.4%	-0.6%
Current Accounts	66.6	-15.4%	-7.6%
Savings Accounts	82.0	+2.8%	-0.8%
Term Deposits	11.6	n.s.	+78.0%

€bn	31.03.23	%Var/ 31.03.22	%Var/ 31.12.22
OFF BALANCE SHEET SAVINGS			
Life Insurance	24.1	-4.9%	-0.8%
Mutual Funds	38.5	-6.3%	+2.6%

CPBS – Commercial & Personal Banking in Luxembourg – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Commercial & Personal Banking in Luxembourg (including 100% of Private Banking) [1]			
Revenues	**145**	**115**	**+26.6%**
incl. net interest income	*120*	*88*	*+36.3%*
incl. fees	*25*	*27*	*-5.3%*
Operating Expenses and Dep.	-88	-80	+9.4%
Gross Operating Income	**58**	**35**	**+66.5%**
Cost of Risk	-1	5	n.s.
Operating Income	**56**	**40**	**+40.3%**
Share of Earnings of Equity-Method Entities	0	0	n.s.
Other Non Operating Items	0	2	-81.8%
Pre-Tax Income	**57**	**42**	**+35.6%**
Income Attributable to Wealth and Asset Management	-2	-2	+0.1%
Pre-Tax Income of Commercial & Personal Banking	**55**	**40**	**+37.2%**
Cost/Income	**60.3%**	**69.8%**	**-9.5 pt**

1. Including 100% of Private Banking for the Revenues to Pre-tax income line items – Allocated equity available in quarterly series

Average outstandings (€bn)	1Q23	%Var/1Q22	%Var/4Q22
LOANS	13.2	+3.8%	+1.0%
Individual Customers	8.2	+2.9%	+0.3%
Corporates and Local Governments	5.0	+5.5%	+2.1%
DEPOSITS AND SAVINGS	28.8	+0.5%	-4.2%
Current Accounts	15.4	-12.3%	-10.3%
Savings Accounts	7.5	-14.9%	-9.1%
Term Deposits	5.9	+261.8%	+28.2%

€bn	31.03.23	%Var/ 31.03.22	%Var/ 31.12.22
OFF BALANCE SHEET SAVINGS			
Life Insurance	1.0	-6.5%	-1.1%
Mutual Funds	1.9	-9.9%	+1.9%

- **Revenues: +26.6% vs. 1Q22**
  - Net interest income: +36.3%, very strong increase driven by higher volumes and a good performance of margin on deposits in particular from corporate clients
  - Fees: -5.3%, a good level of fees, down from a high 1Q22 base
- **Operating expenses: +9.4% vs. 1Q22,** very positive jaws effect (+17.2 pts)
- **Pre-tax income: +37.2% vs. 1Q22**

CPBS – Europe-Mediterranean – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Europe-Mediterranean (including 100% of Private Banking) [1]			
Revenues	**648**	**585**	**+10.7%**
incl. net interest income	*540*	*465*	*+16.0%*
incl. fees	*108*	*120*	*-9.7%*
Operating Expenses and Dep.	-435	-428	+1.6%
Gross Operating Income	**212**	**156**	**+35.8%**
Cost of Risk	-49	-41	+19.5%
Operating Income	**164**	**116**	**+41.6%**
Share of Earnings of Equity-Method Entities	87	70	+24.7%
Other Non Operating Items	37	-9	n.s.
Pre-Tax Income	**288**	**177**	**+63.0%**
Income Attributable to Wealth and Asset Management	-8	-3	n.s.
Pre-Tax Income of Europe-Mediterranean	**280**	**174**	**+61.6%**
Cost/Income	**67.2%**	**73.3%**	**-6.1 pt**

1. Including 100% of Private Banking for the Revenues to Pre-tax income line items – Allocated equity available in quarterly series

- **Foreign-exchange impact driven by the euro's appreciation vs. the Turkish lira and the zloty**
  - TRY/EUR[1]: -22.0% vs. 1Q22, -3.9% vs. 4Q22
  - PLN/EUR[2]: -1.8% vs. 1Q22, +0.3% vs. 4Q22
- **At constant scope and exchange rates vs.1Q22**
  - **Revenues[3]:** +18.8%
  - **Operating expenses[3]:** +9.5%, very largely positive jaws effect (+9.3 pts)
  - **Pre-tax income[4]:** +42.4%

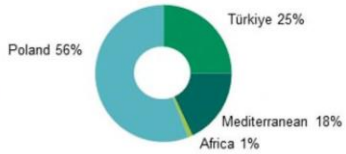
1. End-of-period exchange rates based on the application in Türkiye of IAS 29; 2. Average exchange rates; 3. Including 100% of Private Banking in Türkiye and Poland; 4. Including 2/3 of Private Banking in Türkiye and Poland

CPBS – Europe-Mediterranean – 1Q23

Volumes and risks

Average outstandings (€bn)	1Q23	%Var/1Q22 historical	%Var/1Q22 at constant scope and exchange rates	%Var/4Q22 historical	%Var/4Q22 at constant scope and exchange rates
LOANS	33.9	-0.3%	+6.6%	-3.1%	-1.7%
DEPOSITS	41.8	+5.4%	+13.8%	-2.4%	-0.1%

Geographical breakdown in loans outstanding in 1Q23[1]



Cost of risk / loans outstanding

Annualised cost of risk / outstandings as at beginning of period	1Q22	2Q22	3Q22	4Q22	1Q23
Türkiye	0.69%	0.16%	1.05%	1.12%	-0.30%
Poland	0.16%	0.63%	0.31%	0.01%	0.75%
Others	0.86%	0.64%	0.69%	-0.85%	0.91%
Europe-Mediterranean	0.45%	0.51%	0.58%	0.11%	0.53%

TEB: a solid and well capitalised bank

- Solvency ratio[2] of 16.79% as at 31.03.23
- Very largely self-financed
- 1.0% of the Group's loans outstanding as at 31.03.23

1. Based on the perimeter as of 31.03.23, excluding Ivory Coast; 2. Capital Adequacy Ratio (CAR)

CPBS – Specialised Businesses – Personal Finance – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Personal Finance			
Revenues	1,288	1,388	-7.2%
Operating Expenses and Dep.	-810	-776	+4.5%
Gross Operating Income	477	613	-22.1%
Cost of Risk	-358	-315	+13.4%
Operating Income	120	297	-59.7%
Share of Earnings of Equity-Method Entities	9	14	-35.2%
Other Non Operating Items	-7	-7	+9.1%
Pre-Tax Income	122	305	-60.0%
Cost/Income	62.9%	55.9%	+7.0 pt

Allocated equity available in quarterly series

Average outstandings (€bn)	1Q23	%Var/1Q22 historical	%Var/1Q22 at constant scope and exchange rates	%Var/4Q22 historical	%Var/4Q22 at constant scope and exchange rates
TOTAL CONSOLIDATED OUTSTANDINGS	97.0	+4.7%	+5.0%	+1.2%	+1.6%
TOTAL OUTSTANDINGS UNDER MANAGEMENT (1)	113.1	+5.0%	+5.4%	+1.4%	+1.9%

(1) Including 100% of outstandings of subsidiaries not fully owned as well as of all partnerships

At constant scope and exchange rates vs. 1Q22

- **Revenues**: -7.3%
- **Operating expenses**: +4.1%
- **Pre-tax income**: -60.7%

Cost of risk / outstandings

Annualised cost of risk / outstandings as at beginning of period	1Q22	2Q22	3Q22	4Q22	1Q23
France	1.13%	1.70%	2.11%	0.81%	1.40%
Italy	1.64%	1.56%	1.22%	1.03%	1.57%
Spain	1.40%	1.56%	1.64%	2.58%	1.75%
Other Western Europe	0.98%	0.77%	0.72%	1.92%	1.16%
Eastern Europe	1.25%	-0.35%	1.40%	1.57%	1.05%
Brazil	6.61%	6.11%	6.42%	13.60%	4.24%
Others	1.73%	0.75%	1.28%	1.57%	1.96%
Personal Finance	1.34%	1.29%	1.39%	1.70%	1.45%

CPBS – Specialised Businesses – 1Q23

Arval & Leasing Solutions – New Digital Businesses

€m	1Q23	1Q22	1Q23 / 1Q22
Arval & Leasing Solutions			
Revenues	982	812	+20.9%
Operating Expenses and Dep.	-403	-366	+10.0%
Gross Operating Income	579	446	+29.9%
Cost of Risk	-38	-30	+27.9%
Operating Income	541	416	+30.0%
Share of Earnings of Equity-Method Entities	0	4	n.s.
Other Non Operating Items	-24	20	n.s.
Pre-Tax Income	517	440	+17.4%
Cost/Income	41.0%	45.1%	-4.1 pt

Allocated equity available in quarterly series

€m	1Q23	1Q22	1Q23 / 1Q22
New Digital Businesses & Personal Investors (including 100% of Private Banking)[1]			
Revenues	243	205	+18.5%
Operating Expenses and Dep.	-164	-132	+24.1%
Gross Operating Income	79	73	+8.4%
Cost of Risk	-23	-12	+83.6%
Operating Income	57	61	-6.8%
Share of Earnings of Equity-Method Entities	-2	-3	-10.9%
Other Non Operating Items	0	0	+68.7%
Pre-Tax Income	55	58	-6.5%
Income Attributable to Wealth and Asset Management	-1	-1	+38.5%
Pre-Tax Income of New Digital Businesses & Personal Investors	54	58	-7.0%
Cost/Income	67.4%	64.4%	+3.0 pt

1. Including 100% of Private Banking for the Revenues to Pre-tax income line items – Allocated equity available in quarterly series

CPBS – Specialised Businesses – 1Q23

Arval & Leasing Solutions and Personal Investors

Arval

Average outstandings (€bn)	1Q23	%Var/1Q22 historical	%Var/1Q22 at constant scope and exchange rates	%Var/4Q22 historical	%Var/4Q22 at constant scope and exchange rates
Consolidated Outstandings	29.9	+16.9%	+14.3%	+6.1%	+5.9%
Financed vehicles ('000 of vehicles)	1,614	+8.8%	+6.0%	+1.4%	+1.4%

Leasing Solutions

Average outstandings (€bn)	1Q23	%Var/1Q22 historical	%Var/1Q22 at constant scope and exchange rates	%Var/4Q22 historical	%Var/4Q22 at constant scope and exchange rates
Consolidated Outstandings	23.1	+4.6%	+6.0%	+0.9%	+1.2%

Personal Investors

Average outstandings (€bn)	1Q23	%Var/1Q22	%Var/4Q22
LOANS	0.6	+6.8%	-9.5%
DEPOSITS	32.2	+6.2%	+5.9%

€bn	31.03.23	%Var/ 31.03.22	%Var/ 31.12.22
ASSETS UNDER MANAGEMENT	157.3	-3.2%	+5.1%
European Customer Orders (millions)	10.0	-22.6%	+9.0%

Investment & Protection Services – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Investment & Protection Services			
Revenues	**1,409**	**1,400**	**+0.6%**
Operating Expenses and Dep.	-897	-851	+5.4%
Gross Operating Income	**512**	**549**	**-6.7%**
Cost of Risk	-1	-7	-83.9%
Operating Income	**511**	**542**	**-5.8%**
Share of Earnings of Equity-Method Entities	68	45	+51.0%
Other Non Operating Items	0	35	n.s.
Pre-Tax Income	**578**	**622**	**-7.0%**
Cost/Income	**63.7%**	**60.8%**	**+2.9pt**

Allocated equity available in quarterly series

€bn	31.03.23	31.03.22	%Var/ 31.03.22	31.12.22	%Var/ 31.12.22
Assets under management (€bn)	**1,213.1**	**1,226.7**	**-1.1%**	**1,171.7**	**+3.5%**
Insurance	251.4	270.4	-7.0%	246.6	+2.0%
Wealth Management	406.3	403.2	+0.8%	393.3	+3.3%
AM+RE	555.4	553.2	+0.4%	531.8	+4.4%
Asset Management	526.2	523.2	+0.6%	502.1	+4.8%
Real Estate Services	29.2	30.1	-2.9%	29.7	-1.6%

	1Q23	1Q22	%Var/ 1Q22	4Q22	%Var/ 4Q22
Net asset flows (€bn)	**19.4**	**-0.2**	**n.s.**	**17.8**	**+9.0%**
Insurance	-0.3	2.6	n.s.	-1.6	-80.9%
Wealth Management	5.6	3.4	+65.4%	3.7	+49.6%
AM+RE	14.1	-6.2	n.s.	15.7	-10.0%
Asset Management	13.6	-6.7	n.s.	15.1	-10.3%
Real Estate Services	0.5	0.5	+1.5%	0.5	+1.0%

IPS – Insurance – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Insurance			
Revenues	**524**	**490**	**+6.9%**
Operating Expenses and Dep.	-202	-197	+2.7%
Gross Operating Income	**322**	**294**	**+9.7%**
Cost of Risk	0	0	n.s.
Operating Income	**322**	**294**	**+9.7%**
Share of Earnings of Equity-Method Entities	59	29	n.s.
Other Non Operating Items	0	-3	-90.5%
Pre-Tax Income	**381**	**319**	**+19.2%**
Cost/Income	**38.5%**	**40.1%**	**-1.6 pt**

Allocated equity available in quarterly series

IFRS 17 "Insurance contracts" has replaced IFRS 4 "Insurance contracts" since 01.01.23. IFRS 17 entered into force at the same time as the implementation of IFRS 9 for insurance activities.

The main effects are as follows:

- **Operating expenses deemed "attributable to insurance activities"** are recognised in deduction of revenues and no longer booked in operating expenses. These accounting entries apply only to Insurance and to Group entities (other than in the Insurance business line) that distribute insurance contracts (i.e. internal distributors) and have no impact on gross operating income. In 1Q23, attributable expenses came to €221m in Insurance. The impact of these entries for internal distributors is presented in the Corporate Centre to avoid disrupting the reading of their financial performance;
- **The impact of volatility generated by the fair value accounting of assets through profit and loss (IFRS 9)** is presented in the Corporate Centre and therefore has no impact on Insurance revenues.

IPS – Wealth & Asset Management – 1Q23

€m	1Q23	1Q22	1Q23 / 1Q22
Wealth and Asset Management			
Revenues	**885**	**910**	-2.7%
Operating Expenses and Dep.	-695	-655	+6.2%
Gross Operating Income	**190**	**255**	-25.7%
Cost of Risk	-1	-7	-83.9%
Operating Income	**189**	**249**	-24.1%
Share of Earnings of Equity-Method Entities	9	16	-43.6%
Other Non Operating Items	0	38	n.s.
Pre-Tax Income	**198**	**303**	-34.7%
Cost/Income	78.6%	72.0%	**+6.6 pt**

Allocated equity available in quarterly series

1Q23 – Corporate Centre

Restatements of the volatility and attributable operating expenses related to insurance

- **As of 01.01.23, Corporate Centre includes 2 restatements related to the application of IFRS 17, alongside the implementation of IFRS 9 for insurance activities[1]. For a better readability, these restatements will be reported separately each quarter.**

- Operating expenses deemed "attributable to insurance activities" are recognised in deduction of revenues and no longer booked in operating expenses. The impact of these entries for the internal distributors are presented in the Corporate Center
  - ➔ These entries have no impact on gross operating income
  - ➔ **In 1Q23, attributable operating expenses came to €250m for Corporate Centre (vs. €259m in 1Q22)**
- The impact of the volatility generated by the fair value accounting of assets through profit and loss (IFRS 9) is presented in the Corporate Centre and therefore has no impact on Insurance business line revenues
  - ➔ **In 1Q23, the impact of the generated volatility was -€16m for Corporate Centre (-€158m in 1Q22 due to the unfavourable market performances in 1Q22)**
  - ➔ Note: The sensitivity to a combined shock of a 10% decrease in financial and real estate assets and an 1% increase in interest rates has an estimated impact of about –€120m

€m	1Q23	1Q22	1Q23 / 1Q22
Corporate Center : restatement related to Insurance activities of the volatility (IFRS9) and attribuable costs (internal distributors)			
Revenues	-266	-417	n.s.
Restatement of the volatility (Insurance business)	*-16*	*-158*	*n.s.*
Restatement of attributable costs (Internal Distributors)	*-250*	*-259*	*n.s.*
Operating Expenses and Dep.	*250*	*259*	*-3,6%*
Restatement of attributable costs (Internal Distributors)	*250*	*259*	*-3,6%*
Gross Operating Income	-16	-158	n.s.
Cost of Risk			
Operating Income	-16	-158	n.s.
Share of Earnings of Equity-Method Entities			
Other Non Operating Items			
Pre-Tax Income	-16	-158	n.s.

Allocated equity available in quarterly series

1. See slide 60 for Insurance impacts

1Q23 - Corporate Centre

Excluding the restatements related to insurance activities

€m	1Q23	1Q22	1Q23 / 1Q22
Corporate Center excl. restatement related to insurance activities of the volatility (IFRS9) and attribuable costs (internal distributors)			
Revenues	-478	52	n.s.
Operating Expenses and Dep.	-624	-542	+15,1%
Incl. Restructuring, IT Reinforcement and Adaptation Costs	-361	-72	n.s.
Gross Operating Income	-1 102	-490	n.s.
Cost of Risk	6	-54	n.s.
Operating Income	-1 096	-544	n.s.
Share of Earnings of Equity-Method Entities	12	23	-45,9%
Other Non Operating Items	-1	-42	n.s.
Pre-Tax Income	-1 085	-564	n.s.
Cost/Income	49,3%	n.s.	n.s.

Allocated equity available in quarterly series

- **Revenues**
  - Revaluation of proprietary credit risk included in derivatives (DVA): -€54m (+€93m in 1Q22)
  - Adjustment in 1Q23 of hedges related to changes in TLTRO's terms & conditions decided by the ECB in 4Q22: -€403m
- **Operating expenses**
  - Overall adaptation costs in Personal Finance: -€236m
  - Restructuring and adaptation costs: -€30m (-€26m in 1Q22)
  - IT reinforcement costs: -€95m (-€45m in 1Q22)
- **Other non-operating items**
  - 1Q22 reminder: Badwill (bpost bank): +€244m, capital gain on the sale of a stake: +€204m, impairment and reclassification to profit and loss of exchange differences (Ukrsibbank)[2]: -€433m
- **Pre-tax profit: important decrease due to the extraordinary impact of adjustment to hedges in 1Q23 related to changes in the TLTRO's terms and conditions (-€403m) and overall adaptation costs at Personal Finance (-€236m)**

1. Previously recorded in Consolidated Equity

Breakdown in taxes and contributions subject to IFRIC 21 – 1Q23

In millions of euros (Application of IFRS 17)	1Q22	1Q23
Corporate & Institutional Banking	-737	-752
Global Banking	-165	-169
Global Markets	-514	-525
Securities Services	-57	-59
Commercial, Personal Banking and Services	-751	-758
Commercial & Personal Banking in the Euro Zone	-603	-600
Commercial & Personal Banking in France[1]	-168	-167
BNL bc [1]	-47	-48
Commercial & Personal Banking in Belgium[1]	-369	-366
Commercial & Personal Banking in Luxembourg[1]	-19	-19
Commercial & Personal Banking outside the Euro Zone	-38	-34
Europe-Mediterranean[1]	-38	-34
Specialised Businesses	-110	-125
Personal Finance	-79	-92
Arval & Leasing Solutions	-38	-39
New Digital Businesses & Personal Investors[1]	7	7
Investment & Protection Services	-37	-39
Insurance	-3	-3
Wealth Management	-30	-32
Asset Management (including Real Estate & Principal Investments)	-3	-4
Corporate Centre	-264	-51
TOTAL	-1,789	-1,601

1. Including 2/3 of Private Banking

Focus: Commercial real estate and leveraged financing

- **Favourable diversification and positioning by geographical region and sector**
- **Highly selective at the origination stage and proactive management of portfolios and exposures**
- **Exposures following the sale of Bank of the West on 01.02.23**

Leveraged financing[4]: 0.7% of total exposures[1], or €13.2bn, equivalent to €10.2bn in EAD[2] (0.6% of the Group total)

- Decrease in loans classified as non-performing (2.1% of gross exposures)
- Highly granular exposures (average amount of €5m) and diversified by sector and geographical region

- Close and specific analysis, supervision and monitoring set-up with the introduction of new Risk Appetite Statement metrics

Commercial real estate: 3.9% of total exposures[1], or €71.5bn, equivalent to €58.1bn of EAD[2] (3.7% of the Group total)

- ~50% of counterparties are rated investment grade[3]
- 1.6% of loans classified as non-performing
- Perimeter covering a wide range of owners (institutional investors, asset managers, private equity, industrial, developer, etc.)
- A resilient and diversified portfolio: offices (22% of gross exposures), retail (14%), logistics and diversified assets (19%), hotels (4%)
- >90% of EAD in Europe; no exposure in the Nordic countries and limited exposures in Germany; 2% of exposures are in the US

1. Gross exposures, on- and off-balance sheet, non-weighted as of the end of December 2022 excluding Bank of the West (Group Total: €1,851bn); 2. Exposure at default as of the end of December 2022 excluding Bank of the West (Group Total €1,584bn) ; 3. Investment grade – external rating or internal equivalent; 4. Leveraged buyout (LBO) with financial sponsors – Alignment of exclusions with European regulatory standards applied as at 31.12.22

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GROUP RESULTS

DIVISION RESULTS

CONCLUSION

1Q23 DETAILED RESULTS

APPENDICES

Number of Shares and Earnings per Share

Number of Shares

in millions	31-Mar-23	31-Mar-22
Number of Shares (end of period)	1 234	1 234
Number of Shares excluding Treasury Shares (end of period)	1 232	1 233
Average number of Shares outstanding excluding Treasury Shares	1 233	1 233

Distributable Earnings Per Share (distributable EPS)

in millions	31-Mar-23
Average number of Shares outstanding excluding Treasury Shares	**1,233**
Distributable Net Income	2,845
Remuneration net of tax of Undated Super Subordinated Notes	-147
Exchange rate effect on reimbursed Undated Super Subordinated Notes	0
Net income attributable to equity holders, after remuneration and exchange rate effect on Undated Super Subordinated Notes	**2,698**
Distributable Earnings per Share (distributable EPS) in euros	**2.19**

Book value per Share

Book value per Share

in millions of euros	31-Mar-23	31-Mar-22	
Shareholders' Equity Group share	**127,145**	**119,050**	(1)
Changes in assets and liabilities recognised directly in equity (valuation reserve)	-3,199	353	
Undated Super Subordinated Notes	13,471	8,624	(2)
Remuneration net of tax payable to holders of Undated Super Subordinated Notes	113	44	(3)
Net Book Value (a)	**113,561**	**110,382**	(1)-(2)-(3)
Goodwill and intangibles	9,119	11,682	
Tangible Net Book Value (a)	**104,442**	**98,700**	
Number of Shares excluding Treasury Shares (end of period) in millions	**1,232**	**1,233**	
Book Value per Share (euros)	**92.2**	**89.5**	
of which book value per share excluding valuation reserve (euros)	***94.8***	***89.3***	
Net Tangible Book Value per Share (euros)	**84.8**	**80.1**	

(a) Excluding Undated Super Subordinated Notes and remuneration net of tax payable to holders of Undated Super Subordinated Notes

Return on Equity and Permanent Shareholders' Equity (1/2)

Permanent Shareholders' Equity Group share, not revaluated, used for the calculation of ROE / ROTE
(based on reported results)

in millions of euros	31-Mar-23	31-Mar-22	
Net Book Value	**113,561**	**110,382**	(1)
of which changes in assets and liabilities recognised directly in equity (valuation reserve)	-3,199	353	(2)
of which 2021 dividend distribution project		4,527	(3)
of which 2022 dividend distribution project	5,773	7,113	(4)
of which assumption of distribution of 2023 net income	7,909		(5)
Annualisation of restated result (a)	10,227	11,193	(6)
Restatement of remuneration of Undated Super Subordinated Notes for the annualised calculation	-463	-306	(7)
Permanent shareholders' equity, not revaluated, used for the calculation of ROE (b)	**112,842**	**109,276**	(1)-(2)-(3)-(4)-(5)+(6)+(7)
Goodwill and intangibles	9,119	11,682	
Tangible permanent shareholders' equity, not revaluated, used for the calculation of ROTE (b)	**103,723**	**97,594**	
Average permanent shareholders' equity, not revaluated, used for the ROE calculation (c)	**109,971**	**106,550**	
Average tangible permanent shareholders' equity, not revaluated, used for the ROTE calculation (d)	**99,416**	**94,935**	

(a) 3* 1Q23 Net Income Group share excluding exceptional and extraordinary items but including IT reinforcement, adaptation and restructuring costs and excluding contribution to SRF and levies after tax

(b) Excluding Undated Super Subordinated Notes, remuneration net of tax payable to holders of Undated Super Subordinated Notes, and including the assumptions of distribution of net income

(c) Average Permanent shareholders' equity: average of beginning of the year and end of the period including in particular annualised reported net income as at 31 March 2023 with exceptional and extraordinary items and contribution to SRF and taxes not annualised (Permanent Shareholders' equity = Shareholders' equity attributable to shareholders - changes in assets and liabilities recognised directly in equity - Undated Super Subordinated Notes - remuneration net of tax payable to holders of Undated Super Subordinated Notes - dividend distribution assumption)

(d) Average Tangible permanent shareholders' equity: average of beginning of the year and end of the period including in particular annualised net income as at 31 March 2023 with exceptional items and contribution to SRF and taxes not annualised (Tangible permanent shareholders' equity = permanent shareholders' equity - intangible assets - goodwill)

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Return on Equity and Permanent Shareholders' Equity (2/2)

Calculation of Return on Equity
(based on reported results)

in millions of euros	31-Mar-23		31-Mar-22		
Net income Group share	**4,435**		**2,108**		(1)
Exceptional and extraordinary items (after tax) (a)	2,383		-43		(2)
of which exceptional and extraordinary items (not annualised)		2,470		11	(3)
of which IT reinforcement and restructuring costs (annualised)		-87		-54	(4)
Contribution to the Single Resolution Fund (SRF) and levies after tax	-1,444		-1,634		(5)
Net income Group share, not revaluated (exceptional and extraordinary items, contribution to SRF and taxes not annualised) (b)	**15,009**		**13,517**		(6)
Remuneration net of tax of Undated Super Subordinated Notes and exchange effect	-610		-523		
Impact of annualised IT reinforcement and restructuring costs	-348		-216		
Net income Group share used for the calculation of ROE/ROTE (c)	**14,052**		**12,778**		
Average permanent shareholders' equity, not revaluated, used for the ROE calculation (d)	**109,971**		**106,550**		
Return on Equity (ROE)	**12.8%**		**12.0%**		
Average tangible permanent shareholders' equity, not revaluated, used for the ROTE calculation (e)	**99,416**		**94,935**		
Return on Tangible Equity (ROTE)	**14.1%**		**13.5%**		

(a) See slide 8

(b) Based on annualised reported Net Income Group share as at 31 March 2023, (6)=4*[(1)-(2)-(5)]+(3)+(5)

(c) Based on annualised reported Net Income, Group share as at 31 March 2023

(d) Average Permanent shareholders' equity: average of beginning of the year and end of the period including in particular annualised reported Net Income as at 31 March 2023 with exceptional and extraordinary items and contribution to SRF and taxes not annualised (Permanent Shareholders' equity = Shareholders' equity attributable to shareholders – changes in assets and liabilities recognised directly in equity - Undated Super Subordinated Notes - remuneration net of tax payable to holders of Undated Super Subordinated Notes - dividend distribution assumption)

(e) Average Tangible permanent shareholders' equity: average of beginning of the year and end of the period including in particular annualised reported Net Income as at 31 March 2023 with exceptional and extraordinary items and contribution to SRF and taxes not annualised (Tangible permanent shareholders' equity = permanent shareholders' equity - intangible assets - goodwill)

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A Solid Financial Structure

Doubtful loans/gross outstandings

	31-Mar-23	31-Mar-22
Doubtful loans (a) / Loans (b)	1.7%	1.9%

(a) Impaired loans (stage 3) to customers and credit institutions, not netted of guarantees, including on-balance sheet and off-balance sheet and debt securities measured at amortized costs or at fair value through shareholders' equity; (b) Gross loans outstanding to customers and credit institutions, on-balance sheet and off-balance sheet and including debt securities measured at amortized costs or at fair value through shareholders' equity (excluding insurance)

Coverage ratio

€bn	31-Mar-23	31-Mar-22
Allowance for loan losses (a)	14.0	15.8
Doubtful loans (b)	19.4	21.6
Stage 3 coverage ratio	72.2%	73.3%

(a) Stage 3 provisions; (b) Impaired loans (stage 3) to customers and credit institutions, on-balance sheet and off-balance sheet, netted of guarantees received, including debt securities measured at amortized costs or at fair value through shareholders' equity (excluding insurance)

Common Equity Tier 1 ratio

Basel 3 Common Equity Tier 1 ratio[1]

(Accounting capital to prudential capital reconciliation)

€bn	31-Mar-23	31-Dec-22
Consolidated Equity	132.0	126.6
Undated super subordinated notes	-13.5	-11.8
2022 net income distribution project	-5.8	-5.8
2023 net income distribution project	-1.6	
Regulatory adjustments on equity[2]	-3.2	-1.2
Regulatory adjustments on minority interests	-3.1	-3.0
Goodwill and intangible assets[3]	-7.9	-10.6
Deferred tax assets related to tax loss carry forwards	-0.2	-0.2
Other regulatory adjustments	-1.2	-1.1
Deduction of irrevocable payments commitments	-1.4	-1.1
Common Equity Tier One capital	94.1	91.8
Risk-weighted assets	694	745
Common Equity Tier 1 Ratio	13.6%	12.3%

Capital Ratios

	31-Mar-23	31-Dec-22
Total Capital Ratio (a)	17,9%	16,2%
Tier 1 Ratio (a)	15,5%	13,9%
Common equity Tier 1 ratio (a)	13,6%	12,3%

(a) CRD5, on risk-weighted assets of €694bn as at 31.03.23 and €745bn as at 31.12.22; refer to slide 76

1. CRD5; 2. Including Prudent Valuation Adjustment, IFRS 9 transitional provisions and €1,54bn share buyback programme related to the sale of Bank of the West; 3. Mainly explained by the sale of Bank of the West

Medium/Long Term Regulatory Funding

Continued presence in debt markets

Around 58% of the regulatory issuance plan realised as at 13 April 2023

2023 MLT regulatory issuance plan[1]: €18.5bn

- **Capital instruments: €3.5bn[1]; AT1 €2.7bn already issued[2]**
  - **AT1**:
    - $1bn (dealt in 2022, as pre-funding for the 2023 plan), PerpNC5[3], at 9.25% (sa, 30/360); equiv. 5Y US Treasuries+497 bps
    - €1.25bn, PerpNC7.4[4], at 7.375% (sa, Act/Act); equiv. mid-swap€+463 bps
    - SGD600m, PerpNC5[3], at 5.9% (sa, Act,365); equiv. 5Y mid-swap SORA-OIS+267.4 bps
- **Senior Debt: €15bn[1]:**
  - **Non-Preferred: €3.4bn already issued[2]**
    - £850m, 9.4Y bullet, UK Gilt+215 bps
    - €1bn, 6NC5[5], « Green bond », mid-swap€+145 bps
    - €1bn, 8NC7[6], « Green bond », mid-swap€+137 bps
  - **Preferred: €4.6bn already issued[2]**
    - €1.25bn, 8NC7[6], mid-swap€+92 bps
    - CHF335m, 5Y bullet, CHF mid-swap+75 bps
    - $1.75bn, 6NC5[5], US Treasuries+145 bps
    - €1bn, 6NC5[5], mid-swap€+78 bps

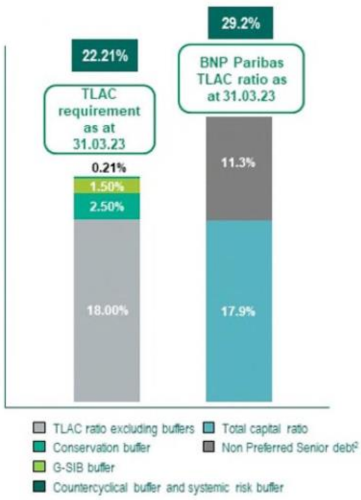
Other Secured Debt:

- **Covered bonds: €3.5bn[1]; €1bn already issued**:
  - €1bn, 7Y bullet mid-swap€+22 bps
- **Securitisations: €3.1bn[1]; €0.5bn already issued**

1. Subject to market conditions, indicative amounts; 2. € valuation based on historical FX rates for cross-currency swapped issuances and on 31.03.23 for others; 3. Perpetual, callable on year 5, and every 5 year thereafter; 4. Perpetual, callable on year 7.4, and every 5 year thereafter; 5. 6-year maturity callable on year 5 only; 6. 8-year maturity callable on year 7 only

TLAC ratio: ~700bps above the requirement without calling on the preferred Senior debt allowance as at 31 March 2023

- **TLAC requirement as at 31.03.23: 22.21% of RWA**
  - Including capital conservation buffer, G-SIB buffer, countercyclical capital buffer (14 bps) and systemic risk buffer (7 bp)
- **TLAC requirement as at 31.03.23: 6.75% of leverage ratio exposure**
- **BNP Paribas TLAC ratio as at 31.03.23[1]**
  - ✓ **29.2% of RWA**:
    - ✓ 17.9% of total capital as at 31.03.23
    - ✓ 11.3% of Non Preferred Senior debt[2]
    - ✓ Without calling on the Preferred Senior debt allowance
  - ✓ **8.2% of leverage exposure**



1. In accordance with Regulation (EU) No. 2019/876, Article 72b paragraphs 3 and 4, some Preferred Senior debt instruments (amounting to 11,608 million euros as at 31 March 2023) are eligible within the limit of 3.5% of risk-weighted assets; BNP Paribas did not use this option as at 31 March 2023; 2. Principal amount outstanding and other regulatory adjustments, including amortised portion of Tier 2 instruments with residual maturity over 1 year

Distance to MDA restrictions as at 31 March 2023

Capital requirements as at 31.03.23[1]:

- CET1: 9.60%
- Tier 1: 11.39%
- Total Capital: 13.78%

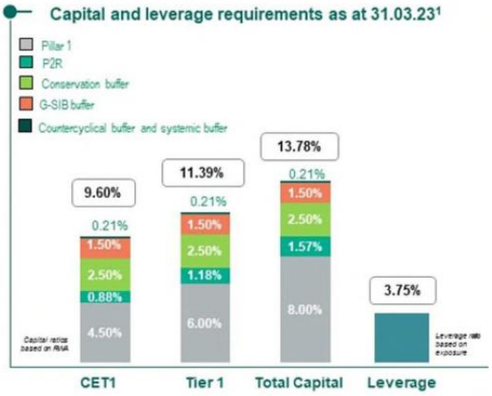
Leverage requirement as at 31.03.23: 3.75%

MREL requirement as at 31.03.23

- Distance to M-MDA restriction: in force since 01.01.22 but not constraining, as higher than the distance to MDA restrictions

Distance as at 31.03.23 to Maximum Distributable Amount restrictions[2], equal to the lowest of the calculated amounts: €15.0bn

Capital and leverage requirements as at 31.03.23[1]



	CET1	Tier 1	Total Capital	Leverage
BNP Paribas Capital ratios as at 31.03.23	13.6%	15.5%	17.9%	4.4%
Distance as of 31 March 2023 to Maximum Distributable Amount restrictions[2]	€27.5bn[3]	€28.3bn[3]	€28.5bn[3]	€15.0bn[4]

1. Including a countercyclical capital buffer of 14 bps and a systemic risk buffer of 7 bps;
2. As defined by the Article 141 of CRD5; 3. Calculated on €694bn RWA as at 31.03.23; 4. Calculated on €2,464bn exposures as at 31.03.23

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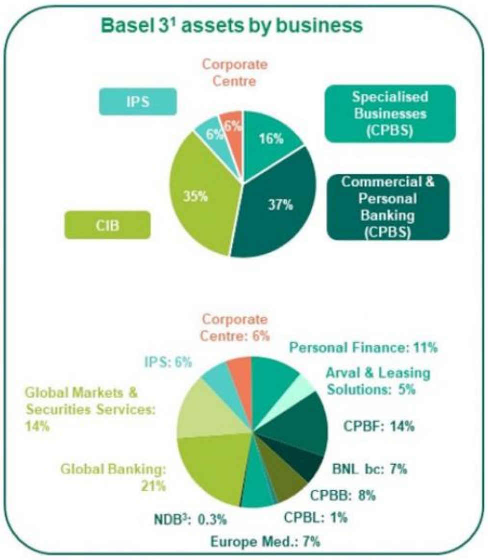
Basel 3 Risk-Weighted Assets[1]

€694bn as at 31.03.23 (€745bn as at 31.12.22)

€bn	31.03.23	31.12.22
Credit risk	534	580
Operational Risk	58	62
Counterparty Risk	42	42
Market vs. Foreign exchange Risk	27	26
Securitisation positions in the banking book	15	16
Others[2]	19	20
Basel 3 RWA[1]	**694**	**745**



1. CRD5; 2. Including the DTAs and significant investments in entities in the financial sector subject to 250% weighting; 3. New Digital Businesses

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10.2 Long term credit ratings

Long Term/Short Term Rating	S&P	Fitch	Moody's	DBRS
As at 24 March 2023	A+/A-1 (stable outlook)	AA-/F1+ (stable outlook)	Aa3/Prime-1 (stable outlook)	AA (low)/R-1 (middle) (stable outlook)
As at 3 May 2023	A+/A-1 (stable outlook)	AA-/F1+ (stable outlook)	Aa3/Prime-1 (stable outlook)	AA (low)/R-1 (middle) (stable outlook)
Date of last review	25 April 2022	13 September 2022	5 July 2022	28 June 2022

11 DOCUMENTS INCORPORATED BY REFERENCE

Pursuant to Annex I of Commission Delegated Regulation (EU) No 2019/980 of 14 March 2019 as it forms part of UK domestic law by virtue of the EUWA and regulations made thereunder, the following items are incorporated by reference:

- The sections set out below from the Registration Document No. D.22-0098 filed with the AMF on 15 March 2022 (which is available via the following link: https://invest.bnpparibas/en/document/universal-registration-document-2022);

The consolidated financial statements for the year ended 31 December 2021	Pages 177-290
The Statutory Auditors' report on the consolidated financial statements at 31 December 2021	Pages 291-296

- The sections set out below from the Registration Document No. D.21-0886 filed with the AMF on 2 March 2021 (which is available via the following link: https://invest.bnpparibas/en/document/universal-registration-document-and-annual-financial-report-2020);

The consolidated financial statements for the year ended 31 December 2020	Pages 161-271
The Statutory Auditors' report on the consolidated financial statements at 31 December 2020	Pages 272-277

- The sections set out below from the Registration Document No. D.20-0097 filed with the AMF on 3 March 2020 (which is available via the following link: https://invest.bnpparibas/en/document/universal-registration-document-and-annual-financial-report-2019);

The consolidated financial statements for the year ended 31 December 2019	Pages 149–258
In relation to financial statements for the year ended 31 December 2019, the auditors have emphasised certain matter which described in fuller detail in explanatory notes on Note 1.a.1. This is in relation to the description of the impact on the consolidated financial statements for the year ended 31 December 2019 of the application of IFRS 16 "Leases"	Pages 158 to 159
In relation to financial statements for the year ended 31 December 2019, the auditors have emphasised certain matter which described in fuller detail in explanatory notes on Note 2. This is in relation to the description of the impact on the consolidated financial statements for the year ended 31 December 2019 of the application of IFRS 16 "Leases"	Pages 178 to 179
The Statutory Auditors' report on the consolidated financial statements at 31 December 2019	Pages 259-264

Any information included in the documents incorporated by reference that is not included in each cross reference lists above is not incorporated by reference and the non-incorporated parts are either not relevant for the investor or covered elsewhere in this Universal Registration Document.

In order to assist readers of the annual financial report, the following table cross-references the information required by article L.451-1-2 of the French Monetary and Financial Code.

Annual financial report	Page
Statement by the person responsible for the universal registration document filed with the Autorité des Marchés Financiers on 24 March 2023	**744**

Management report

The cross-reference table below makes it possible to identify in the universal registration document filed with the Autorité des Marchés Financiers on 24 March 2023 the information that constitutes the management report of the Company (including the report on Corporate Governance) and the consolidated management report, as required by legal and regulatory provisions.

I. Company and Group Business and Situation[1]	
Information (reference texts)	**Page Number**
Company and Group position over the past year (L.232-1 II and L.233-26 of the French Commercial Code)	128-156; 176-295; 574-612
Objective and comprehensive analysis of business performance, results and the financial position of the Company and Group (L.22-10-35 and L.225-100-1 I of the French Commercial Code)	128-156; 176-295; 574-612
Key financial and non-financial performance indicators for the Company and Group (L.22-10-35 and L.225-100-1 I of the French Commercial Code)	128-171; 626-627; 634
Foreseeable developments of the Company and Group (L.232-1 II and L.233-26 of the French Commercial Code)	153-156
Key events occurring since the financial year-end and the preparation date of the management report (L.232-1 II and L.233-26 of the French Commercial Code)	725
Company and Group research and development activities (L.232-1 II and L.233-26 of the French Commercial Code)	N/A
Equity investments in, or takeovers of, companies that have their head office in France (L.233-6 and L.247-1 I of the French Commercial Code)	612
Business and results for the Company as a whole, Company subsidiaries and companies it controls by branch of activity (L.233-6 and L.247-1 I of the French Commercial Code)	7-19; 128-152
Existing Company branches (L.232-1 II of the French Commercial Code)	726-732
Information on Company locations and businesses (L.511-45 and R.511-16-4 of the French Monetary and Financial Code)	287-295; 726-732

II. Risk factors and characteristics of internal control procedures[2]	
Information (reference texts)	**Page Number**
Description of the main risks and contingencies faced by the Company and Group (L.22-10-35 and L.225-100-1 I of the French Commercial Code)	311-330
Information on the financial risks related to the effects of climate change and measures taken by the Company and Group to reduce these through a low-carbon strategy applicable to all aspects of their business (L.22-10-35 of the French Commercial Code)	119; 534-546
Objectives and policy for hedging each main transaction category by the Company and Group (L.22-10-35 and L.225-100-1 I of the French Commercial Code)	496-500
Exposure to price, credit, liquidity and cash flow risks of the Company and Group (L.22-10-35 and L.225-100-1 I of the French Commercial Code)	368-519

1 *Information on events after the Board of directors' meeting of 7 February 2022 is not included in the management report.*

2 *The information on the invasion of Ukraine in February 2022 included in Pillar 3 subsequent to the Board of directors' approval of the financial statements is not included in the management report.*

Main features of internal control and risk management procedures set up by the Company and Group relating to the preparation and processing of accounting and financial information (L.22-10-35 of the French Commercial Code)	121-126
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Information (reference texts)	**Page Number**
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Employee share ownership status (L.225-102 of the French Commercial Code)	20-21
Securities acquired by employees under a corporate takeover transaction (L.225-102 of the French Commercial Code)	N/A
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Information on share buyback transactions undertaken by the Company (L.225-211 of the French Commercial Code)	106 - 109; 271; 589
Any adjustments made to securities giving access to share capital (L.225-181, L.228-99, R225-137, R.228-91 of the French Commercial Code)	N/A
Summary of transactions carried out by corporate officers, executives, certain company managers and persons with close connections to them during the past year (223-26 of the AMF General Regulation, L.621-18-2 and R.621-43-1 of the French Monetary and Financial Code)	105
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the economic performance of the Company, subsidiaries and controlled companies as well as on employee working conditions (L.22-10-36, L.225-102-1 and R.225-105 of the French Commercial Code)	
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Company's business plan (R.225-105 I of the French Commercial Code)	686-687
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Taxonomic information / Article 8 of Regulation (EU) 2020/852 "Taxonomy"	711-714
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VI. Report on Corporate governance	
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Information on the remuneration policy for directors and corporate officers (L.22-10-8 of the French Commercial Code)	78-86
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List of all directorships and positions held in any company by each director and corporate officer during the year (L.22-10-10 and L.225-37-4 1° of the French Commercial Code)	35-48
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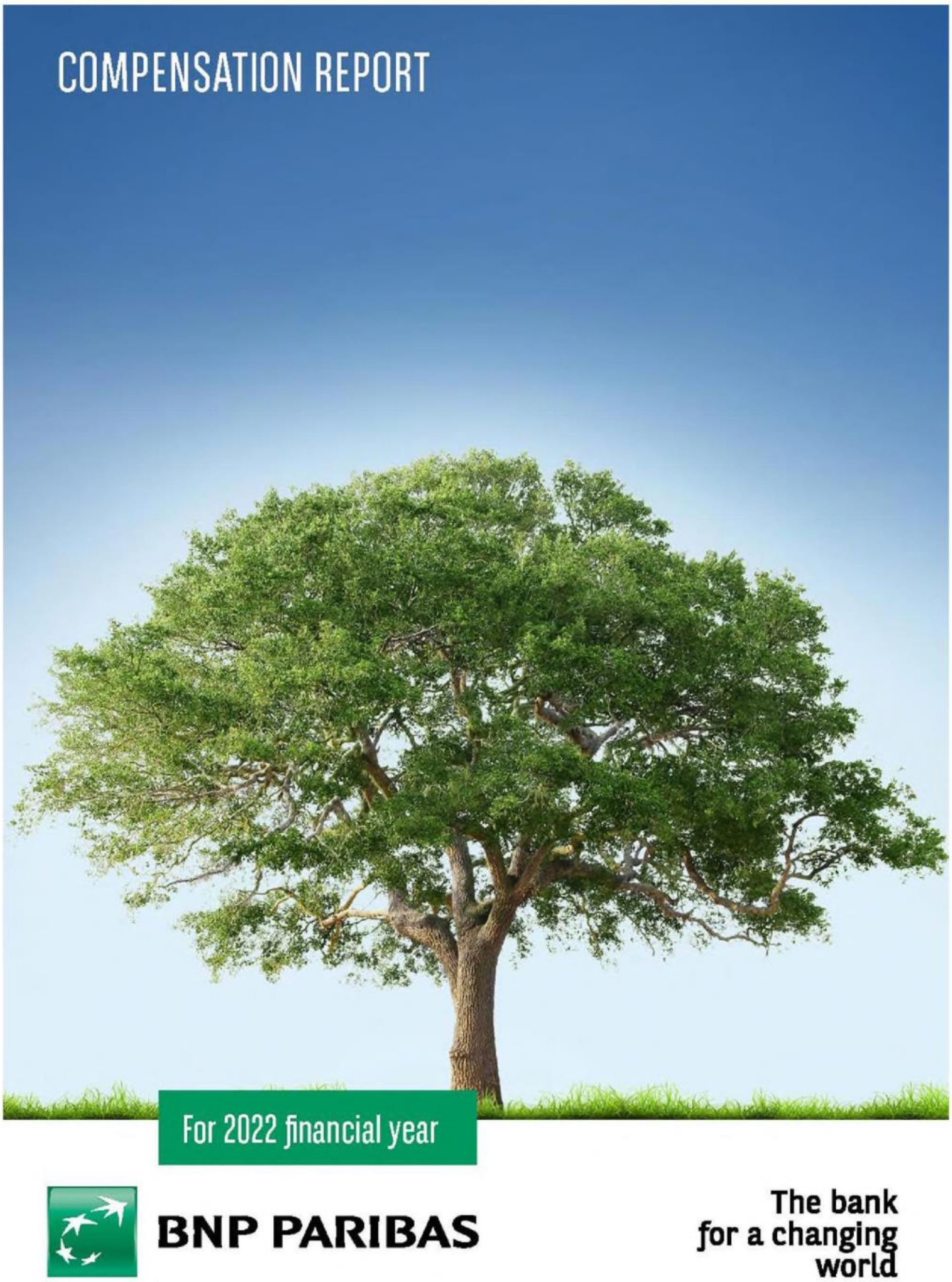
12 2022 COMPENSATION REPORT

BNP Paribas has published a compensation report for the financial year 2022 of employees whose professional activities have a material impact on the Group's risk profile (the "**2022 Compensation Report**").

4.4 Compensation for financial year 2022 of employees whose professional activities have a material impact on the Group's risk profile



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ÉDITO

Sofia Merlo, Head of Group Human Resources

"Just as the health crisis was coming to an end, 2022 has been impacted by the outbreak of conflict in Ukraine which has had an impact on the global economic situation. The Group has shown a strong commitment to support its staff members in Ukraine and to adapt to this new environment, by continuing to support its clients throughout the world.

Thanks to the power of a diversified and integrated model combined with the commitment of all staff members, the Group achieved a very solid commercial and financial performance in 2022, supported by the growth of its three operating divisions.

1 A responsible employer's policy

People are at the heart of the priorities of the Growth, Technology & Sustainability 2025 (GTS) strategic plan presented by the Group in February 2022, with the aim of developing the potential and engagement of all staff members to ensure our collective performance and our position as a leader in sustainable finance.

BNP Paribas Group pays particular attention to its remuneration policy for all employees in nearly 65 countries. In all its locations, the Group endeavours to integrate local specificities within the framework of the budgets allocated in terms of compensation, with particular attention paid to the first salary levels that may be most impacted by this new environment.

Furthermore, the Group strictly applies the European regulations[1] on remuneration, as well as the regulations specific to some countries or businesses. In order to respect these regulations, the Group's compensation policy is designed in a way not to encourage excessive risk taking, nor to create incentives that could lead to conflicts of interest between employees and clients.

The compensation policy is also based on principles of transparency and equity, in particular gender equity. It mainly results in a unique annual process for compensation review, which happens simultaneously with the performance review of staff members, to ensure consistency between performance and the award of variable remuneration, as well as a control and monitoring of the evolutions in fixed and variable remuneration.

2 A compensation policy linked to sustainable performance

The Group compensation policy for 2022 performance year has been implemented in a context of very strong performances. These results reflect the Group's strategy and its long-term commitment to its customers, serving the economy and society.

The compensation policy remains strictly applied in compliance with applicable regulations: variable compensation pools are adjusted to ensure consistency with the evolution of financial results of the Group and of the businesses, taking into account risks.

As a result of these good performances in a highly competitive environment for certain businesses, variable compensation for 2022 performance year have globally increased throughout the Group. The Investment Banking business lines were particularly resilient in this complicated economic environment, largely explaining the increase in variable compensation for material risk takers population.

Moreover, as a major actor of sustainable finance, for several years the Group has included in its compensation policy CSR[2] indicators representative of the four pillars of the Group's policy, including climate indicators (linked to the emission of greenhouse gases and the support of our clients towards a low-carbon economy). These indicators are aligned with the Group's CSR dashboard for 2022-2025 as published in the 2022 Universal Registration Document. These CSR indicators have also been taken into account since 2019 in determining part of the annual variable compensation of Corporate Officers.

1 | CRD5 : Capital Requirement Directive

2 | Corporate Social responsibility

3 A fair compensation policy

BNP Paribas continued to pay very close attention to equality of treatment for all, in particular between women and men, and to the contribution to the respect of Code of Conduct, Regulation and internal rules, as well as Risk Assessment and Management for each staff member, in addition to the individual and collective performance measurement. Some staff members are also subject to an individual review by independent control functions.

Concerning the equal pay treatment between women and men, the Group continues its strong commitment in this area by setting up specific measures dedicated to rebalancing of unjustified remuneration gaps. Analyses are presented annually to the General Management at the end of the annual compensation review process to ensure an adequate distribution between women and men of the different budgets in terms of fixed salary increases, variable remuneration or long-term loyalty schemes.

However, ensuring equal treatment from a gender perspective does not completely enable to reduce gender pay gaps. For a number of years now, the Group has been carrying out several actions aiming at improving the representation of women in some senior management positions or in some activities where they are under-represented, by setting ambitious objectives, in particular with regard to the percentage of women in Senior Management Positions[3] (40% by the end of 2025).

This report presents the Group's compensation policy, the governance implemented to ensure its consistency and correct application, as well as detailed information on the compensation of some of its employees. It concerns the employees, whose activities may have a material as impact on the risk profile of the Group, who are identified as material risk takers in accordance with the identification criteria specified in the CRD5 regulation at Group level and who are subject to specific provisions on their compensations required by the European regulation. ”

3 | The Group's Senior Management Position (SMP) population is made up of employees in positions considered to have the most significant impact from a strategic, commercial, functional and expertise point of view.

INTRODUCTION

The BNP Paribas Group applies all regulatory requirements on compensation such as specified in:

- **European Directive CRD5**[4] of 20 May 2019, as transposed into French law in the Monetary and Financial Code and the order of 22 December 2020 and the CRR2 European regulation of 20 May 2019[5];
- **European Commission Delegated Regulation**[6] of 25 March 2021, on the identification criteria for employees whose professional activities have a material impact on the institution's risk profile ("Material Risk Takers" or "MRT"), on a consolidated basis, in all its branches and subsidiaries, including those outside the European Union;
- **EBA**[7] **guidelines** on sound remuneration policies of 2 July 2021, in line with the ACPR[8] position.

The Group's compensation policy applied in 2022 is compliant with all of these principles and aims to not encourage excessive risk-taking, to avoid incentives that may lead to conflicts of interest, and not to encourage or reward prohibited trading activities and to avoid unequal treatment, in particular on gender basis.

These regulatory prudential provisions apply to the Group on a consolidated basis (including subsidiaries and branches outside the European Union), except for derogations allowed by the regulation. In case of discrepancies between the regulation applied at Group level and the one which applies at local level, the most stringent rules shall apply.

This report is produced in order to comply with regulatory provisions of Article 450 of EU Regulation 2019/876 of 20 May 2019 on prudential requirements for credit institutions and investment firms (CRR)[9].

In terms of specific populations targeted by legal and regulatory provisions, the following populations have been identified:

1| Group MRT

Corresponding to the employees included in the Group MRT category in 2022 in accordance with the regulation in force. Thus, all the employees meeting one of the criteria defined in the Directive or the Delegated Regulation, including those identified only because of their level of remuneration (as a result of their expertise, even if it is not demonstrated that their professional activity has an impact on the Group risk profile) have been included in the scope of the Group MRT. These employees are subject to all the principles set out in the Group compensation policy as detailed below.

4 | Capital Requirements Directive 5 , UE Directive 2019/878 amending the directive 2013/36/UE
5 | Regulation EU 2019/876 that completes Regulation 575/2013
6 | Delegated Regulation 2021/923
7 | European Banking Authority
8 | French Banking Supervisory Authority
9 | Capital Requirements Regulation

In addition to these legal and regulatory provisions applicable at Group level, other compensation requirements may apply to some employees who, even though they are not considered as Group MRT, are subject to specific provisions in some of the Group's entities.

2 | Local MRT

Local MRT are the staff members identified in particular within Group significant banking subsidiaries located in the European Union and applying CRD5 on an individual basis due to national transpositions.

3 | Locally regulated employees

Locally regulated employees are staff members identified due to other regulatory requirements by virtue of local banking regulations outside European Union.

The number of employees identified under each of these provisions (1, 2, 3 above) is detailed on page 20. In addition, although a number of principles relating to the remuneration policy applies to all Group employees, the figures detailed as from page 21 of this report only concern employees identified as "Group MRT" subject to CRD5 principles at Group level such as required by regulation.

Moreover, other specific rules on remuneration may apply to some Group businesses, for instance, due to provisions:

- **Linked to protection of clients' interests** (MIFID[10] and ESMA[11] guidelines) for staff members in direct or indirect contact with clients;
- **Linked to the European SFDR[12] Regulation**, which aims to ensure that the variable remuneration of financial market participants and financial advisors does not encourage excessive risk-taking with respect to sustainability risks for investments and financial products;
- **In relation with sectoral principles** (asset management with AIFMD and UCITS and insurance with Solvency[13]);
- **Linked to the application of the French Banking Law** (such as transposed in the French Monetary Code) **and the Volcker Rule** for market professionals;
- **Specific to the Group for front office employees of Global Markets activities** of Corporate & Institutional Banking (CIB), for whom variable compensation awarded continues to be strictly controlled as previously (taking into account all costs and risks when determining variable compensation pools, and applying deferral and indexation provisions on a part of the variable compensation).

10 | Markets in Financial Instruments Directive
11 | European Securities and Markets Authority
12 | Sustainable Finance Disclosure Regulation
13 | and IFD as of performance year 2022 for Investment firms

1 · GOVERNANCE

The BNP Paribas Group compensation principles and compensation policy for MRT are designed and proposed by Group Human Resources in cooperation with the relevant business lines. They are presented for validation to the Group Compliance, Risk and Finance Committee (CRIF), chaired by the General Management, and then presented to the Remuneration Committee before approval by the Board of directors. Since 2014, the General Shareholders Meeting is annually consulted on some subjects. In compliance with applicable regulation, the Remuneration Committee of BNP Paribas SA also assumes the responsibility of the Remuneration Committee for significant subsidiaries in France.

Preparation of the remuneration policy and its implementation by Group Human Resources

Group Compliance, Risk and Finance Committee (CRIF)

The CRIF Committee is a General Management Committee chaired by Mr. Yann Gérardin, Chief Operating Officer, and includes the Heads of Compliance, Risk and Finance functions (or representatives appointed by them), as well as:

- The Group Head of Human Resources;
- The Group Head of Compensation and Benefits, who acts as secretary;
- Mr Michel Konczaty, Executive advisor to the General Management as a permanent invitee.

Compensation policy for regulated employees is presented to and discussed by the CRIF Committee, which reviews and validates:

- Compliance of the policy with current regulations;
- Its adequacy and consistency with the institution's risk management policy;
- Consistency between variable compensation practices and the need to ensure a sufficient level of capital base.

This Committee met three times with respect to the compensation process for the year 2022.

Remuneration Committee and Board of Directors

The Remuneration Committee is a committee of the Board of directors chaired by Mr. Pierre-André de Chalendar. He is also a member of the Corporate Governance, Ethics, Nominations and CSR Committee. The Committee is also composed by Ms. Jane Fields Wicker-Miurin, who is also member of the Financial Statements Committee, and of the Internal control, Risk Management and Compliance Committee, Ms. Marion Guillou who is also member of the Corporate Governance, Ethics, Nominations and CSR Committee, and Mr. Hugues Epaillard, who is an employee representative at the Board of directors and also a member of the Internal Control, Risk Management and Compliance Committee. This composition is intended to facilitate the Board's work on the appropriateness of BNP Paribas' remuneration principles with the risk policy.

Its membership is consistent with applicable regulation and with the recommendations of the Afep Medef Corporate Governance Code. **Its members are predominantly independent directors** and have experience in compensation systems and market practices in this field. Finally, the Chairman of the Board of directors is not a member, but is invited to participate in discussions, except when he is personally concerned.

The internal rules of the Board of directors define the Remuneration Committee's missions which prepare the Board of directors' decisions concerning the principles of the remuneration policy, the compensation of Corporate Officers of the Group, as well as compensation of employees whose activities have a significant impact on the company's risk profile (Group MRT), in accordance with applicable regulations. The Remuneration Committee **receives the decisions** validated by the CRIF Committee.

Thus, the Remuneration Committee analyses compensation policy for MRT, compensation principles, as well as the annual process guidelines reviewed by the CRIF Committee, including:

- Parameters for the determination of variable compensation envelope (i.e. "bonus pools") for Global Markets;
- Terms and conditions of allocations, individual awards and payments.

The Compensation Committee also analyses the list of beneficiaries whose compensation exceeds some thresholds such as defined each year by General Management, and is responsible for controlling the individual compensation of the Heads of Risk function and of Compliance function at Group level.

The subjects discussed during the Remuneration Committee meetings are then presented to the Board of directors for approval of the principles. The relevant information is also provided to the Board of directors of significant subsidiaries.

The Remuneration Committee met four times to deliberate on the compensation process for the year 2022.

General Shareholders Meeting

The BNP Paribas General Shareholders Meeting is consulted annually about the compensation envelope paid in the past financial year to employees identified as Group MRT for that financial year, including the fixed and the variable compensation, in compliance with the French Monetary and Financial Code (see p. 24).

Moreover, the Remuneration Committee (upon proposal validated by the CRIF) decides to propose to the Board of directors to submit a resolution to the General Shareholders Meeting to raise the variable to fixed compensation ratio from 100% to 200%. A two-thirds majority of the General Shareholders Meetings is required for approval, provided that at least half of the shareholders are represented, otherwise, a three-quarters majority is required. Employees identified as MRT for the previous year are not allowed to take part in the vote.

Finally, the remuneration of Corporate Officers as well as the other BNP Paribas SA 's directors is annually subject to specific resolutions submitted to the General Shareholders Meeting, in application of the provisions of the French Code de Commerce linked to the "loi Pacte". This information is detailed in the Board of directors' report to the General Shareholders Meeting.

Audit & Controls

The operating procedures implementing the Group's compensation policy are documented to provide an effective audit trail of any decisions. In addition, **controls have been defined by Group Human Resources and implemented by the Human Resources of poles, entities and functions of the Group** in order to ensure the correct identification of the MRT employees and the correct application of all regulatory requirements applicable to this population (deferral rules, indexation and variable to fixed ratio). At the end of the annual compensation review process, these controls are certified by each of the Group's poles, businesses and functions.

Moreover, a second level of control has been implemented by **RISK ORM** and the **Group's internal audit (Inspection Générale) performs an annual, independent ex post review of the compensation process** to ensure that it complies with the principles and procedures stipulated in the Group's compensation policy. The Board's Remuneration Committee is systematically provided with a summary of this report.

The review performed in 2022 by the Group internal audit team concerning the 2021 process and the implementation of the CRD5 principles including the identification of employees according to criteria defined by Delegated Regulation, the provisions applied to remuneration, as well as the gender-neutral compensation policy concluded that the principles and regulations had been appropriately applied. A summary of this review has been brought to the attention of the CRIF committee and to the Board's Remuneration Committee and communicated to the regulator.

Moreover, every year, the European Central Bank reviews the principles and the implementation of BNP Paribas' Group remuneration policy.

2 · GROUP COMPENSATION PRINCIPLES

Compensation principles applicable to all Group employees

COMPENSATION ELEMENTS FOR GROUP EMPLOYEES

Group employees' compensation includes different components:

Fixed compensation

Fixed salary rewards competence, experience, qualification level, as well as the level of involvement in assigned tasks. It is set on the basis of local and professional market conditions and the principle of internal consistency within the BNP Paribas Group. It is composed of a fixed base salary, which compensates the skills and responsibilities corresponding to the position held, and when appropriate, fixed pay supplements linked, in particular, to the specific characteristics of the position held, in accordance with applicable regulation.

Collective variable compensation

Profit-sharing schemes can exist depending on local legislations, associating employees to the results of the Group and/or of their entity. Their calculation methodologies are usually defined by company agreements.

Individual variable compensation

Variable compensation rewards employees for their performance during the year based on the achievement of quantitative and qualitative targets and individual assessments according to fixed objectives. It takes into account the business line's results and the achievement of quantitative and qualitative targets, as well as contribution to risk management and respect of compliance rules and the local and/or professional market practices. It does not constitute a right and is set each year in accordance with the compensation policy for the year in question and current corporate governance guidelines.

In addition, variable compensation may also consist of a medium or long-term retention plan, or any other suitable instrument aimed at motivating and building the loyalty of the Group's key executives and high potential employees, by giving them an interest in the growth of the value created.

Variable compensation is determined in order to avoid the introduction of incentives that could lead to conflicts of interest between employees and customers, or non-compliance with the Code of Conduct, Rules and Regulations and Risk Management.

The fixed salary must represent a sufficiently high proportion of the total compensation to reward employees for their work, seniority level, expertise and professional experience without necessarily having to pay a variable compensation component.

Commercial incentives

For employees holding commercial functions in particular within retail activities, individual variable remuneration can be awarded under sales incentive schemes. These schemes must not be designed in a manner that would promote selling a product or a service which is not well adapted to the clients' needs, or favour employees' interests and/or the Group's interest over clients' interests.

Employee Benefits

Employee benefits depend on each country's legislation and come in addition to any other remuneration components. They are intended to protect employees against the uncertainties of life (via health, disability and life insurances, etc.), encourage their savings efforts and promote preparation for retirement, via collective pension schemes.

Other compensation items

Buyout awards to newly hired experienced executives will be paid according to a schedule and under conditions as equivalent as possible to the initial vesting dates and conditions of the repurchased instruments and in accordance with the payment and behavioural conditions stipulated in the framework of the BNP Paribas Group's deferred compensation scheme in effect at the date of the buyout awards to these employees.

Guaranteeing in advance the payment of variable compensation is prohibited. However, in the context of hiring, especially to attract a candidate with a key skill, the allocation of variable compensation may be guaranteed on an exceptional basis the first year; this award shall in any event be subject to the same conditions as variable compensation (i.e. with a deferred portion, indexing, and performance conditions where appropriate).

In case of the early termination of an employment contract, any amount paid in the transactional context (beyond the existing legal minima and collective agreements) shall reflect the actual past performance of the employee.

HEDGING PROHIBITION

Hedging or insurance coverage by beneficiaries of risks related to share price fluctuation or the profitability of business lines, aimed at eliminating the uncertainties related to their deferred compensation is prohibited, including during the retention period.

THE ANNUAL COMPENSATION REVIEW PROCESS

Compensation reviews are managed through a single annual process across the Group and via a centralized system that enables the General Management to obtain at any time updated proposals within the Group, particularly for all MRT. Moreover, General Management can monitor the whole process – depending on the economic situation, the institution's results and market conditions - until individual decisions are taken and announced.

3 · COMPENSATION POLICY FOR GROUP MRT

Perimeter

Group MRT are identified annually according to the criteria defined by the European Commission Delegated Regulation, and through additional criteria decided by the Group. Under CRD5 and the new Delegated Regulation, the identification criteria have changed and now concern:

AT GROUP LEVEL

- **Corporate Executive Officers;**
- **Non-executive Corporate Officers;**
- **The members of the Group's Executive Committee** within their respective areas of responsibility;
- **The Heads at Group level** of Finance, Human Resources, Compensation Policy, Group Legal, Group Tax, IT, and Economic Analysis as well as those who supervise accounting procedures, the prevention of money laundering and terrorist financing, IT security and the management of outsourced activities;
- **Within the control functions: Compliance, Risk, Legal and Internal audit**: the Head at Group level and the managers who directly report to this person;
- **Senior managers** responsible for business lines, geographical areas, business areas and operational entities with a material impact on the Group's risk profile.

AT THE LEVEL OF THE GROUP'S MAIN BUSINESS LINES

Within significant activities for which the Group allocates more than 2% of its internal capital or which are considered as core businesses:

- The Head and the managers who directly report to this person and who are responsible of MBU sub-activities or control functions;

BY VIRTUE OF RISK CRITERIA

- Employees with delegations on credit that exceed certain thresholds (0.5% of the Group's Common Equity Tier 1 "CET1") and those with authority to approve or reject such credit decisions;
- Group employees with the authority to initiate transactions of which the Value at Risk "VaR" exceeds certain thresholds (5% of the Group's VaR limit), and those who have authority to approve or reject such transactions;
- Members with authority among the committees to accept or reject transactions, operations or new products;
- Managers whose cumulated delegations for their direct employees exceed the threshold for credit risk.

BY VIRTUE OF COMPENSATION LEVEL

Furthermore, the list also includes Group employees whose total annual compensation for the preceding year exceeds the minimum of the 3 following thresholds[14]:

1. The highest threshold between EUR 500,000 and the average total remuneration awarded to the members of the Group's management body and senior management for the previous year; **2.** the threshold corresponding to 0.3% of the highest remunerations within BNP Paribas SA; **3.** EUR 750,000.

14 | The first threshold is included directly in Directive CRD5 (EU) 2019/878 and the other two thresholds are indicated in the delegated Regulation (EU) 2021/923.

Determination of bonus pools and breakdown by business line

GLOBAL MARKETS ACTIVITIES

In the context of strict oversight of compensation for all Global Markets staff, **the variable compensation pool for this business line is determined by taking into account all components of revenues and risk**, including:

- Direct revenues;
- Direct and indirect costs allocated to the business line;
- Refinancing cost billed internally (including actual cost of liquidity);
- The cost of risk generated by the business line;
- The cost of capital allocated to the activity during the year.

However, some elements of revenues or costs are not allocated to the business line when they do not reflect its performance over the year.

The bonus pools thus calculated are distributed among the Global Markets business lines on the basis of clearly defined and documented criteria specific to each business line or team, which reflect:

- Quantitative performance measurement (including the creation and development of long-term competitive advantages for the Group);
- The measurement of underlying risk;
- Market value of the teams and the competitive situation.

These elements are supplemented by factual elements designed to measure the collective behaviour of the teams in terms of:

- Ongoing control, compliance and respect for procedures;
- Team spirit within the business line and cross-selling within the Group.

The criteria selected are based on quantitative indicators and factual elements, which are defined each year at the beginning of the compensation review process.

THE GROUP'S OTHER BUSINESS LINES

Variable compensation pools for the Group's other business lines are determined on the basis of the net revenues, after direct costs and cost of capital, after taking into account risks (in particular for CIB activities), or by the application of a variation rate from the preceding financial year, set in particular on the basis of the Group's performance profile or the performance profile of the business line as a whole after taking into account risks (in particular for Retail Banking activities), as well as on the basis of market practices.

POOLS FOR GROUP AND CONTROL FUNCTIONS

Variable compensation pools for Group functions and integrated control functions[15] are determined independently from the performance of the business lines for which they facilitate, validate or check the operations.

Variable compensation pools for the functions within business areas and business lines are defined with respect to those of Group functions, taking into account, to a limited extent and where appropriate, specific job market situations.

15 | Risk, Compliance, Internal Audit, Legal

Individual awards

Individual awards are made upon management decision based on:

- The performance of the team to which the concerned employee belongs and his or her individual performance (performance is measured on the basis of results achieved and the risk level associated with these results);
- Appraisals (mandatory annual individual assessment performed by the line manager), which simultaneously assess;
  - qualitative achievements in relation to fixed objectives,
  - professional behaviour with respect to the Group's values, compliance rules, Code of Conduct and procedures of the Group,
  - contribution to risk management, including operational risk and
  - the managerial behaviour of the concerned employee where applicable.

Failure to comply with applicable rules and procedures or blatant breaches of compliance rules or Group Code of Conduct shall entail the reduction or cancellation of the bonus, independently of any disciplinary proceedings.

The employees identified as Group MRT and local MRT are annually formally and independently assessed by control functions (Compliance and Risk) against the Respect of Code of Conduct and Rules & Regulations and against the Risk Assessment & Management such as defined by the Group.

The result of these reviews is then taken into account by the managers of the concerned employees in the annual performance appraisal and for the determination of their annual variable compensation.

Failure to comply with at least one of these rules leads to a systematic reduction or cancellation of the awarded variable remuneration of the year for the relevant employees.

Individual awards for employees of Group functions and control functions are made in accordance with these principles and independently from the performance of the business lines controlled by the employees. Furthermore, particular emphasis is given to the employee's contribution to risk management during the annual appraisal process.

Payment of variable compensation

For MRT[16], variable compensation includes a non-deferred portion and a deferred portion[17].

The deferred portion increases in proportion to the level of the amount of variable compensation, according to a grid set each year by the General Management, ranging from at least 40% to 60% for the highest variable compensation amounts.

In accordance with regulatory requirements, bonuses (including both the deferred and non-deferred portions) **are paid as follows:**

- Half in cash;
- Half in cash indexed on the BNP Paribas share price, at the end of a retention period of 9 months for the non-deferred part and 6 months for the deferred part.

Indexing on the share price has a double purpose: to align the beneficiaries interests with those of shareholders, and to ensure solidarity with the institution's overall performance results.

The deferred portion is acquired over minimum 4 years following the award year and vests no faster than prorata temporis. Thus, the payment of deferred bonuses subject to deferral over 4 years is spread over 8 payment dates, with the last payment in September 2027, i.e. 4 years and 9 months after the reference year for determining the award of variable compensation.

The deferred portion vests progressively over 4 years following the year of award, subject to achieving the business line, activity and Group financial performance targets and meeting the behavioural criteria set at the time of award.

Variable compensation is deferred by fifth, over 5 years following the award date in particular for the members of the Group Executive Committee.

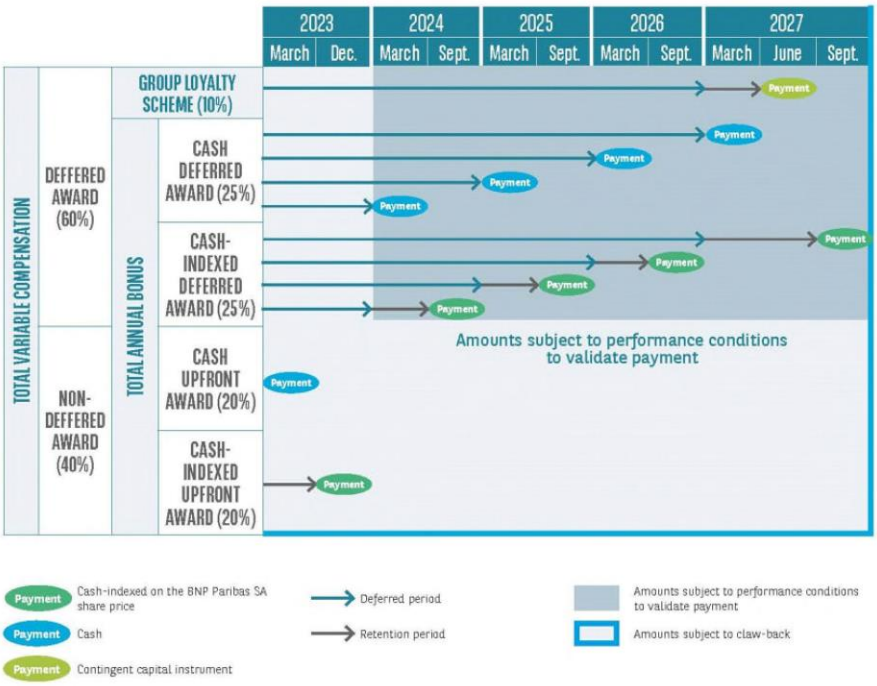
Vesting of each annual portion is thus conditional upon the fulfillment of the conditions defined initially at the award date on each annual vesting date, based on the profitability level of the business line and/or activity, and/or the Group as a whole. These conditions are designed to promote an awareness of the impact that activities in a given year could have on results in subsequent years and to align individual conduct with the institution's strategy and interests. **If these conditions are not met during a financial year, the annual portion of deferred variable remuneration is not paid ("Malus").**

Some MRT are also beneficiaries of fully deferred 4 to 5-year loyalty schemes. The Group loyalty scheme takes the form of a contingent capital instrument for which payment is subject to the absence of regulatory resolution measures and to a level of the Group's CET1[18] ratio above 7%. This scheme also includes conditions relative to Group financial performance as well as CSR criteria including climate indicators, defined at the time of award.

The figure below shows an example of variable compensation payment rules applicable to a MRT employee subject to a deferred rate of 60% over 4 years and benefiting from an allocation of 10% of its total variable compensation under the Group loyalty scheme:

16 | Excluding BNP Paribas SA Executive Corporate Officers (see p.19 for details)
17 | With the exception of total variable remuneration below EUR 50,000 and one third of total remuneration

18 | The Group's Common Equity Tier 1 stood at 12.3% on 31/12/2022



In case of dismissal for misconduct (or for employees who left the Group, the misconduct that would have led to his/her dismissal if it had been revealed while she/he was an employee), particularly when the employee's action involves the breach of risk control rules, compliance or the respect of the Code of Conduct, or also a dissimulation or an action that resulted in a distortion of the conditions under which bonuses previously allocated were set, **all or part of the rights to the deferred portions of all previously awarded variable compensations[19] shall be lost** ("Malus") **and potentially any elements of variable compensation already paid shall be recovered** ("claw-back") (subject to respect of local labour law).

In addition, in the event of the implementation of a resolution plan, as defined in Article L. 613-50 and following of the Monetary and Financial Code, the deferred variable compensation schemes will provide for the conditions under which parts of awarded variable remuneration may be reduced or cancelled.

Finally, the variable remuneration of employees working in capital market activities, not included in the category of MRT, continues to be strictly controlled and subject to payment rules including deferral, indexation and payment conditions arrangements.

Risk, conduct and compliance criteria and their measurement are thus taken into account ex-ante in the annual compensation review process for the calculation of variable compensation pools (collective) and during the annual appraisal process (individual). Moreover, conduct and compliance are also taken into account ex-post for employees who benefit from variable compensation subject to deferral (malus and claw-back in case of misconduct).

All of these elements contribute to strengthen conduct, compliance and risk culture of all Group staff members.

19 | Including Group loyalty scheme

Ratio between variable and fixed compensations

For control functions employees, the total variable remuneration awarded to each employee for a year can not exceed the amount of their fixed remuneration for that year.

Furthermore **Total variable compensation awarded to an employee included in the MRT category**, considered at its notional value at the award date, **cannot exceed his or her total fixed compensation** for the same year multiplied by a ratio.

The CRIF Committee proposes **a maximum ratio of 200%** to the Remuneration Committee of the Board of directors. This proposal is then submitted for approval to the General Shareholders Meeting.

The General Meeting of May 18, 2021 approved by more than 99% this ratio of 200% for a 3-year period. For the purpose of calculating the ratio, the portion of variable compensation deferred for 5 years and paid in the form of instruments, up to a limit of 25% of total variable compensation, is discounted at a rate defined in compliance with the EBA guidelines[20].

For 2022 performance year, 1 employee[21] in France benefited from this discount rate.

52% of employees identified as Group MRT benefited for 2022 performance year of a ratio from 100% to 200% between the variable and the fixed components of their total compensation.

Scope of application and local rules

The provisions described above are those applicable in principle to the Group MRT. Specific provisions, sometimes more stringent in particular concerning payment conditions of variable compensation the deferral duration or the ratio, may apply to MRT in some countries, due to specific local regulatory provisions or the local transposition of CRD5 rules.

Moreover, according to the order of 22 December 2020, the Group's activities subject to specific regulatory provisions (e.g. AIFMD and UCITS for Asset Management, IFD for Investment firms and Solvency for insurance) or entities which are not included in the Group's prudential consolidation scope are not subject to CRD5 provisions.

These CRD5 provisions on compensation also apply on an individual basis at the level of Group banking subsidiaries within European Union and the United Kingdom, according to the local legislation, to employees identified as "local MRT", in accordance with the Group principles detailed supra and with applicable local regulation.

Corporate Officers of BNP Paribas SA

The variable compensation of BNP Paribas SA's Corporate Officers is determined in compliance with the principles set out above applicable to all Group MRT and in accordance with the terms and conditions proposed by the Remuneration Committee adopted by BNP Paribas' Board of directors and approved by the Shareholders General Meeting in accordance with the legislation and governance rules in force..

Specific compensation principles and policy applicable to BNP Paribas SA's Corporate Officers are detailed in chapter 2 of the 2022 Universal Registration Document.

20 | EBA guidelines (EBA/GL/2014/01)

21 | Excluding Corporate Executive Officers

4 · QUANTITATIVE INFORMATION ON COMPENSATION AWARDED FOR 2022 FINANCIAL YEAR

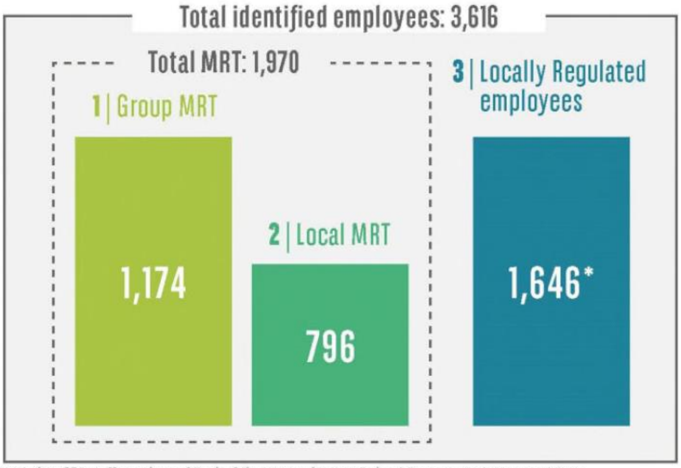
Overall data

GROUP INFORMATION

BNP Paribas Group counts in total around 177,000 employees[22], as of 31 December 2022, representing a total of salary and employee benefits cost of EUR 17.6 billion – out of which EUR 13.5 billion of wages, salaries and other variable remuneration (including profit-sharing schemes) – as detailed in the Consolidated Financial Statements of the 2022 Universal Registration Document.

GROUP EMPLOYEES WHOSE 2022 COMPENSATION IS SUBJECT TO OVERSIGHT RULES

The chart below shows the number of employees whose 2022 compensation is subject to oversight rules according to regulatory provisions applicable worldwide and to internal rules such as described in the introduction.



*Including 995 staff members of Bank of the West subject to Federal Reserve regulatory provisions

GROUP MRT PERIMETER

The application of the identification criteria in 2022, as detailed on page 14, led to a decrease in the number of MRT identified at Group level, due to the increase of the total compensation threshold above which Group employees should be identified as MRT. 20 employees within Bank of the West have been identified as Group MRT because they were present on 31/12/2022, but as the Bank of the West entity was sold to Bank of Montreal on 1 February 2023, the remuneration awarded to these employees will not be presented in the following tables (as variable compensation for the 2022 performance year has been awarded by Bank of Montréal in March 2023).

22 | Workforce in Full Time Equivalents (FTE) of entities under exclusive control or consolidated via global integration (Financial headcount) excluding Bank of the West staff

Compensation of Group MRT employees in 2022

The quantitative information presented below concerns gross compensation (excluding employer contribution) awarded for 2022 to the 1,154 employees identified as Group MRT excluding Bank of the West scope (less than 1% of the total staff), but does not concern compensation awarded to other Group employees identified as Local MRT within Group subsidiaries applying CRD5 on an individual basis due to national regulations or other Group employees whose compensation is also subject to oversight.

QUANTITATIVE INFORMATION ON COMPENSATION AWARDED TO GROUP MRT[23]

The compensation awarded to Group MRT (excluding Bank of the West) for 2022 financial year is split as follows (REM1):

In k€ excluding employer contribution	Chairman of the Board	Other non executive Corporate Officers	Executive Corporate Officers[2]	CIB	Commercial, Personal Banking & Services	Independent Control functions[3]	Group functions	Other[4]	TOTAL
Number of concerned employees	1	13	3	735	148	188	26	40	1 154
Total compensation amount	1 013	1 371	10 562	874 544	60 485	75 355	29 349	28 208	1 080 887
o/w fixed compensation[1]	1 013	1 371	4 306	370 287	37 103	46 994	11 955	14 694	487 723
o/w variable compensation	0	0	6 256	504 257	23 381	28 361	17 394	13 514	593 163
o/w cash	0	0	3 128	249 553	8 047	12 160	5 986	5 817	284 691
o/w share-linked instruments	0	0	2 226	155 651	2 025	3 702	2 096	2 137	167 837
o/w other instruments	0	0	3 128	248 199	7 527	11 402	5 969	5 817	282 042
o/w share-linked instruments	0	0	2 226	155 651	2 025	3 702	2 096	2 137	167 837
o/w other instruments	0	0	0	6 505	7 807	4 799	5 439	1 880	26 430
o/w share-linked instruments	0	0	0	6 505	7 807	4 799	5 439	1 880	26 430

(1) The fixed compensation includes the compensation paid in the 2022 year for the BNP Paribas SA 's director position.

(2) Subject to the approval of the Shareholders' Annual General Meeting of 16 May 2023 under the terms provided for by article L 22-10-34 II of the French Commercial Code.

(3) Including Group Legal.

(4) "Other" population: Investment & Protection Services pole.

On the EUR 593,16 million of total variable remuneration awarded for 2022 performance year to the Group MRT, only EUR 116,85 million is paid in cash in March 2023. The variable compensation balance is spread over up to 11 conditional instalments paid between December 2023 and September 2028 (depending on the deferred remuneration scheme applicable to each employee)..

23 | For information, some lines do not appear in the tables compared to the regulatory templates as they contain no data. Furthermore, for the Executive Corporate Officers, their Long Term Incentive Plan is presented in fair value of the amount awarded.

Other elements relative to Group MRT compensation are the following (REM2):

In K€ excluding employer contribution	Executive Corporate Officers	Other identified staff
Guaranteed variable remuneration awards		
Guaranteed variable remuneration awards Number of identified staff[24]	0	44
Guaranteed variable remuneration awards Total amount	0	26 284
Of which guaranteed variable remuneration awards paid during the financial year, that are not taken into account in the bonus cap	0	0
Severance payments awarded during the financial year		
Severance payments awarded during the financial year - Number of identified staff	0	19
Severance payments awarded during the financial year - Total amount	0	9 421
of which paid during the financial year	0	9 421
of which deferred	0	0
of which guaranteed variable remuneration awards paid during the financial year, that are not taken into account in the bonus cap	0	9 421
of which highest payment that has been awarded to a single person	0	1 603

Deferred remuneration (REM3) :

In K€ excluding employer contribution	Total amount of deferred remuneration awarded for previous performance periods	Of which due to vest in the financial year	Of which vesting in subsequent financial years	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in the financial year	Amount of performance adjustment made in the financial year to deferred remuneration that was due to vest in future performance years
MB Management function[25]					
cash-based	9 941	1 627	8 314	0	0
share-linked instruments or equivalent non-cash instruments	11 590	2 102	9 488	0	0
other instruments	4 667	840	3 827	-165	0
Other identified staff					
cash-based	354 919	84 104	270 815	0	0
share-linked instruments or equivalent non-cash instruments	436 588	185 361	251 227	0	0
other instruments	91 554	19 365	72 189	-640	0
TOTAL	909 258	293 398	615 860	-805	0

24 | Includes employees hired in the year who are identified as MRT taking into account this guaranteed variable remuneration (therefore subject to the CRD5 regulatory constraints on variable remuneration (deferral, indexation, variable/fixed ratio)).

25 | Remuneration granted to corporate officers during their directorship or in their previous position as employees.

In K€ excluding employer contribution	Total amount of adjustment during the financial year due to ex post implicit adjustments (i.e. changes of value of deferred remuneration due to the changes of prices of instruments)	Total amount of deferred remuneration awarded before the financial year actually paid out in the financial year	Total amount of deferred remuneration awarded for previous performance period that has vested but is subject to retention periods
MB Management function			
cash-based	277	1 903	0
share-linked instruments or equivalent non-cash instruments	-432	1 670	1 172
other instruments	0	675	0
Other identified staff			
cash-based	4 429	88 533	0
share-linked instruments or equivalent non-cash instruments	-295	185 066	387
other instruments	0	18 725	0
TOTAL	3 979	296 572	1 559

Number of MRT Employees whose 2022 total remuneration exceeds EUR 1 million (REM4) :

Total compensation	NUMBER OF MRT
< €1million	785
Between €1 and €1.5 million	200
Between €1.5 and €2 million	73
Between €2 and €2.5 million	41
Between €2.5 and €3 million	26
Between €3 and €3.5 million	9
Between €3.5 and €4 million	8
Between €4 and €4.5 million	3
Between €4.5 and €5 million	3
Between €5 and €6 million	4
Between €6 and €7 million	1
Between €7 and €8 million	1

Among the employees whose remuneration exceeds EUR 1 million, 121 work in the United Kingdom, 112 in the United States, 67 in France, 46 in Asia and the remaining employees are located in 8 other countries.

5 · QUANTITATIVE INFORMATION ON COMPENSATION PAID TO GROUP MRT IN 2022

In accordance with article L511-73 of the Monetary and Financial Code, the BNP Paribas Annual Shareholders' Meeting of 16 May 2023 will vote on a consultative basis in its eighteenth resolution, on the global amount of compensation paid in 2022 to employees identified as Group MRT in 2022.

These remunerations are, by definition, different from what is presented in paragraph 3 above, which reflects the compensations awarded in 2023 for 2022 financial year. Compensations actually paid out in 2022 refer to partial payments of variable compensation awarded between 2018 (for financial year 2017) and 2022 (for financial year 2021), for the portion payable in 2022 in accordance with applicable provisions.

The amount paid for these variable compensation awarded in previous years may be affected by a failure to achieve performance conditions and by fluctuations in the BNP Paribas share price between the award date and the payment date.

The amount of fixed compensation reflects the amount actually paid out in the year, taking into account any potential salary increases awarded during the year. Fixed compensation, awarded as set out above in section 3, reflects fixed compensation at 31/12/2022 considered on an annual basis.

Therefore, the total compensation paid out in 2022, subject to the consultation of General Shareholders Meeting, amounted to EUR 926 million.

Amount in EUR million excluding employer contribution.

NUMBER OF EMPLOYEES CONCERNED	EXERCICE 2022	
	Amount of fixed compensation paid	Amount of variable compensation paid
1174	480	446

Variable compensation paid includes:

Amount in EUR million excluding employer contribution	2022	
	Award value	Payment value**
2021 bonus paid in the year	228	220
2020 deferred bonus	49	50
2019 deferred bonus	44	47
2018 and before	74	82
2019 Group loyalty scheme	25	25
Other components of variable compensation*	22	22
TOTAL	443	446

* sign-on bonuses, buyout awards, collective profit sharing schemes, etc.
** the difference between the award value and the payment value results from the partial indexation of variable compensation to the BNP Paribas share price and from performance conditions.

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BNP PARIBAS

The bank
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world

13 PERSON(S) RESPONSIBLE FOR THE UNIVERSAL REGISTRATION DOCUMENT

13.1 Person(s) responsible for the Universal Registration Document and the annual financial report

The Issuer and each of the Directors, whose names appear on pages 38 to 52.

13.2 Statement by the person(s) responsible for the Universal Registration Document

The Issuer, and each of the Directors, hereby declare that, to the best of the knowledge of the Issuer, and each of the Directors, the information contained in this Universal Registration Document is in accordance with the facts and contains no omission likely to affect its import.