MERCK

Annual Report 2008

# Staying the course

More information inside the cover:
Business sectors and divisions
Merck 2008 at a glance

# Major achievements of 2008

Despite a rapidly deteriorating economic situation, total revenues of the Merck Group increased by 7.1% to € 7,558 million in 2008. On a currency-adjusted basis, we achieved growth of 11%.

The operating result rose by 16% to € 1,131 million. Return on sales (ROS) improved to 15.0%. Profit after tax from continuing operations increased from € –88 million to € 379 million owing to good business performance, the sharp decline in exceptional items as well as the nearly full repayment of debt.

The pharmaceutical business achieved double-digit growth rates. Our oncology drug Erbitux® was approved in mid-2008 in the European Union for the first-line treatment of metastatic colorectal cancer, as well as in Japan for second- and third-line treatment in this indication. In November, the EU drug regulatory authorities granted approval for the first-line treatment of head and neck tumors. Sales of Erbitux® increased 20% to € 565 million. Rebif®, our drug to treat multiple sclerosis, further expanded its leading position with sales of € 1,331 million, 9.3% more than in 2007.

## Pharmaceuticals business sector

Merck develops, manufactures and markets innovative prescription drugs as well as over-the-counter products. We develop therapies for high unmet medical needs. Through their targeted effect, these help patients to live a longer and better life. Our over-the-counter products help prevent disease and relieve minor complaints.

**Merck Serono division**
The product portfolio of this division includes leading prescription drugs such as the cancer drug Erbitux® and the multiple sclerosis treatment Rebif®. In addition, we offer therapies to treat infertility, growth disorders, cardiovascular or metabolic diseases, and psoriasis – indications mainly treated by specialists. Our research activities focus on Oncology, Neurodegenerative Diseases, Fertility, Autoimmune and Inflammatory Diseases, and Endocrinology.

**Consumer Health Care division**
Many consumers trust a wide range of well-known over-the-counter brands that Merck develops, manufactures and markets in its Consumer Health Care division. The portfolio ranges from products for everyday health such as Bion®3, or Femibion®, which is specially for women, classic cold remedies such as the well-known brand Nasivin®, to products that strengthen the joints such as Seven Seas® JointCare and Kytta®.

## Chemicals business sector

Merck offers a wide range of specialty chemicals for technologically sophisticated applications. Many of these are contained in products that people encounter in everyday life, such as mobile phones, televisions, automotive coatings, drugs and cosmetics. Top quality, diversity as well as a customer-centric approach to research and product development along with extensive service characterize our Chemicals business.

**Liquid Crystals division**
Close cooperation in development and production of liquid crystals (LC) with the world's leading display manufacturers has made Merck the global leader in this market. Modern life would be hard to imagine without LC displays. Merck is technology leader and continually invests in research for these and new technologies, e.g. OLEDs (organic light-emitting diodes) or chemicals for energy-efficient lighting.

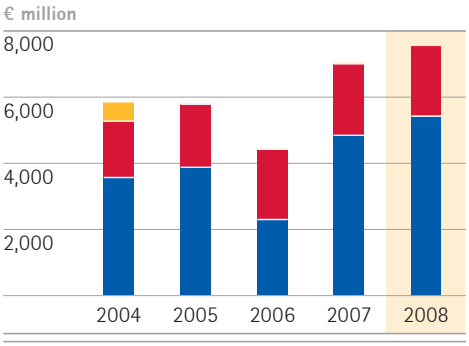
**Performance & Life Science Chemicals division**
Our specialty chemicals and our expertise in application technologies, quality assurance and approval processes have made us a successful supplier in key markets, in particular the food, optics, plastics, coatings, printing, cosmetics and pharmaceutical industries. Products and services from Merck are used throughout the entire process chain, from analysis, research and development, through to production. Our portfolio includes, for example, effect pigments, cosmetic actives, reagents and test kits.

# Merck 2008 at a glance

**Key figures for 2008**

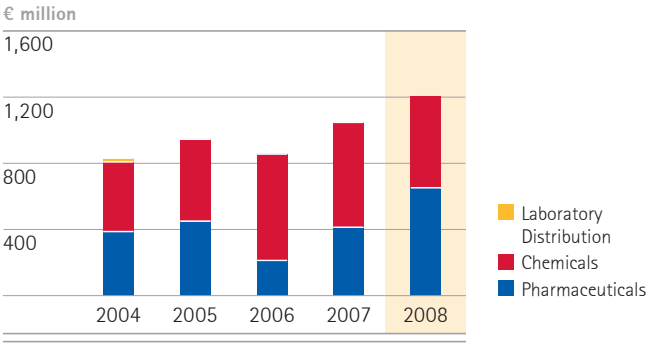
| € million | Pharma-ceuticals | Chemicals | Corporate and Others | Total | Change in % |
|---|---|---|---|---|---|
| Total revenues | 5,428 | 2,123 | 6.6 | 7,558 | 7.1 |
| Gross margin | 4,485 | 1,170 | –2.7 | 5,652 | 7.1 |
| Research and development | 1,091 | 143 | 0 | 1,234 | 20 |
| Operating result | 655 | 558 | –81 | 1,131 | 16 |
| Exceptional items | –354 | –46 | 0 | –400 | –48 |
| Earnings before interest and tax (EBIT) | 301 | 512 | –81 | 731 | – |
| EBIT before depreciation and amortization (EBITDA) | 1,381 | 645 | –80 | 1,947 | 4.8 |
| Return on sales in % (ROS: operating result/total revenues) | 12.1 | 26.3 | – | 15.0 | |
| Free cash flow | 559 | 460 | –581 | 438 | – |
| Free cash flow adjusted for acquisitions and disposals | 598 | 474 | –470 | 601 | –38 |

**Total revenues by business sector***




*excluding Corporate and Other

**Operating result by business sector***




*excluding Corporate and Other

# Staying the course

Even in economically difficult times, we have stayed the course. Two important factors are to thank for this:

With our strategy "Sustain. Change. Grow." we are exploiting opportunities and protecting ourselves against risks. This is because we derive our power to grow from the balance between the well established and the new, between tradition and innovation, between Pharmaceuticals and Chemicals. Our pioneering spirit in research and our experience enable us to develop products that improve quality of life.

Our ability to succeed on course has a great deal to do with the corporate culture for which Merck stands. We are convinced that our values pave the way for our success. Courage, achievement, responsibility, respect, integrity and transparency are our compass when it comes to our financial and social actions.

Merck's development over its 340-year history shows that we identify strongly with these strengths. And it gives us every confidence to further strengthen the value and performance of our company in the future. Merck is staying the course – even in economically difficult times.

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**Dr. Karl-Ludwig Kley**
Chairman of the Executive Board of Merck KGaA

Dear Shareholders and Friends,

We have just ended a year that was increasingly characterized by turmoil in the financial and business markets. Nevertheless, we largely achieved the objectives for Merck as communicated at the beginning of 2008. On the whole, you can therefore be satisfied with Merck's performance in 2008.

At € 1.1 billion, the operating result reached a new record high for Merck. Total revenues increased by 7.1% to € 7.6 billion. We plan to propose a dividend of € 1.50 per share to the Annual General Meeting.

Although nearly all our divisions were impacted by negative currency effects, return on sales grew to 15.0%. The Pharmaceuticals business sector increased total revenues by 11% to € 5.4 billion. The Chemicals business sector recorded a slight decline of 1.3% in total revenues to € 2.1 billion due to the impact of the economic downturn, which affected the liquid crystals business at the end of the year. The division just missed its objectives. Although a disappointment, we remain confident in the future viability and success of this business.

### A well-balanced business model ...

We have good market positions and a strong balance sheet. And we are known for our cautious financial policy. This protects us in times of crisis. We are solidly positioned as a pharmaceutical and chemical company with promising growth opportunities.

We are the market leader in high-tech sectors: In red, or medical, biotechnology, we are the leader in Europe. Since we want to not only maintain but also expand this position, in November we placed the cornerstone for Europe's most modern biotechnology manufacturing facility, located in Switzerland. We are proud of having obtained three new approvals for our oncology drug in 2008, which we often refer to as the 'Year of Erbitux®'.

As a supplier to the display industry, we are the global market and technology leader in liquid crystals used in mobile phones, navigation devices, laptops and flat-screen televisions.

In addition, we also operate in mature market segments with very stable businesses – ranging from classic pharmaceuticals to active ingredients and laboratory chemicals.

We therefore see ourselves well equipped to withstand the current economic crisis based on our own strengths. In fact, we can even use the situation in order to grow and to strengthen our competitive position.

**... and a strong management culture ...**

In order to sustain success, it is necessary to have a company management based on a common set of values and mutual trust. The stronger these factors are and the more solidly a company's culture is founded on shared values, the less the need for central control mechanisms and bureaucracy.

Around the world, 32,800 people from 117 countries work for Merck. Our values are the bond that exists between the company and its employees, spanning different cultural backgrounds. These values give us the freedom to run our businesses in an entrepreneurial way and to shape – as opposed to merely administering – the future of our company. Decentralized entrepreneurial responsibility is therefore essential for us in order to understand markets and reach customers.

Also on behalf of my colleagues on the Executive Board, I thank all employees for their untiring and strong commitment to our company – especially during difficult times. I would like to take this opportunity to also thank Walter W. Zywottek, who retired from the Executive Board in mid-2008. He spent 40 successful years working for Merck and made outstanding contributions to the company thanks to his energy and competence.

**... make us confident in difficult times as well.**

In spite of everything: A global economic crisis is something that Merck too cannot ignore. While we have a robust business model and an entrepreneurial culture, this doesn't protect us against declining customer demand. We too must tighten our belts and respond to this situation by reducing costs and capital spending. Yet the concrete impact on Merck cannot be expressed in figures. At least not yet. The Executive Board of Merck considers it irresponsible to make forecasts today that might need to be adjusted in two months' time. Therefore, we will refrain from providing an outlook this year. The reactions to this decision by our capital providers confirm our stance.

We will continue with our strategy of profitable growth. Here we are focusing on three main elements:

- We continue to concentrate on research-oriented specialty businesses and on driving innovations forward.
- We will exploit our potential for organic growth more strongly in order to improve our market position. To this end, we will invest further in regional markets, particularly China, India, Japan and the United States.
- External growth through alliances and acquisitions is also part of our strategy.

Even in difficult times, our values help us to do the right thing. Especially now, our two core values of courage and achievement have special meaning.

In this spirit, we want to continue the 340-year Merck success story. My Executive Board colleagues and I would like to thank you for your trust and support as we continue along the chosen course.

Sincerely,

Karl-Ludwig Kley

# Executive Board of Merck KGaA

**Dr. Bernd Reckmann**
**Head of the Chemicals business sector**

Born in 1955

Biochemist

joined Merck in 1986,
Member of the Executive Board
since January 2007

**Responsibility for**
**Group-wide functions:**
Chemicals business sector;
Site Management Darmstadt and Gernsheim;
Production, Engineering, Process Development

**Regional responsibilities:**
Germany (including Human Resources);
Asia; United States (Chemicals); Australia;
New Zealand

**Elmar Schnee**
**Head of the Pharmaceuticals business sector**

Born in 1959

Business graduate

joined Merck in 2003, Member of the
Executive Board since November 2005

**Responsibility for**
**Group-wide functions:**
Pharmaceuticals business sector

**Regional responsibilities:**
Europe; United States (Pharmaceuticals);
Canada; Latin and Central America; Africa;
Middle East

**Dr. Karl-Ludwig Kley**
**Chairman of the Executive Board**

Born in 1951

Lawyer

Member of the Supervisory Board and Board of Partners of Merck from March 2004 to June 2006, Member of the Executive Board since joining Merck in September 2006

**Responsibility for Group-wide functions:**
Human Resources (global); Legal, Patents, Trademarks; Auditing, Risk Management; Strategic Planning; Inhouse Consulting; Corporate Communications; Environment, Health and Safety; Information Services

**Dr. Michael Becker**
**Chief Financial Officer**

Born in 1948

Lawyer

joined Merck in 1998, Member of the Executive Board since January 2000

**Responsibility for Group-wide functions:**
Accounting, Controlling, Finance, Taxes, Insurance; Mergers and Acquisitions; Investor Relations; Purchasing

www.merck.de/management

# Management Report of the Merck Group

# Overall economic situation

**Global economy weakens significantly**

The financial crisis that was triggered in summer 2007 by the problems in the U.S. housing market resulted in recessionary trends in the global economy in 2008. In many countries, these led to weak demand in industrial production sectors and were reflected in real gross national product (GNP) of the last two quarters of 2008. While 2007 was still marked by global GNP growth of 5%, this value declined to 3.7% in 2008 according to the International Monetary Fund (IMF). The German Council of Economic Experts registered global economic growth of 2.8% in 2008. The Organization for Economic Cooperation and Development (OECD) reported a 1.4% increase in GNP for its 30 members in 2008.

According to the IMF, raw material prices, which fell in the second half of 2008, reflect the global economic downturn, the strengthening of the dollar and the financial crisis.

In addition, during the second half of 2008, consumer confidence fell, leading to declining consumption and postponed investments, and thus lower product volumes.

While the United States saw a 2.0% increase in GNP in 2007, this number decreased to 1.4% in 2008. In the euro zone, GNP grew by 2.6% in 2007 and, according to the IMF and Eurostat, by 1.2% in 2008. Major European economies such as Germany, France, Italy and Spain all registered a decline in GNP growth in 2008. GNP growth in Germany declined from 2.5% in 2007 to 1.3% in 2008 and fell continuously as of the second quarter. According to OECD statistics, France saw a decline in GNP growth from 2.2% in 2007 to 0.8% in 2008 and Italy saw GNP growth decline from +1.5% in 2007 to –0.2% in 2008.

Even high-growth nations such as China, Russia and India could not escape the global trend completely. Initially, however, they were only slightly affected by the turmoil in the financial markets and the global economic weakness. China's double-digit growth of 12% in 2007 declined to 9.7% in 2008, according to IMF data. This was the first time in five years that the Chinese economy had posted single-digit growth.

Russia was not only affected by the global trend toward economic weakness but also suffered from capital outflows due to the conflict in Georgia. According to data from the German Council of Economic Experts, Russian GNP growth declined from 8.1% in 2007 to 7% in 2008. The OECD and the World Bank assume even lower growth rates.

According to the IMF, India recorded a 7.8% increase in GNP in 2008 following an increase of 9.3% in 2007.

The Japanese economy grew by only 0.5% in 2008 following an increase of 2.1% in the previous year, according to IMF data.

### Global pharmaceutical markets see moderate growth

According to data from the market research institute IMS Health, the global pharmaceutical market grew between 4.5% and 5.5% to a volume of US$ 780 billion in 2008.

According to IMS figures, the United States, the world's largest pharmaceutical market, grew by 1% to US$ 208 billion. The weaker growth is attributed to lower demand for newly approved products as well as the economic climate, which is possibly impacting the prescribing practices of physicians.

For Japan, the world's second-largest pharmaceutical market, IMS Health reported growth of 4% to US$ 66 billion, followed by Germany, where market volume increased by 4% to US$ 36 billion. In France, the world's fourth-largest market, drug sales increased by 1% to US$ 31 billion in 2008.

### Chemical markets suffer from economic downturn

The European chemical industry association CEFIC, which represents around 50% of all global chemical companies, says that production of chemicals including pharmaceutical active ingredients by its member companies increased by 0.2% in 2008. In the United States, chemical production, including drugs, decreased by 1.1%. Excluding the production of pharmaceutical products, CEFIC reported an 0.6% decline in European chemicals production. According to CEFIC data, in the United States, the decline amounted to 2.4% in 2008. Specialty chemical manufacturers cut their output by 1.3% in 2008. Production of chemicals used by consumers fell by 1.4% in 2008.

The German Chemical Industry Association VCI assumes stagnating production and sales growth of 3% to € 179 billion in 2008. According to the VCI, chemical production had already begun to decline in the second half as the financial crisis impacted an increasing number of customer segments within the chemical industry. The VCI primarily named the automotive and the construction industries as sectors that experienced declining demand.

According to the International Council of Chemical Associations (ICCA), more than 7 million people work in the chemical industry. Including industrial sectors that indirectly depend on the chemical industry, more than 20 million people work in the chemical industry. Global sales are around € 2 trillion, with the largest market being Asia followed by Europe.

# Economic development of Merck

Merck largely met the guidance it provided at the beginning of the year in an environment that continually worsened.

With the publication of the Annual Report for 2007, we forecast an increase in total Group revenues in a range between 5% and 9%. We met this objective in 2008: Total revenues increased by 7.1% to € 7,558 million.

We predicted that total revenues of the Pharmaceuticals business sector would rise by between 7% and 11%. In 2008, the business sector achieved an 11% increase in total revenues to € 5,428 million.

In February 2008, Merck expected that total revenues in the Chemicals business sector would grow in a range between 5% and 7%. Owing to negative currency effects and the worsening economic situation, we could not achieve this objective: Total revenues declined by 1.3% to € 2,123 million; on a currency-adjusted basis they increased by 4.7%.

The operating result rose by 16%, matching our forecast of double-digit growth. For the Pharmaceuticals business sector, we expected a high double-digit rise in the operating result. Here we achieved an increase of 57%. In February 2008, we assumed that the earnings contribution from the Chemicals business sector would remain stable. Since we supply our specialty chemicals to some extent to sectors that are sensitive to economic cycles, we sustained a decline of 12%.

**Comparison of target and actual values**

| | Forecast for 2008 | Actual values in 2008 |
|---|---|---|
| **Growth of total revenues** | 5% – 9% | 7.1% |
| Pharmaceuticals | 7% – 11% | 11% |
| Chemicals | 5% – 7% | –1.3% |
| **Growth of operating result** | double-digit | 16% |
| Pharmaceuticals | high double-digit | 57% |
| Chemicals | stable | –12% |

# Financial position and results of operations

**Return on sales of the Merck Group rises to 15.0%**

Total revenues of the Merck Group rose by 7.1% to € 7,558 million in 2008. Negative currency effects, especially in the Chemicals business sector, lowered growth by 4.2%. Organically – meaning adjusted for the impact of currency as well as acquisitions and disposals – growth amounted to 11%. Royalty income, which we disclose as part of total revenues, totaled € 356 million, 26% more than in 2007. Gross margin grew in line with total revenues by 7.1%. Marketing and selling expenses rose by 8.5% since the Merck Serono division intensified its marketing activities. This is closely related to new therapeutic areas, for which our drugs have been approved (details can be found starting on page 33). At 28%, the marketing and selling ratio was only one percentage point higher than in 2007.

We maintained administration expenses at the previous year's level of € 446 million. Other operating income and expenses totaled € 170 million and were thus only half as high as in 2007, which included high one-time integration and restructuring expenses following the acquisition of Serono.

Group-wide, we spent € 1,234 million on research and development. This corresponds to an increase of 20% over 2007 and a research ratio of 16% relative to total revenues. At € 573 million, amortization of intangible assets was slightly higher than in 2007 and relates almost exclusively to ongoing amortization resulting from the Serono purchase price allocation.

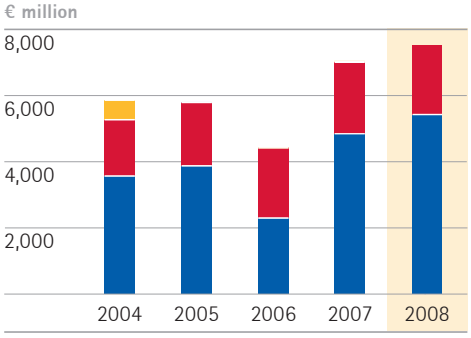
R&D spending increased by 20%.

The operating result of the Merck Group increased by 16% to € 1,131 million in 2008. Return on sales (ROS) rose to 15.0% from 13.8%.

**Exceptional items for pharmaceuticals and restructuring**

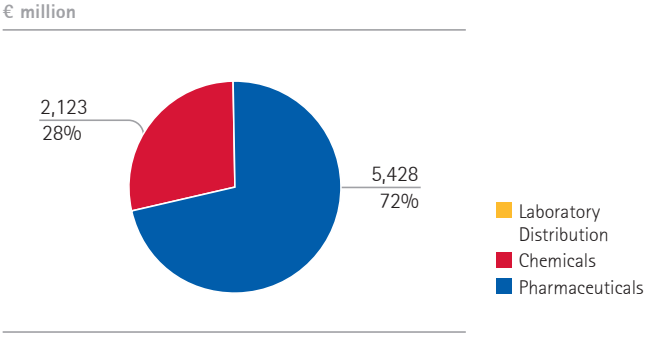
In 2008, we booked exceptional items of € 400 million. This related primarily to impairments of intangible assets in the Merck Serono division: Due to sharply lower sales expectations for the psoriasis drug Raptiva®, production technology assets were written off in full. This resulted in an expense of € 195 million. Moreover, the licensing rights to Enbrel® for the treatment of rheumatoid arthritis and psoriasis were partially written down due to changes in the estimates of the associated royalty income and the timing thereof. This resulted in an expense of € 43 million. We completely wrote off

**Total revenues by business sector***




*excluding Corporate and Other

**Total revenues by business sector***




*excluding Corporate and Other

the goodwill of € 42 million of our former subsidiary Lexigen subsequent to the termination of the relevant research projects. In 2008, we discontinued the development of a high-dose recombinant human growth hormone for HIV-associated adipose redistribution syndrome (HARS) and wrote off in full the intangible assets that had previously been capitalized at € 20 million in this connection.

We booked write-downs of € 29 million for financial assets due to lasting declines in share prices. The Merck Serono division incurred charges totaling € 26 million in connection with the restructuring of its sales force in various European countries.

The Chemicals business sector restructured the Performance & Life Science Chemicals division at its sites in the United States and Brazil. Merck recognized expenses of € 46 million as exceptional items in this connection.

In 2007, exceptional items related mainly to write-downs of inventories, which were remeasured within the scope of the Serono purchase price allocation.

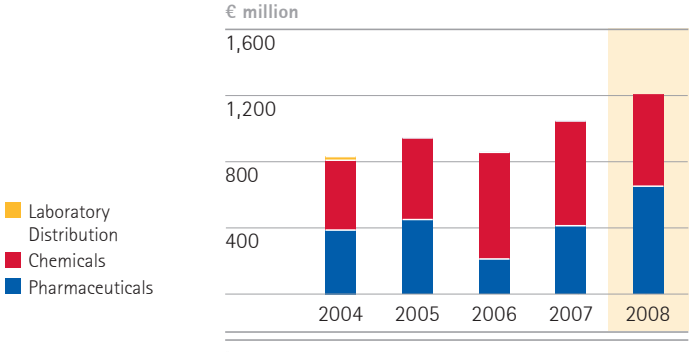
### Sharp decline in interest expenses

Divestment of Generics helped lower financial liabilities.

The financial result for 2008 was € –156 million compared to € –311 million in 2007, which was mainly attributable to interest payments for the Serono acquisition. Proceeds from the sale of the Generics business, which were booked in the fourth quarter of 2007, were used to lower financial liabilites. As a result, Merck could considerably reduce its interest expenses in 2008. In 2008, exchange rate differences lowered the financial result by € –18 million, while in 2007, we had booked exchange rate gains of € 9 million.

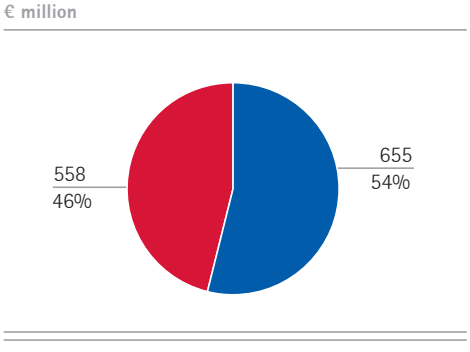
In 2007, we sold the Generics business to Mylan Inc. and reported it under Discontinued operations in the Group financial statements. As part of the divestment agreement, Mylan received an option to purchase the rest of the business that remained with Merck after the transaction closed. To date, this business has not been transferred to Mylan. It is immaterial for Merck and is reported as part of the Merck Serono division since 2008.

**Operating result by business sector***




*excluding Corporate and Other

**Operating result by business sector***




*excluding Corporate and Other

**Total revenues by quarter**

| € million | 1st quarter | 2nd quarter | 3rd quarter | 4th quarter | 2008 | 2007* |
|---|---|---|---|---|---|---|
| **Total** | **1,858** | **1,903** | **1,893** | **1,904** | **7,558** | **7,057** |
| Pharmaceuticals | 1,292 | 1,344 | 1,352 | 1,439 | 5,428 | 4,877 |
| Chemicals | 559 | 559 | 541 | 464 | 2,123 | 2,150 |
| Corporate and Other | 7 | 0 | 0 | 0 | 7 | 29 |

**Components of growth in total revenues by quarter**

| in % | 1st quarter | 2nd quarter | 3rd quarter | 4th quarter | 2008 | 2007* |
|---|---|---|---|---|---|---|
| Organic growth | 14 | 12 | 14 | 6.0 | 11 | 11 |
| Pharmaceuticals | 14 | 13 | 17 | 15 | 15 | 13 |
| Chemicals | 13 | 13 | 7 | –14 | 4.7 | 8.7 |
| Currency effects | –5.4 | –6.1 | –4.8 | –0.5 | –4.2 | –3.6 |
| Acquisitions/disposals | 0.0 | –0.1 | 0.0 | 0.0 | –0.1 | 51 |
| **Total** | **8.3** | **6.1** | **8.7** | **5.4** | **7.1** | **58** |

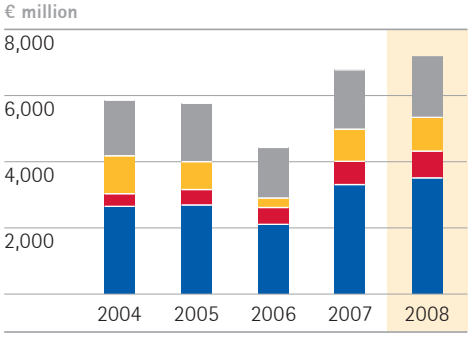
*excluding the Generics division

**Above-average sales growth in the new markets of eastern Europe and in China**

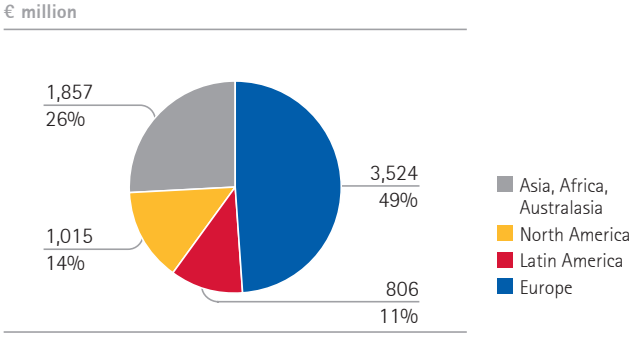
Accounting for nearly half of sales, Europe is Merck's largest market, followed by Asia as well as North America and Latin America. Within Europe, France was once again our top-selling country, where sales increased by 5.6% to € 779 million. Posting slight growth in sales to € 722 million, Germany was our second-largest market, followed by Italy with sales of € 343 million and growth of 7.5%. We increased sales in Poland by 22% to € 86 million and in Russia by 60% to € 72 million. By contrast, sales declined in the United Kingdom due to currency effects.

Traditionally, our sales in Asia are mainly attributable to liquid crystals. Strong currency effects in these markets led to only a moderate 3.7% increase in total Group sales in Asia to € 1,663 million. However, within the Pharmaceuticals business sector, sales increased in Asia by 22% to € 523 million, with China posting an 86% rise to € 116 million. In Japan, our pharmaceutical sales soared by 64% to € 30 million in 2008.

**Merck Group | Sales by region**




**Merck Group | Sales by region**



In the North American market, which has grown significantly in importance since 2007 as a result of the acquisition of Serono, Group sales increased by 4.9% to € 1,015 million in 2008, with the United States accounting for € 912 million of the total. Negative currency effects also played a strong role here, resulting in a growth rate in the United States of only 5.6%.

In Brazil, our largest market in Latin America, sales increased by 28% to € 248 million. However, in Mexico, our second-largest market in the region, sales declined by 8.5% to € 166 million due to overstocking by pharmaceutical wholesalers. By contrast, Venezuela and Argentina delivered excellent performances, with growth rates exceeding 25%.

**Key figures of the Merck Group**

| | Operating result € million | Exceptional items € million | EBIT € million | FCF € million | EBITDA € million | ROS % |
|---|---|---|---|---|---|---|
| Pharmaceuticals | 655 | –354 | 301 | 598 | 1,381 | 12.1 |
| Chemicals | 558 | –46 | 512 | 474 | 645 | 26.3 |
| Corporate and Other | –81 | 0 | –81 | –470 | –80 | – |
| **Total** | **1,131** | **–400** | **731** | **601** | **1,947** | **15.0** |

EBIT = Earnings before interest and tax
FCF = Free cash flow adjusted for acquisitions and disposals
EBITDA = EBIT before depreciation and amortization
ROS = Operating result/total revenues

Pharmaceutical sales higher thanks mainly to Rebif® and Erbitux®

### Pharmaceuticals increases contribution to operating result

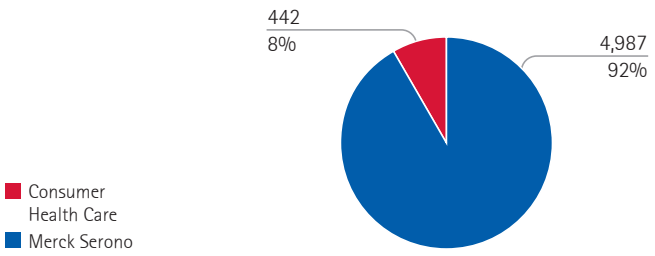
The Pharmaceuticals business sector, comprising the Merck Serono and Consumer Health Care divisions, generated an 11% increase in total revenues to € 5,428 million. The majority of this increase is due to higher sales of the drugs Rebif® und Erbitux®. Royalty income grew by 25% to € 339 million. The operating result increased by 57% to € 655 million. The business sector thus generated 54% of the total operating result*. In 2007, the business sector accounted for 40% of the Group operating result*. Return on sales for the Pharmaceuticals business sector rose to 12.1% compared with 8.5% in 2007.

Total revenues of the Merck Serono division increased by 12% to € 4,987 million and the operating result rose to € 594 million. The 66% increase in the operating result was due to the good development of business and to the absence of high, one-time restructuring and integration expenses for Serono in 2007.

*excluding the segment Corporate and Other

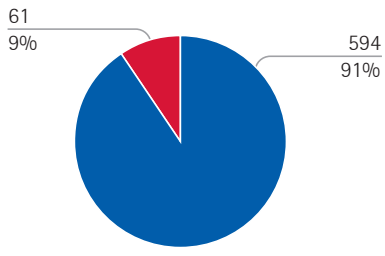
**Pharmaceuticals | Total revenues by division**

€ million




**Pharmaceuticals | Operating result by division**

€ million




Consumer Health Care
Merck Serono

The division increased its R&D spending by 22%. The research ratio of 22% was two percentage points higher than in 2007. At € 565 million, the high level of expenses due to the amortization of intangible assets was at the previous year's level and was due almost exclusively to the Serono purchase price allocation. Return on sales for the Merck Serono division amounted to 11.9% following 8.0% in 2007.

Total revenues of the Consumer Health Care division rose by 5.2% to € 442 million; the operating result rose by 2.9% to € 61 million compared with 2007. The proceeds of € 11 million on the sale of the biManán® brand in Spain had a positive impact on the operating result. In December, the Belgian company Bio-Fyt was acquired for € 30 million. The division maintained its return on sales of 13.9% at nearly the previous year's level of 14.2%.

### Chemicals strongly affected by falling sales and negative currency effects

Total revenues of the Chemicals business sector were € 2,123 million in 2008, corresponding to a decline of 1.3%. Negative currency effects due to the translation of weak currencies such as the U.S. dollar and the Korean won lowered our revenue growth rate of 4.7% by 6.0 percentage points. In the course of the year, and particularly in the fourth quarter, the economic downturn affected sales in our Chemicals business sector, with deliveries to manufacturers of goods used by consumers bearing the brunt.

At € 558 million, the operating result was 12% lower than in 2007. The business sector thus accounted for 46% of the Group operating result* compared with 60% in 2007. Return on sales amounted to 26.3%, compared with 29.3% in 2007. Research and development expenses rose by 4.4% to € 143 million.

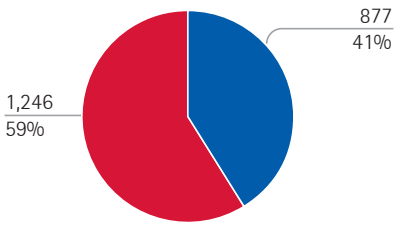
Chemicals business sector contributes 46% to the Group operating result*.

Negative currency effects and the recession strongly impacted total revenues of the Liquid Crystals division. They declined by 4.2% to € 877 million; on a currency-adjusted basis the growth rate was 5.6%. Since Merck produces the basic materials in Darmstadt, but generates sales with customers in Asia and bills in local currencies, the unfavorable currency relationships directly impacted the operating result. Since the fourth quarter, the economic downturn has led to a sharp decline in sales. At € 391 million, the operating result was therefore 20% lower than in 2007. Return on sales declined to 44.6% compared to 53.1% in 2007.

*excluding the segment Corporate and Other

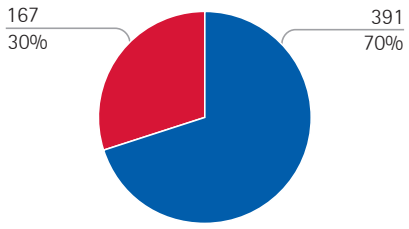
**Chemicals | Total revenues by division**

€ million




**Chemicals | Operating result by division**

€ million




Performance & Life Science Chemicals
Liquid Crystals

The Performance & Life Science Chemicals division also suffered from negative currency effects as well as from the economic downturn in its effect pigments business. Total revenues were unchanged at € 1,246 million. However, on a currency-adjusted basis, growth amounted to 4.0%. The operating result rose by 15% to € 167 million. This is primarily due to the low level of 2007, which included one-time expenses for write-downs and restructuring measures. At 13.4%, return on sales was markedly higher than 2007, when it amounted to 11.7%.

### Sharp increase in profit after tax

Profit after tax from continuing operations was € 379 million. This was considerably better than the negative value of € – 88 million in 2007, which stemmed from high exceptional items due to the Serono acquisition. Adjusted for exceptional items, the tax rate was 25.8%, compared to 28.2% in 2007. In 2007, profit after tax including discontinued operations included the earnings contribution as well as the gain on the disposal of the Generics business.

### Dividend proposal

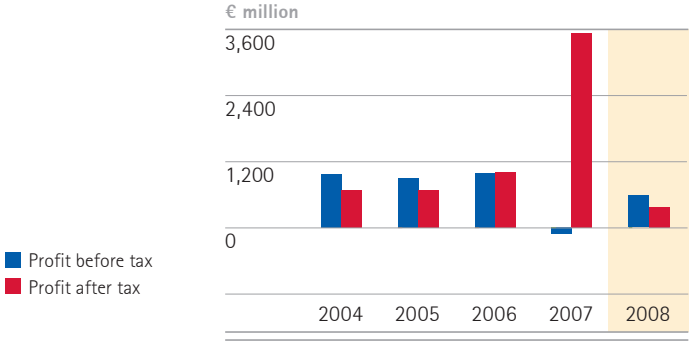
Merck to propose a dividend of € 1.50 per share to the Annual General Meeting.

The objective of our dividend policy is to distribute, on a long-term average, a total dividend equivalent to 30 – 40% of the Group profit after tax. We plan to propose to the Annual General Meeting of Merck KGaA on April 3, 2009 a dividend of € 1.50 per share.

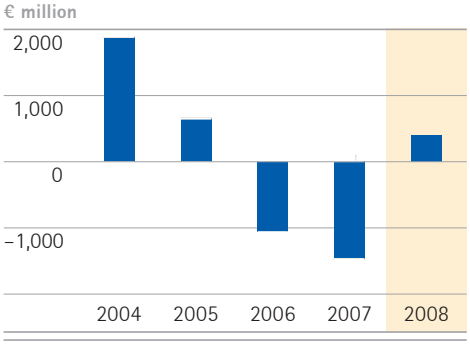
### Free cash flow affected by higher business volume

In addition to return on sales (ROS), we consider free cash flow an important indicator to assess the financial position of the company. In 2008, free cash flow amounted to € 438 million. In 2007, at € –1,473 million, this indicator reflected the acquisition of Serono and the sale of the Generics business. Free cash flow adjusted for acquisitions and disposals amounted to € 601 million in 2008, compared to € 978 million in 2007. This decline is due mainly to an increase of € 112 million in working capital. Aside from a higher business volume, the increase in receivables is due mainly also to the fact that we terminated a program to sell receivables in Italy and now disclose the financing in

**Profit before and after tax**




**Free cash flow**



our balance sheet. In addition, we increased spending on property, plant and equipment by € 131 million. In 2007, Merck booked around 160 million from one-time gains on the sale of financial assets. Free cash flow before acquisitions and disposals as a percentage of total revenues declined to 8.0% compared to 13.9% in 2007.

### Higher equity ratio, lower gearing

Total assets of Merck as of December 31, 2008 were € 15,645 million. This corresponds to an increase of € 722 million, or 4.8%, as compared with December 31, 2007. The higher level of working capital was mainly responsible for this development. The equity ratio increased from 58.2% to 61.1%. This was due to both the improved profit after tax in 2008 as well as currency effects. Net equity increased by a total of € 875 million. In particular, the high level of Serono assets disclosed in the balance sheet after measurement in Swiss francs increased owing to currency effects as the Swiss franc strengthened considerably toward the end of 2008.

On December 31, 2008, net debt, defined as financial liabilities less cash, amounted to € 477 million, as compared with € 355 million on December 31, 2007. At 0.17, gearing (ratio of net debt and pension provisions to net equity) remained at a very low level (2007: 0.18).

### Solid balance sheet ratios reflect the financial strategy

Merck's bank debts are low.

Overall, Merck's balance sheet ratios and financial indicators remain a very solid expression of our financial strategy of securing Merck's liquidity at all times. Merck's bank debts are low. In addition, we have issued bonds for refinancing purposes and have secure investment deposits as well as open credit lines. In terms of business development, Merck's performance was satisfactory until October 2008. However, we sustained declines due to negative currency effects, particularly in the Chemicals business sector. In November and December, the economic downturn led to a sharp decline in sales. This affected liquid crystals and, within the Performance & Life Science Chemicals division, particularly effect pigments for automotive coatings.

### Capital spending rises markedly

In 2008, Merck invested a total of € 395 million in property, plant and equipment. This was € 131 million or 50% more than in 2007. As a result, the capital spending ratio as a percentage of total revenues increased to 5.2% compared with 3.7% in 2007.

Individual investment projects, each with a value of more than € 0.5 million, accounted for around two-thirds of capital spending. In regional terms, Europe accounted for 84% of the total, with the focus on Germany and Switzerland. In Germany, we invested € 160 million at our two largest production sites, namely Darmstadt and Gernsheim, for new and expanded production capacities and research and development facilities, among other things. In Switzerland, capital spending totaled € 119 million. Capital spending amounted to € 18 million in North America and € 19 million in Latin America. Our companies in Asia accounted for a total capital spending volume of € 24 million. Spending focused mainly on Japan, India and Korea, especially for the Chemicals business sector.

High level of investment in biotech protection facility.

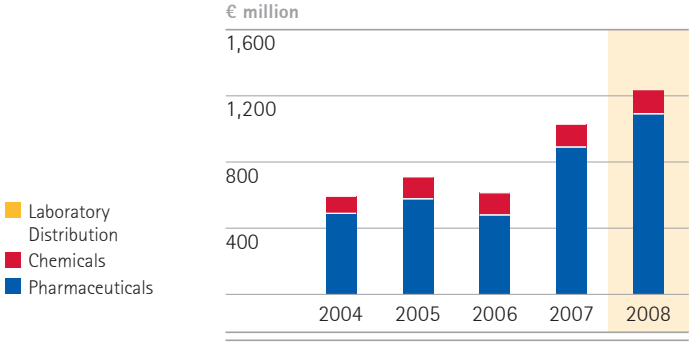
Capital spending by the Pharmaceuticals business sector totaled € 250 million in 2008, with the Merck Serono division accounting for the vast majority of this amount. The main focus of the investments was on the expansion of our biotechnology production capacities in Corsier-sur-Vevey, Switzerland. In November 2008, we placed the cornerstone for the expansion of the Merck Serono Biotech Center, which represents the single largest investment project of the Merck Group in both 2008 and 2009. Around 20% of capital spending for this business sector related to headquarters in Darmstadt, Germany.

Capital spending on property, plant and equipment amounted to € 143 million in the Chemicals business sector, with the Liquid Crystals division accounting for € 65 million and the Performance & Life Science Chemicals division for € 79 million of this total. Both divisions invested primarily at the Darmstadt and Gernsheim sites, our main locations, in order to expand and modernize existing production facilities, to improve infrastructure and to construct new research buildings.

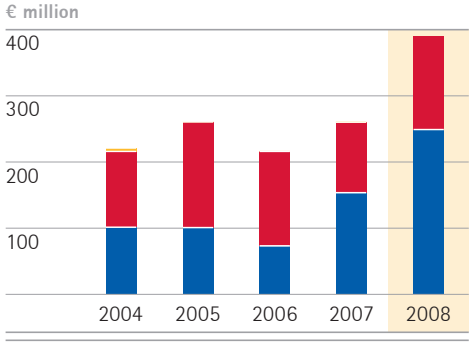
### Value added

Value added is a measure of the economic strength of a company and indicates how the corporate result is achieved and for what it is used.

**Research & development**




**Capital spending on property, plant and equipment**



The corporate result, i.e. the sum of total revenues, other income and financial income, amounted to € 7,713 million in 2008. After deducting the costs of materials as well as other purchased services and expenses, the net value added statement shows that gross value added increased to € 3,975 million in 2008. Following the deduction of write-downs, which were very high in 2007 due to the purchase price allocation for the Serono inventories, net value added amounted to € 2,760 million.

The majority, or 73%, of net value added went towards personnel expenses, i.e. salaries, social security contributions and pension expenses. Financial expenses were significantly lower following an increase in 2007 due to the Serono acquisition. Profit after tax and income tax were higher than in 2007, a year that was strongly impacted by the Serono acquisition.

**Net value added statement**

| € million | 2008 | 2007* |
|---|---|---|
| Total revenues | 7,558 | 7,057 |
| Other income | 142 | 151 |
| Financial income | 13 | 62 |
| Corporate result | 7,713 | 7,270 |
| Cost of materials | –1,089 | –1,045 |
| Other purchased services/expenses | –2,649 | –2,372 |
| Gross value added | 3,975 | 3,853 |
| Depreciation/write-downs of purchase price allocation | –1,215 | –1,658 |
| Net value added | 2,760 | 2,195 |

Increase in gross value added.

**Distribution of net value added**

| € million | 2008 | 2007* |
|---|---|---|
| Personnel expenses | 2,015 | 1,933 |
| Financial expenses | 170 | 373 |
| Taxes on income | 196 | –23 |
| Profit after tax | 379 | –88 |
| Net value added | 2,760 | 2,195 |

*excluding the Generics division

# Responsibility

www.merck.de/responsibility

## Headcount increases further

As of December 31, 2008, 32,800 people worked for Merck, 1,832 more than a year ago. Merck was represented in 59 countries by 178 companies. We manufacture our products at 54 sites in 25 countries. The increase in the number of employees related to all businesses. In Germany, the size of the workforce increased by 159 employees. However, in August around 130 sales representatives from Merck Pharma GmbH transferred to the German subsidiary of the Japanese pharmaceutical company Daiichi Sankyo. Owing to the changed framework conditions for off-patent ethical drugs, we decided to continue this business without our own sales force activities. The members of the Primary Care sales force in Turkey and Ireland also transferred to Daiichi Sankyo.

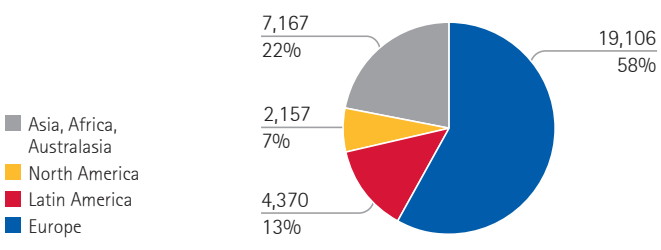
Our workforce in Switzerland grew by 278 employees as a result of the expanded pharmaceutical business. The headcount increased by 316 in Latin America, by 123 in North America and by 1,179 in Asia. Special mention should be made of China, where the workforce grew by 553 employees. The expansion of the Merck Serono business played a significant role here. In several countries, we combined the Merck and Serono companies and eliminated positions. This related above all to the United Kingdom, where the headcount declined by 140. In Spain, we sold biManán®, a local brand of diet products, and also closed one research site. The number of employees declined by 83.

In terms of function, 22% of our employees work in production, 35% in marketing and sales, 14% in research and development, and 6.5% in logistics. The remaining employees work in areas such as Engineering, Environment, IT, Finance and Human Resources.

## Access to medicines

In 2007, we joined forces with the World Health Organization (WHO) to combat the tropical disease schistosomiasis – a major threat to children in Africa. In 2008, the project started in eight countries: A total of 14 million tablets of Cesol® 600 containing the active ingredient praziquantel will be distributed in Madagascar, Benin, Nigeria, Cameroon, Senegal, Yemen, the Central African Republic and Angola. In Africa, more than 200 million people are infected. Schistosomiasis is responsible for around 200,000 deaths each year. Over a ten-year period, Merck will provide 200 million tablets to treat around 27 million school children.

**Number of employees as of December 31, 2008**



Merck remains the exclusive supporter of the Global Pharma Health Fund (GPHF) in the fight again counterfeit drugs in developing countries. With the GPHF Minilab®, GPHF offers a unique portable compact laboratory that makes it possible to test drugs rapidly and to close gaps in monitoring. The 300th Minilab was delivered for use in 2008.

### FTSE4Good-Index: Ethical seal of approval

In 2008, Merck was selected to join the FTSE4Good Index, a share index for global responsible investment. Its members are companies committed to responsible and ethical business practices. Inclusion criteria cover themes such as environmental sustainability, climate change, human and labor rights as well as preventing bribery.

### Implementing new chemicals legislation

The EU regulation REACH entered into force in 2007. It stands for "Registration, Evaluation, Authorisation and restriction of Chemicals" and requires all companies manufacturing or importing chemical substances into the European Union to provide evidence of their safety in use. In 2008, we pre-registered all the relevant substances, thereby meeting the preconditions for final registration within the different transition deadlines. In addition, we made all the necessary preparations to implement the Globally Harmonised System of Classification and Labelling of Chemicals (GHS). The EU regulation, which is based on a UN agreement, entered into force on January 20, 2009. The new elements of the GHS hazard communication such as hazard pictograms and signal words will replace the previous hazard symbols and phrases. We expect this to lead to a further improvement in occupational health and safety as well as environment protection aspects when handling our products.

### Environmental management system 14001: Under one roof

Based on our responsibility for the environment, we decided to seek certification of all our production sites in accordance with the international environmental management system ISO 14001. According to this standard, environmental performance is permanently recorded and optimized in a continuous improvement process. Merck is building for the first time on a group certificate, which applies to all locations and replaces the former individual certificates. In 2008, the German sites in Darmstadt, Gernsheim, Mainz, Hohenbrunn and Frankfurt, as well as Tres Cantos in Spain were certified. All other production sites are to follow in 2010.

With respect to the measurement of environmental performance, Merck is aiming for a Group certificate for all locations.

### Protecting people and the environment

We further improved and refined our environmental, safety and quality management processes in 2008. Spending on environmental protection, health and safety totaled € 131 million. This amount includes investments, operating costs and provisions that have been used. In 2008, direct $CO_2$ emissions by Merck totaled 164,000 metric tons. This corresponds to a slight increase of 1%. Last year we established the basis to report $CO_2$ emissions this year in accordance with the Greenhouse Gas Protocol. This often used reporting standard includes not only direct $CO_2$ emissions from the use of natural gas, oil and other energy sources, but also indirect emissions, such as the proportionate $CO_2$ quantities from the use of electricity.

# Merck shares

**Pessimism takes hold in the capital markets**

Sentiment in the international capital markets worsened considerably in the course of 2008. Uncertainties regarding potential defaults on sub-prime mortgages, which had begun in 2007 and increased in the course of the year, led to the collapse of some banks in 2008. These banks were either sold or went bankrupt, which triggered a chain reaction in the stock markets, resulting in recessionary trends in different economies. The development of Merck shares was also characterized by this general turmoil in the capital market.

Merck shares outperform the DAX® in 2008.

Merck shares finished 27% lower than in 2007. In terms of our share price performance, we ranked sixth among the DAX® 30 companies. The DAX® index suffered a 40% drop in value in 2008. Merck shares developed virtually consistent with the broad index of European pharmaceutical companies included in the Bloomberg Europe Pharmaceuticals Index (BEUPHRM). This pharmaceutical index recorded a decline of 22% in 2008 compared to 2007.

The relative stability of Merck shares in these turbulent times can be attributed, among other things, to the Merck Group's business model. The Pharmaceuticals and Chemicals business sectors enable us to balance risk, putting Merck on a solid foundation.

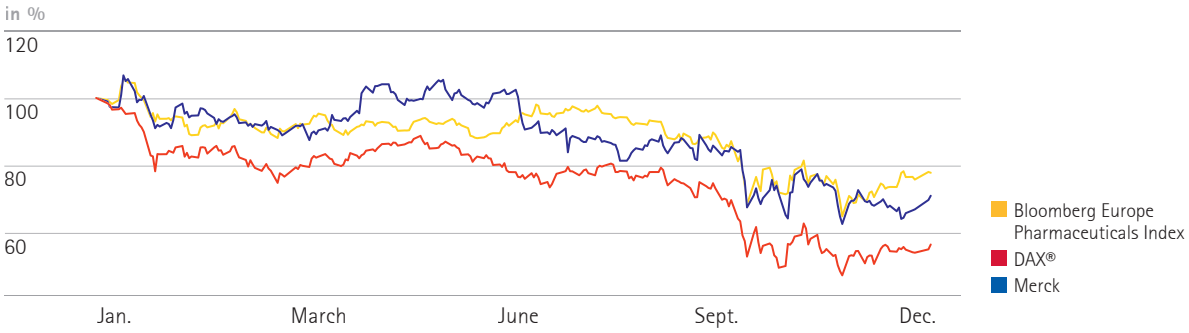
**Share price supported by good Erbitux® study results**

As a result of the strong euro and high oil prices at the beginning of the year, Merck shares suffered with the entire DAX® from fears of only moderate economic growth in Germany. This was followed by a period of uncertainty in which Merck shares remained unchanged in line with the stock markets. At the end of April, the Merck share price recovered and approached its annual high of € 93.79 recorded on January 9, 2008. The capital market's expectations regarding the approval of the oncology drug Erbitux® for early treatment of metastatic colorectal cancer supported the share price development in the second quarter. A committee of the European Medicines Agency issued a positive opinion on May 30. In addition, Merck shares benefited in the second quarter from expectations of positive study results for Erbitux® in the treatment of lung cancer. Merck presented the data at the beginning of June 2008 in Chicago at ASCO, the world's most important oncology congress. We received marketing approval for the early use of Erbitux® in colorectal cancer patients on July 23. This included the potential for broad combination with existing chemotherapies; however, it limits the use of the drug to a certain patient group (see page 34 for details).

Despite turbulence, our share price recovered slightly at year-end.

In a market environment of continued insecurity, profit-taking in July 2008 exerted downward pressure on Merck shares. In September, the financial crisis reached another peak with the collapse of Lehman Brothers and sent the entire stock market into a tailspin. Despite our comparatively crisis-resistant business model, the Merck share price declined and reached its annual low of € 57.67 on November 21 but recovered slightly toward year-end.

**The performance of Merck shares vs. the DAX®/Bloomberg Pharmaceuticals Index in 2008**




**Share data**[1]

| | 2008 | 2007 |
|---|---|---|
| Earnings per share after tax and minority interest from continuing operations (in €) | 1.69 | –0.50 |
| Earnings per share after tax and minority interest from continuing and discontinued operations (in €) | 1.69 | 16.21 |
| Dividend in € | 1.50 | 1.20 |
| One-time bonus in € | – | 2.00 |
| Share price high in € (January 9, 2008/June 15, 2007) | 93.79 | 106.55 |
| Share price low in € (November 21, 2008/January 2, 2007) | 57.67 | 79.96 |
| Year-end share price in € | 64.51 | 88.30 |
| Actual number of shares in millions (as of year-end) | 64.6 | 64.6 |
| Theoretical total number[2] of shares in millions (as of year-end) | 217.4 | 217.4 |
| Market capitalization[3] in € million (as of year-end) | 14,024 | 19,196 |

[1] Share-price relevant figures relate to the closing price in Xetra® trading on the Frankfurt Stock Exchange.
[2] The calculation of the theoretical number of shares is based on the fact that the general partner's equity capital is not represented by shares. As the share capital of € 168.0 million was divided into 64.6 million shares, the corresponding calculation for the general partner's capital of € 397.2 million resulted in 152.8 million theoretical shares on December 31, 2008.
[3] Based on the theoretical number of shares.

## Established in the DAX®

The liquidity of our shares remained at a high level in 2008. On average, 744,506 shares were traded daily. High liquidity makes Merck shares attractive for more investors. At the end of 2008, Merck again ranked 24th in the DAX® with respect to market capitalization, and 30th once again with respect to average share trading volumes.

www.merck.de/investors

### Analysts' estimates

As of the end of 2008, Merck shares were covered and assessed by 34 stockbrokers and equity analysts. In comparison, other DAX® companies are followed by an average of 38 brokerages. They serve as multipliers that inform the stakeholders in the capital markets of business developments in a timely manner.

Analysts see share price potential of 20% over the year-end closing price.

At the end of 2008, a total of 34 investment recommendations had been issued: Merck shares were given buy recommendations by 26 analysts, seven brokerages gave the shares a neutral rating, and one issued a sell recommendation. Analysts adjusted their expectations for the share price as a result of the general pessimism in the capital market. Whereas in 2007 they had estimated an average price of € 102 for Merck shares within one year, their share price estimate was € 79 in 2008. This corresponds to a share price potential of more than 20% compared to the year-end share price of 2008.

Details of the individual analysts and their estimates can be found on our website at www.merck.de/investors.

### Transparency and proximity to shareholders

Programs for institutional and private investors intensified.

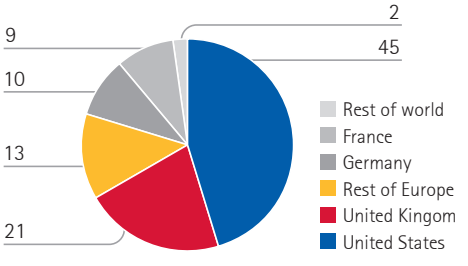
We participated in 16 conferences in 2008 in the United States, Europe and Japan as part of our Investor Relations program. Roadshows were conducted in Germany, the United Kingdom, France, Switzerland, Ireland, Italy, Scandinavia and the Benelux countries, as well as on the U.S. west and east coasts, in Canada and Singapore. Altogether, we held more than 500 one-on-one meetings with institutional investors in 2008. We participated in events held by the Deutsche Schutzvereinigung für Wertpapierbesitz e.V. and the Schutzgemeinschaft der Kapitalanleger e.V. to strengthen the private investor base in Germany. We redesigned our website and made it more transparent. We webcasted the Annual General Meeting for the first time in 2008, thereby reaching a broader target group.

### A more international shareholder structure

The shareholder identification survey conducted in August 2008 identified over 54 million shares and thus more than 80% of the bearer shares in free float. The analysis provides information about the regional distribution of shareholders as well as the classification of investor types. With 45%, U.S. investors continue to hold the majority of Merck shares in free float (2007: 49%), followed by investors residing in the United Kingdom and Germany. The significance of France increased slightly compared to 2007.

**Identified investors by region**

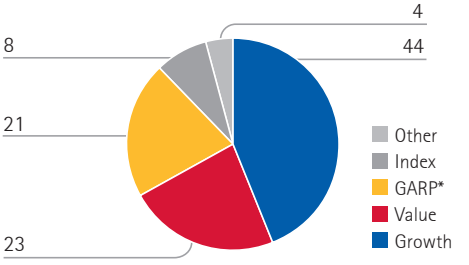
in %




Source: Company data

**Identified investors by type**

in %




Source: Company data
*Growth at reasonable price

As of December 31, 2008, the following shareholders reported their holdings in Merck shares to the company in accordance with the German Securities Trading Act:
– Barclays Bank PLC, London (United Kingdom): 5% – 10%
– Capital Group Companies Inc. Los Angeles (United States): 5% – 10%
– Sun Life Financial Inc. Toronto (Canada): 5% – 10%
– Fidelity International Ltd., Hamilton (Bermuda): 3% – 5%
– Templeton Investment Counsel LLC, Fort Lauderdale (United States): 3% – 5%
Merck continues to aim for a more balanced regional distribution of shareholders with a targeted Investor Relations program, concentrating primarily on long-term focused investors.

### Information on capital and shares

As of the balance sheet date, the company's subscribed capital is divided into 64,621,125 no par value bearer shares plus one registered share. The holder of the registered share is E. Merck Beteiligungen KG (until and including December 31, 2008 E. Merck Beteiligungen OHG). It is entitled and obliged to appoint one-third of the members of the Supervisory Board representing the limited liability shareholders. If the holder of the registered share is a general partner, he or she has no such right of appointment. The transfer of the registered share requires the company's approval. The approval is granted at the sole discretion of the personally liable general partner with an equity interest, namely E. Merck KG (until and including December 31, 2008 E. Merck OHG). As of the balance sheet date, there were no holdings in the company's share capital exceeding 10% of the voting rights.

According to the Articles of Association of the company, the general partners not holding an equity interest who form the Executive Board are admitted by E. Merck KG with the consent of a simply majority of the other general partners. A person may only be a general partner not holding an equity interest if he or she is also a general partner of E. Merck KG. In addition, at the proposal of E. Merck KG and with the approval of all general partners not holding an equity interest, further persons may be appointed to the Executive Board who are not general partners not holding an equity interest.

The Articles of Association of the company can be amended by a resolution of the Annual Meeting that requires the approval of the general partners. The resolutions of the General Meeting are, notwithstanding any statutory provisions to the contrary, adopted by a simple majority of the votes cast. Where the law requires a capital majority in addition to the voting majority, resolutions are adopted by a simple majority of the share capital represented in the vote.

The Articles of Association of the company specify the authorized share capital. The Executive Board is authorized, with the approval of the Supervisory Board and of E. Merck KG, to increase the share capital on one or several occasions until March 31, 2010 by up to a total of € 29,824,787.20 by issuing new shares against cash or contributions in kind. The company is not authorized to acquire its own shares.

The company has not entered into any material agreements subject to a change of control pursuant to a takeover offer nor has it concluded any compensation agreements with the members of the Executive Board or employees in the event of a takeover offer.

# Pharmaceuticals business sector

## Treating and curing

Merck improves quality of life with products such as Euthyrox® to treat thyroid disorders as well as treatments for hormone disorders using the patient-friendly electronic auto-injection device Easypod®.

# Merck Serono


Merck Serono is the largest division of Merck. It focuses on specialist therapeutic areas and markets innovative prescription drugs of chemical and biotechnological origin, including monoclonal antibodies and other therapeutic proteins, in more than 150 countries.

### Key therapeutic areas/products

- Oncology: Erbitux® (solid tumors)
- Neurodegenerative Diseases: Rebif® (multiple sclerosis)
- Autoimmune and Inflammatory Diseases: Raptiva® (psoriasis)
- Fertility: Gonal-f®, Pergoveris™, Luveris®, Ovitrelle®, Crinone®, Cetrotide® (infertility)
- Endocrinology: Saizen® (growth hormone disorders), Serostim® (HIV-associated wasting)
- CardioMetabolic Care: Glucophage® family (type 2 diabetes), Concor® family (cardiovascular diseases), Euthyrox® (thyroid disorders)

### Key events in 2008

- Return on sales (ROS) rises from 8.0% to 11.9%
- Approvals of Erbitux® in the EU for first-line treatment of head and neck tumors and metastatic colorectal cancer (KRAS wild-type) and in Japan for the treatment of metastatic colorectal cancer after the failure of irinotecan
- Groundbreaking ceremony for the expansion of the production site in Corsier-sur-Vevey (Switzerland) to manufacture biological therapies
- Approval of Kuvan® in the EU for the treatment of hyperphenylalaninemia resulting from phenylketonuria or BH4 deficiency

# Achieving growth with new therapeutic options

www.merckserono.com

In 2008, the Merck Serono division generated total revenues of € 4,987 million, 12% more than in 2007. The continuous growth in sales was primarily the result of the solid increases achieved by our main products, for example the biological drugs Rebif®, Erbitux® and Gonal-f® as well as classic products such as Concor® and Glucophage®. We achieved 58% of sales, equivalent to € 2,677 million, with biological drugs. Rebif® was once again our top-selling product. Global sales of this drug for the treatment of relapsing forms of multiple sclerosis (MS) rose to € 1,331 million in 2008 – an increase of 9.3% over the previous year.

Sales of the targeted cancer therapy Erbitux® continued to grow at a strong double-digit rate, increasing by 20% to € 565 million in 2008. Apart from the approval of Erbitux® in the European Union for first-line treatment of head and neck tumors and metastatic colorectal cancer (KRAS wild-type tumors), we also expanded our presence in the key market of Japan. The approval of Erbitux® in Japan gives physicians and patients a new therapeutic option in the second- and third-line treatment of metastatic colorectal cancer. In addition, we laid the cornerstone for the expansion of our biotech production in Corsier-sur-Vevey (Switzerland) in which we will invest a total of around € 300 million. By expanding this site, we will be able to produce greater quantities of biotherapeutics, for example the oncology drug Erbitux® as well as treatments for autoimmune and inflammatory diseases.

We placed the cornerstone for the expansion of our biotechnology production in Corsier-sur-Vevey.

### Operating result rises sharply

Gross margin increased by 11% to € 4,191 million over the previous year. The operating result rose by 66% to € 594 million. This increase was due, among other things, to the conclusion of restructuring and integration measures following the acquisition of the former Serono. In addition, we increased our royalty income by 25% to € 337 million in 2008.

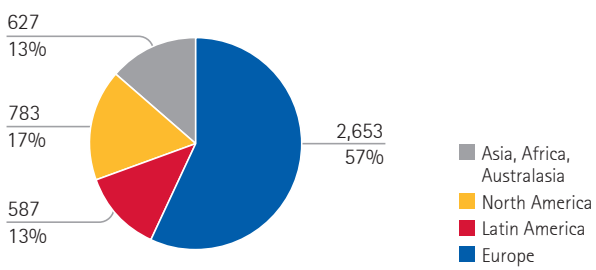
In Europe, sales by the Merck Serono division grew by 8.7% to € 2,653 million. Our largest market was France, where sales increased by 7.7% to € 625 million. Sales in Germany rose only slightly by 1.7% to € 484 million mainly as a result of restrictive health policies. In both Italy and Spain, sales advanced by 10% and were virtually on a par at € 296 million and € 295 million, respectively. Smaller markets such as Turkey, Russia and the Czech Republic posted strong sales increases of 14%, 48% and 40%, respectively.

**Merck Serono | Key figures**

| € million | 2008 | 2007 | Δ in % |
|---|---|---|---|
| Total revenues | 4,987 | 4,458 | 12 |
| Gross margin | 4,191 | 3,765 | 11 |
| R&D | 1,074 | 879 | 22 |
| Operating result | 594 | 357 | 66 |
| Exceptional items | –354 | –744 | –52 |
| Free cash flow (FCF) | 554 | –6,505 | – |
| FCF before acquisitions and disposals | 559 | 774 | –28 |
| ROS in % | 11.9 | 8.0 | |

**Merck Serono | Sales by region**

€ million



The Merck Serono division has strengthened its position in the North American market.

We expanded our position in North America, where sales rose by 7.2% to € 783 million. In Latin America, we recorded a 19% increase in sales. In Brazil, our largest market, sales grew sharply by 33% to € 196 million. Sales in Venezuela and Colombia surged by 26% and 46%, respectively, whereas in Mexico, sales declined by 8.5% due to overstocking by wholesalers. Sales grew by 20% in the region Asia, Africa, Australasia, primarily thanks to the success in China, where sales jumped by 84% to € 114 million, and Japan, which posted a 64% rise in sales to € 30 million as well as good growth in smaller markets such as Saudi Arabia and Algeria.

Return on sales (ROS) amounted to 11.9% in 2008. Nominal free cash flow was € 554 million, considerably more than in 2007, the year in which we acquired Serono. By contrast, free cash flow adjusted for acquisitions and disposals declined by 28% to € 559 million with the termination of a program to sell receivables in Italy (details can be found on page 99).

**Therapeutic areas**

| | Research | Development | Marketing |
|---|---|---|---|
| Oncology | ■ | ■ | ■ |
| Neurodegenerative Diseases | ■ | ■ | ■ |
| Autoimmune and Inflammatory Diseases | ■ | ■ | ■ |
| Fertility | ■ | ■ | ■ |
| Endocrinology | | ■ | ■ |
| CardioMetabolic Care and other products | | | ■ |

## Oncology

Erbitux® offers new prospects in the treamtent of head, neck and lung cancer.

With the targeted oncology drug Erbitux® (cetuximab), Merck Serono has not only considerably increased the number of treatment options available in colorectal cancer, but also opened up new medical prospects in the treatment of head and neck cancer as well as lung cancer. In 2008, our Oncology business unit generated sales of € 574 million. The majority share was attributable to Erbitux®, which achieved a 20% increase in sales to € 565 million. Erbitux® currently holds marketing authorizations in 76 countries worldwide.

In July, the European Commission approved the expanded use of Erbitux® in combination with chemotherapy to include not only second- and third-line treatment but also first-line treatment of patients with epidermal growth factor receptor (EGFR)-expressing, KRAS wild-type metastatic colorectal cancer. Patients with KRAS wild-type tumors, which occur in up to 65% of cases, are most likely to respond to Erbitux®, making this drug the first tailored therapy in first-line treatment of metastatic colorectal cancer. As expected, the sales growth rate of Erbitux® slowed from the second to the third quarter of 2008. This was due to the fact that KRAS testing had to be implemented as a standard

diagnostic procedure. Accordingly, the number of second- and third-line patients initially declined as a result of the focus on patients with KRAS wild-type tumors. In the course of expanded approval, we expect prescriptions for first-line treatment to increase, thereby more than compensating for the lower number of patients in second- and third-line treatment over the medium term. A crucial factor is that reimbursement in different countries is being granted at different points in time.

**Further approvals of Erbitux®**

In November, Erbitux® was approved in the European Union in combination with platinum-based chemotherapy for treatment of head and neck tumors. This approval is based primarily on the results of the EXTREME study, showing for the first time in 30 years a significant survival advantage in first-line treatment setting. In addition, we received marketing authorization in Japan for the use of Erbitux® in combination with irinotecan in metastatic colorectal cancer – giving pretreated patients access to this new treatment. Merck Serono, Bristol-Myers Squibb and ImClone Systems jointly market Erbitux® in Japan. Our marketing partners receive 50% of profits.

We are working to further expand the range of approved indications for Erbitux®. For example, we submitted an application to the European Medicines Agency (EMEA) to approve Erbitux® for first-line treatment of epidermal growth factor receptor (EGFR)-expressing, advanced non-small cell lung cancer (NSCLC).

## Neurodegenerative Diseases

Rebif® is the top-selling product of the Merck Serono division.

Sales by this therapeutic area were almost exclusively attributable to Rebif® (interferon beta-1a). This product is the leading treatment for relapsing forms of multiple sclerosis (MS) outside the United States in terms of sales. Generating sales of € 1,331 million, or 9.3% more than in 2007, Rebif® was once again the top-selling product of the Merck Serono division. Adjusted for currency effects, sales growth amounted to 13%, mainly due to the weak U.S. dollar. We achieved around one-half of Rebif® sales in Europe. The new formulation, which offers improved injection tolerability, has meanwhile been introduced in all countries of the European Union. In 2008, the new formulation of Rebif® was approved in many countries around the world, including Australia, Argentina, Brazil and South Korea. Discussions with the U.S. Food and Drug Administration concerning approval are ongoing. Within the EU, the key markets of Italy and Spain showed exceptionally strong growth. More than one-third of sales were generated in North America, where sales increased by 10% to € 530 million over the previous year. In Latin America, sales remained at the previous year's level overall. However, in Brazil, a young market with considerable potential, we recorded strong double-digit growth. The highest growth rate (+20%) was achieved in Asia, Africa, Australasia, our smallest region.

**An established core therapy for multiple sclerosis**

In 2008, we marked the tenth anniversary of Rebif®. Owing to its proven efficacy and favorable risk-benefit profile, Rebif® has become a core therapy for MS. It is now available in more than 80 countries. According to World Health Organization (WHO) estimates, up to 2.5 million people suffer from MS worldwide. The safety profile of Rebif® is supported by a robust, ongoing clinical development and treatment experience estimated at more than 600,000 patient-years to date.

## Autoimmune and Inflammatory Diseases

Sales of our psoriasis treatment Raptiva® (efalizumab) rose by 22% to € 93 million. Raptiva® is approved in more than 60 countries around the world. Owing to sharply lower sales expectations, product technology assets were written off in full, leading to an expense of € 195 million. In the United States, Raptiva® is marketed by Genentech.

Raptiva® is approved for the treatment of adult patients with moderate to severe chronic plaque psoriasis. In some countries, this indication is further restricted to patients who have failed to respond to, or who have a contraindication to, or are intolerant to certain other systemic therapies. Since its approval, approximately 46,000 patients have been treated with Raptiva® worldwide.

However, since October 2008, Merck Serono has been notified of a reported side effect, namely a limited number of confirmed cases of progressive multifocal leukoencephalopathy (PML), a usually fatal viral infection of the central nervous system. The Merck Serono division and the regulatory agencies are reviewing the situation carefully and taking the necessary measures.

## Fertility

The Merck Serono division is the global leader in developing and providing drugs to treat infertility. We are the only manufacturer of recombinant versions of all three main gonadotropin hormones. Sales by the Fertility therapeutic area increased 8.9% to € 565 million in 2008. Adjusted for the impact of currency, sales growth amounted to 13%. This was due to North America, where more than 20% of sales are generated. Growth was also above average in Asia, Africa, Australasia, some central European countries and Latin America.

**Gonal-f® remains on a growth course**

Gonal-f® was the leading global female infertility treatment in 2008.

Gonal-f® (follitropin alfa for injection) maintained its position as the world's leading female fertility drug in 2008. This recombinant version of the follicle-stimulating hormone (FSH) is prescribed to supplement or to replace natural FSH. It has been approved in more than 100 countries. Sales rose by 5.9% to € 460 million. Growth slightly exceeded that of the gonadotropin market and was mainly attributable to strong double-digit growth rates in Latin America and Asia, Africa, Australasia, especially Brazil and China. We generated around one-half of Gonal-f® sales in Europe, where sales

were maintained at the previous year's level. In particular, sales grew more strongly in Italy and France than the average for the region. In North America, Gonal-f® gained additional market share. However, negative currency effects reduced the double-digit organic growth rate. In Japan, where Gonal-f® is approved to treat male infertility, we filed for regulatory approval in October to expand the indication to include female infertility.

Merck Serono is continually investing in the further development of its products and delivery devices. A new and improved version of the Gonal-f® pen has meanwhile been approved in more than 70 countries. Our efforts to launch the product globally continue.

**Two hormones in a single injection**

Pergoveris™ is our new drug for the stimulation of follicular development in women with severe luteinizing hormone (LH) and follicle stimulating hormone (FSH) deficiency. It is the first biotech drug based on the combination of both substances in a single subcutaneous injection. Pergoveris™ got off to a successful start, posting sales of € 14 million in the first year since its approval in the member states of the EU as well as Iceland, Liechtenstein and Norway.

Pergoveris™ is our new, additional drug for the stimulation of follicular development.

Ovidrel®/Ovitrelle® (choriogonadotropin alfa), a recombinant version of the natural pregnancy hormone hCG, is used to trigger ovulation in women who are undergoing assisted reproduction techniques. It is the first and only recombinant hCG offered in a ready-to-inject, prefilled syringe that is easy to use. The product generated sales of € 34 million, or 21% more than in 2007. This was due mainly to strong growth in Europe.

## Endocrinology

With the specialized therapies and innovative drug delivery devices offered by its Endocrinology therapeutic area, the Merck Serono division is pursuing a clear aim: to improve the lives of patients affected by endocrine and metabolic disorders. Sales in this therapeutic area increased by 4.8% to € 229 million over the previous year. The top-selling product is Saizen®, a recombinant human growth hormone, which generated sales of € 172 million. Demand for Saizen® remained strong, especially in Europe, where sales grew 9.3%. The drug is marketed in most countries for the treatment of growth hormone deficiency in children and adults, as well as in children born small for gestational age (SGA), with Turner syndrome or chronic renal failure. According to expert estimates, the prevalence of growth hormone deficiency in children is between 1 in 4,000 and 1 in 10,000. Yet adults are also affected. In the United States alone, more than 50,000 people suffer from growth hormone deficiency and every year, 6,000 new cases are reported. In the United States, the Endocrinology therapeutic area also offers Serostim®. It is used to treat patients suffering from HIV-associated wasting, which is estimated to affect up to 8% of HIV-infected individuals.

**Easypod® electronic auto-injection device drives sales growth of Saizen®**
The good development of Saizen® was favorably impacted by the increasing use of the electronic auto-injection device Easypod®. This first delivery device of its kind has made once-daily administration easier for patients and medical professionals. In particular, it helps to monitor compliance. Since the launches in Europe, Australia, Latin America, North America and selected Asian markets, the uptake of Easypod® has increased among patients with growth hormone deficiency.

**Kuvan® approved in Europe for the treatment of hyperphenylalaninemia**
In the fourth quarter of 2008, the European Commission granted marketing authorization for Kuvan® for the treatment of hyperphenylalaninemia (HPA) due to phenylketonuria (PKU) or tetrahydrobiopterin (BH4) deficiency. HPA is an abnormally high concentration of phenylalanine in the blood, which can cause serious brain damage in infants and children, and transient to lasting neurocognitive impairment in adult patients if a strict diet is not adhered to at all times. Kuvan® is the first drug approved in Europe to treat this rare disease.

We are developing Kuvan® in partnership with BioMarin Pharmaceutical of the United States. Kuvan® was previously granted orphan drug designation by both the FDA and the EMEA. Consequently, Kuvan® has market exclusivity in this indication for ten years in the European Union and for seven years in the United States.

## CardioMetabolic Care and other products

The interrelationships between diabetes, cardiovascular diseases and thyroid disorders are the causes of many complex clinical pictures.

More and more physicians are adopting an integrated approach to treat diabetes, cardiovascular diseases and thyroid disorders as they meanwhile attribute the causes of many complex clinical pictures to the multifaceted interrelationships between these conditions. In order to offer physicians and patients effective therapeutic approaches, the Merck Serono division has combined its portfolio of drugs to treat patients with these diseases in its CardioMetabolic Care therapeutic area. Sales by the CardioMetabolic Care therapeutic area increased by 11% to € 916 million, thanks to the strong growth of the Concor® franchise as well to solid growth of the Glucophage® and thyroid product franchises. Sales of other products, some of which we distribute only in individual markets, totaled € 921 million in 2008.

**Bisoprolol – the leading beta-blocker in Europe**
The Concor® franchise remains the top-selling group within CardioMetabolic Care. Sales of this beta-blocker containing the active ingredient bisoprolol increased by 14% to € 433 million in 2008. As the active ingredient in products such as Lodoz® and Concor®COR, bisoprolol is the leading beta-blocker in Europe. This region accounted for 73% of global sales. The growth of the Concor® family is due primarily to the excellent development of Concor®COR, sales of which increased 17%.

**Metformin recommended for type 2 diabetes**

Metformin is the drug of choice in type 2 diabetes.

The active ingredient metformin remains the drug of choice for first-line therapy of type 2 diabetes. More than six million patients worldwide are benefiting from one of our oral diabetes therapies based on metformin. According to the International Diabetes Federation (IDF), around 246 million people have diabetes worldwide. Type 2 accounts for 85 to 90% of these cases, and the number continues to grow. According to a study by the Health Services Research Network, the number of type 2 diabetes cases in the United States alone is expected to increase to 29 million by 2050. The guidelines of the IDF, the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD) therefore recommend that newly diagnosed patients with type 2 diabetes be treated immediately with metformin, for example Glucophage®.

Despite generic competition, sales of the metformin franchise rose 9.0% to € 290 million. Branded products from the Glucophage® family generated a respectable 6.1% increase in sales to € 252 million. Glucophage XR® – a once-daily formulation – performed especially well, with sales surging by more than 33%.

**Thyroid hormone Euthyrox® continues to deliver**

Sales of our products to treat thyroid disorders increased by 10% to € 150 million in 2008. Nearly two-thirds of sales were attributable to Europe. Sales of the thyroid hormone Euthyrox® increased by 12% to € 129 million. Currently, around 12 million people in more than 70 countries take Euthyrox® every day.

Globally, more than 300 million people suffer from hypothyroidism.

With drugs to treat hypo- and hyperthyroidism as well as to prevent iodine deficiency diseases, Merck Serono is the second largest supplier worldwide. In Europe, Latin America and China we are number one. Thyroid disorders are one of the world's most prevalent diseases. According to epidemiological data, more than 300 million people suffer from hypothyroidism, i.e. underactivity of the thyroid gland, while not even 20% of them are currently being treated. We are therefore working to educate the public and improve awareness of the need to adequately manage this disease.

## Research and development

Research and development spending increased markedly by 22% to € 1,074 million in 2008. This is equivalent to 22% of the division's total revenues. Apart from oncology we are focusing our research activities on innovative specialist therapies to treat neurodegenerative diseases such as multiple sclerosis as well as autoimmune and inflammatory diseases. Here and in the therapeutic areas of Endocrinology and Fertility we are simultaneously working on numerous development projects, for example, therapies to help infertile couples to conceive a child as well as treatments for growth disorders.

Overall, around 2,300 employees are engaged in the discovery and development of new drugs – mainly in Darmstadt, Geneva and Boston. They are working in highly specialized fields at the interface of innovative biotechnology and established pharmaceutical science. We improved our efficiency, starting seven new development projects in 2008. In addition, we submitted three of our innovative compounds for approval. We received four new marketing authorizations. In order to streamline our research and development activities, we terminated ten projects at the pre-clinical or clinical stage in 2008. As a result, our R&D pipeline consisted of 12 Phase I projects, eight Phase II projects and 11 Phase III projects in 2008.

We plan to strengthen our biotech R&D activities in the U.S.

With the announced expansion of our U.S. research site in Billerica, Massachusetts in a planned $ 50 million investment, we will strengthen our biotech research and development activities in the United States. At the research center, which is scheduled to be completed by 2010, around 200 scientists, as well as 50 employees specializing in process development and protein production, will jointly discover and bring forward new treatments for unmet medical needs. The close proximity of protein production to research is expected to drive the rapid transition from research to manufacturing.

### Scientific networks helping to secure the future

Cooperating in networks is of paramount importance to our success. In Germany, we belong to a top biotech cluster in the Rhine-Neckar region that is supported by the German federal government. Our researchers are participating in five subprojects. We are involved in pioneering work on new therapeutic strategies to eliminate tumor stem cells in collaboration with the German Cancer Research Center in Heidelberg.

We are cooperating with universities and have set up a fund for research projects.

Another example of our networks is the research alliance between the Merck Serono division and École Polytechnique Fédérale de Lausanne (EPFL). Our joint efforts are focused on the areas of neuroscience, oncology and drug delivery. The agreement has provided for three Merck Serono-endowed chairs as well as a major research fund. One of the projects is exploring the use of nanotechnology to achieve better drug uptake.

By restructuring our partnership with ZymoGenetics, we now have exclusive worldwide development and commercialization rights for atacicept as well as access to other innovative approaches. Merck Serono is developing the recombinant fusion protein atacicept as a potential therapy for autoimmune diseases such as lupus, rheumatoid arthritis and multiple sclerosis.

**Status of our innovative compounds (Status: December 31, 2008)**

| Therapeutic area | Compound | Indication | Status |
|---|---|---|---|
| Oncology | Erbitux® (cetuximab)[1] | NSCLC | Filed |
| | | Adjuvant colorectal cancer | Phase III |
| | | Gastric cancer | Phase III |
| | Stimuvax®[2] | NSCLC | Phase III |
| | Cilengitide | Glioblastoma | Phase III |
| | Erbitux® (cetuximab)[1] | Breast cancer | Phase II |
| | Cilengitide | SCCHN | Phase II |
| | Tucotuzumab celmoleukin (EMD 273066/huKS-IL2) | SCLC | Phase II |
| | EMD 273063 (hu14.18-IL2) | Pediatric neuroblastoma and melanoma | Phase II |
| | Adecatumumab (MT201)[3] | Solid tumors | Phase I |
| | Aurorakinase inhibitor (AS703569)[4] | Solid tumors and hematological malignancies | Phase I |
| | NHS-IL2-LT (EMD 521873) | Solid tumors | Phase I |
| | DI17E6 (EMD 525797) | Solid tumors | Phase I |
| | Eg 5 inhibitor (EMD 534085) | Solid tumors und hematological malignancies | Phase I |
| | Survivac (cancer vaccine) | Solid tumors | Phase I |
| | MEK inhibitor (AS703026)[5] | Solid tumors | Phase I |
| | IMO-2055[6] (TLR9 immunomodulator) | Solid tumors | Phase I |
| | Sonepcizumab (ASONEP™)[7] | Solid tumors | Phase I |
| Neurodegenerative Diseases | New formulation of Rebif® | Relapsing forms of multiple sclerosis (MS) EMEA: approved; FDA: filed | Approved/ filed |
| | | Clinically isolated syndrome | Phase III |
| | Cladribine tablets | Relapsing forms of MS | Phase III |
| | | Clinically isolated syndrome | Phase III |
| | Safinamide[8] | Early-stage Parkinson's disease | Phase III |
| | | Mid- to late-stage Parkinson's disease | Phase III |
| | Atacicept[9] | Multiple sclerosis | Phase II |
| Autoimmune & Inflammatory Diseases | Atacicept[9] | Systemic lupus erythematosus | Phase III |
| | | Rheumatoid arthritis | Phase II |
| | Fibroblast growth factor 18[9] | Osteoarthritis | Phase I |
| Fertility | Hyperglycosylated FSH | Infertility (OI/ART) | Phase II |
| Endocrinology | Tesmarolin[10] | HIV patients with lipodystrophy (only U.S.) | Phase III |
| | ARX 201[11] | Growth hormone deficiency | Phase I |

[1] Developed in cooperation with mit ImClone: Erbitux® is a trademark of ImClone Systems, a wholly owned subsidiary of Eli Lilly & Co.
[2] Exclusive worldwide licensing rights acquired from Oncothyreon Inc.
[3] Collaboration with Micromet AG
[4] Collaboration with Rigel Pharmaceuticals Inc.
[5] All rights acquired from Santhera Pharmaceuticals AG
[6] Inlicensed from Idera Pharmaceuticals Inc.
[7] Collaboration with LPath, Inc. ASONEP is a trademark of LPath, Inc.
[8] Collaboration with Newron Pharmaceuticals S.p.A.
[9] Collaboration with ZymoGenetics Inc.
[10] Collaboration with Theratechnologies
[11] Collaboration with Ambrx, Inc.

SCCHN: Squamous cell carcinoma of the head and neck
NSCLC: Non-small cell lung cancer
SCLC: Small cell lung cancer
OI/ART: Ovulation induction/Assisted reproductive technology
HARS: HIV-associated adipose redistribution syndrome

Personalized medicine: A genetic test identifies patients who will respond best to treatment.

### New therapeutic options for cancer treatment with Erbitux®

The results of numerous studies involving the monoclonal antibody Erbitux® (cetuximab) impressively demonstrate the consistent efficacy and versatility of this targeted cancer therapy. In metastatic colorectal cancer, for example, it is now possible to use the KRAS gene as a biomarker to identify those patients who are most likely to respond to treatment with Erbitux®, namely those with KRAS wild-type tumors.

The results of the Phase III CRYSTAL trial underline the value of Erbitux® as a new standard in first-line treatment of metastatic colorectal cancer. In this large randomized trial, 60% of all patients with KRAS wild-type tumors experienced significant tumor shrinkage when treated with Erbitux® in combination with chemotherapy – clearly exceeding the results achieved with chemotherapy alone. The ability of Erbitux® to shrink the tumor translated into a substantially decreased risk of tumor progression and a trend towards prolonged survival for all patients with KRAS wild-type tumors. Furthermore, effective tumor shrinkage might allow complete surgical resection of liver metastases, thereby enhancing the chance of a potential cure. A further randomized Phase II study (CELIM) investigated the efficacy of Erbitux® in combination with standard chemotherapy in patients with initially inoperable liver metastases. Tumor shrinkage was experienced by 79% of patients with KRAS wild-type tumors, and 43% of these patients underwent surgery. A complete surgical removal of the tumor was achieved in 34% – a chance for these patients to be cured. These data are among the best ever achieved for complete surgical removal of liver metastases in metastatic colorectal cancer.

### Erbitux® in lung and gastric cancer

A Phase III clinical trial (FLEX) proved that in first-line treatment in combination with a platinum-based chemotherapy, Erbitux® can significantly prolong median overall survival of patients with non-small-cell lung cancer (NSCLC) across all histological patient subgroups. This effect was more pronounced in FLEX patients treated with Erbitux® who developed early acne-like rash, resulting in median overall survival of 15 months. Lung cancer is one of the leading causes of cancer death worldwide: Among men, it claims more lives – around 975,000 per year – than any other form of cancer. Among women, it is responsible for 376,000 deaths each year, second to breast cancer.

A further Phase III clinical trial (EXPAND) was started in the third quarter of 2008 to investigate the efficacy of Erbitux® in combination with chemotherapy as a new option in first-line treatment of gastric cancer. Every year, nearly 930,000 people are diagnosed with gastric cancer and around 700,000 die from it.

Cancer vaccine Stimuvax® designed to induce an immune response to cancer cells.

### Expanding treatment possibilities in oncology

Two further compounds, Stimuvax® and cilengitide, are currently in Phase III development. Stimuvax® (BLP25 liposome vaccine) is an investigational therapeutic cancer vaccine designed to induce an immune response to cancer cells that express MUC1, a protein antigen over-expressed in many common cancers including lung, breast and colorectal cancer. Stimuvax® is currently in a Phase III study involving patients with non-small cell lung cancer (NSCLC). It is the first cancer vaccine in unresectable locally advanced NSCLC to enter Phase III clinical trial testing (START). The results of a randomized Phase II study found that after three years, almost twice as many patients with unresectable advanced NSCLC receiving Stimuvax® were still alive compared to patients in the control group.

Merck Serono is currently evaluating the investigational integrin inhibitor cilengitide in glioblastoma – the most aggressive form of brain tumor – and in head and neck cancer. Cilengitide is thought to suppress the new formation of blood vessels (angiogenesis) and cut off the tumor from the blood supply. In addition, it is believed to target tumor cells directly. Following Phase II data, cilengitide is now being studied in a global Phase III trial (CENTRIC) to evaluate its efficacy in patients with newly diagnosed glioblastoma. All patients enrolled in the study are carriers of a specific chemical modification in a certain section of their DNA (methylated MGMT promoter). A further Phase II trial (ADVANTAGE) is evaluating the novel combination of cilengitide and Erbitux® in squamous cell carcinoma of the head and neck. In addition, we entered into a worldwide alliance with Lpath, Inc. of the United States to develop and commercialize sonepcizumab (ASONEP™), a Phase I monoclonal antibody currently being evaluated for the treatment of various cancer types.

**Progress with the further development of Rebif®**

Studies are investigating whether Rebif® can be used in early-stage disease.

Our development projects in Neurodegenerative Diseases are focused on innovative therapeutic options for multiple sclerosis (MS) and Parkinson's disease – two areas with high unmet medical needs. The Merck Serono division wants to expand the range of approved indications for the successful MS treatment Rebif® based on the outcome of clinical trials. One of the aims is to enable more patients in the early stages of the disease to benefit from treatment with Rebif®. In September, we completed the enrollment of more than 500 patients for the REFLEX trial, one of the most important studies on the further development of Rebif®. This 24-month Phase III registration study will examine the efficacy of the new formulation of Rebif® in clinically isolated syndrome. In this new indication, the study participants have so far only experienced MS-like attacks, but have not yet been diagnosed with clinically defined MS. The aim of the study is to investigate the therapeutic value of Rebif® prior to the outbreak of MS in these patients.

Initial results of the ongoing Phase IIb IMPROVE study after 16 weeks of treatment show that the primary endpoint has been met, confirming the therapeutic effect of the new formulation of Rebif® in MS patients. The number of active lesions in the brain as measured by magnetic resonance imaging was significantly lower than in patients treated with the new formulation of Rebif® compared with those receiving placebo in the control group.

**Oral MS treatment – a new therapeutic option in development**

Cladribine tablets have fast-track designation from the FDA.

With cladribine tablets, Merck Serono is developing a drug that – once approved – would represent the first therapeutic option for oral treatment of relapsing MS. Patients would only need to take this proprietary oral formulation of a nucleoside analogue a few times a year for a period of four to five days in a single daily dose, making treatment considerably more comfortable and improving the prospects for compliance. The U.S. Food and Drug Administration has given cladribine tablets fast-track designation. The safety and efficacy of cladribine tablets as an MS monotherapy in two dosage strengths were tested in a two-year Phase III registration study called CLARITY. This study, which involved more than 1,300 patients, was completed at the end of 2008. According to the results of the trial, which met the primary endpoint, the relapse rate was significantly reduced. Patients who received a lower total dose experienced a 58% relative reduction in annualized relapse rates versus placebo while patients

who received a higher total dose experienced a 55% reduction. We initiated ORACLE-MS, a further Phase III trial, at the end of September. It will evaluate the efficacy of cladribine in preventing conversion to definite multiple sclerosis in patients at risk of developing multiple sclerosis. The Phase II study ONWARD, which is currently underway, is examining the safety and efficacy of cladribine as an add-on to treatment to interferon beta, for example the new formulation of Rebif®.

Merck Serono is also developing atacicept for the treatment of multiple sclerosis. In April 2008, we initiated a Phase II study to evaluate the efficacy of atacicept in reducing central nervous system inflammation in patients with relapsing MS. In June, an exploratory Phase II trial was started to evaluate the efficacy of atacicept in optic neuritis. Inflammation of the optic nerve is a condition often experienced as an early clinical manifestation by patients with multiple sclerosis.

**Safinamide – a potential add-on treatment in Parkinson's disease**

Safinamide, an orally administered add-on treatment with a novel mechanism of action, is also in late-stage clinical trials. Together with the Italian pharmaceutical company Newron, we are developing safinamide for Parkinson's disease. A Phase III study to evaluate safinamide as an add-on treatment to levodopa in patients with advanced Parkinson's met its primary endpoint. The motor functioning of patients with advanced Parkinson's disease improved significantly. The "ON" times during which motor function reaches its highest levels were extended by 1.3 hours. In a Phase III study called MOTION, we are evaluating safinamide as an add-on therapy to dopamine agonist in early-stage disease.

**Long-acting fertility hormone under development**

Our research and development work in the therapeutic area of Fertility is aimed at helping infertile couples to conceive a child, delivering products for every phase of the reproductive cycle from ovulation to early pregnancy. With our innovative treatments and technologies, we want to help couples increase their chances of a successful pregnancy. In addition, it is our aim to continue making our products as patient-friendly as possible.

For example, we are developing a long-acting recombinant follicle-stimulating hormone (hyperglycosylated FSH), which would mean fewer injections for patients. We successfully completed the Phase II program in assisted reproduction (ART) and are ready to advance the compound to Phase III. Phase II studies to evaluate efficacy in inducing ovulation are still underway.

We terminated the development of anastrozole, an aromotase inhibitor for ovulation induction, in July 2008. Although Phase II dose finding studies were successfully completed, the substance did not show a promising profile to be advanced to Phase III when compared to clomiphene citrate, the standard treatment.

### New studies in systemic lupus erythematosus and rheumatoid arthritis

Focus on proteins that modulate important mechanisms in the development of disease.

Our research and development activities in the Autoimmune and Inflammatory Diseases therapeutic area focus on proteins that modulate important mechanisms in the development of disease. The Merck Serono division is developing atacicept, a soluble fusion protein, for several indications including rheumatoid arthritis (RA). We completed patient enrollment in our two largest Phase II studies in RA and started another Phase II study in 2008. Data for the first two studies are expected in the second half of 2009.

Systemic lupus erythematosus (SLE), a chronic inflammatory disease where the immune system attacks the body's own tissues, is an area of high unmet medical need that primarily affects women. A Phase II/III study with atacicept in patients with SLE began in June. We discontinued one study of atacicept in lupus nephritis (LN), a particularly severe form of SLE affecting the kidneys, which was part of the ongoing SLE development program. This Phase II/III study combined atacicept with other medications (mycophenolate mofetil and corticosteroids) and was discontinued because of the occurrence of severe infections. These were thought to be the result of the underlying significant disease activity coupled with the concomitant use of several immunosuppressive medications. We are currently analyzing the data and redesigning the development plan for atacicept in lupus nephritis.

Thanks to its novel mechanism of action, fibroblast growth factor 18 (FGF 18) could be the first treatment for osteoarthritis that stimulates the repair of articular cartilage instead of simply treating the symptoms of this degenerative joint disease. A second Phase I trial in osteoarthritis was initiated at the end of 2008. In July, Merck Serono returned to the Swiss biotech company NovImmune the rights to develop and commercialize the human monoclonal antibody anti-CD 3 (NI-0401).

### Development projects on growth disorders and metabolic diseases

Our researchers are working on a number of development projects on selected growth disorders and metabolic diseases in the therapeutic area of Endocrinology. The Merck Serono division can build on its long-standing experience in these therapeutic indications.

Our U.S. subsidiary EMD Serono acquired the commercialization rights to tesamorelin, a growth hormone-releasing factor analogue with therapeutic potential in a variety of anabolic and lipolytic indications. The compound is in the final stages of its second Phase III clinical trial to assess the safety and efficacy when used to reduce excess abdominal fat in HIV patients with lipodystrophy. The development of a high-dose recombinant human growth hormone for the treatment of HIV-associated adipose redistribution syndrome (HARS) was discontinued and an impairment loss was recognized for the intangible assets capitalized to date.

In cooperation with the U.S. biopharmaceutical company Ambrx, we are studying the long-acting growth hormone ARX-201 for the treatment of growth hormone deficiency.

In other projects we are working on the constant further development of our application devices.

# Consumer Health Care


The Consumer Health Care division offers consumers high-quality over-the-counter products for preventive health care and self-treatment of minor ailments.

## Key products

- Mobility: Products to strengthen the joints, including the brands Seven Seas®, Seven Seas® JointCare and Kytta®
- Everyday Health Protection: Vitamins and minerals sold under brand names such Cebion® and Diabion®; probiotic multivitamin products Bion®3 and Multibionta®
- Women's and Children's Health: Femibion®, a multivitamin product with folic acid and Metafolin® for pregnant and nursing women; Kidabion® (Haliborange®), a vitamin product for children
- Cough and Cold: Cold remedy Nasivin® (Iliadin®); flu remedy Sedalmerck®

## Key events in 2008

- Double-digit organic growth of 12% in total revenues clearly exceeds market growth
- Acquisition of the Belgian company Bio-Fyt
- Divestment of the biManán® brand of diet products in Spain
- Strategic brands further strengthened
- Successful advertising campaign for Kytta® ointment with strong growth in Germany
- Expansion of business in the growth markets of China and India

# Growth with brands that consumers trust

### Focusing on four health themes

www.merck.de/consumerhealthcare

Our Consumer Health Care division is a specialized supplier of over-the-counter products focused on four health themes: Cough and Cold, Mobility, Everyday Health Protection and Women's and Children's Health. Our main distribution channels are pharmacies, as well as retail chains and mail order in some countries. We are building on the strength of our well-known brands and the trust consumers place in them with respect to their quality and efficacy.

Total revenues of the Consumer Health Care division rose by 5.2% to € 442 million in 2008. Organically, we posted a double-digit sales increase of 12%, more than twice that of the estimated global OTC market. We are continuing to pursue a two-pronged strategy. On the one hand, we are increasingly focusing our business on our strategic brands, while on the other hand we are driving expansion in growth markets such as those of eastern Europe, Asia and Latin America.

In 2008, we continued to invest significantly to further develop our strategic brands. These were financed partly by the proceeds from the sale of the Spanish diet product brand biManán® to the French company Nutrition & Santé for € 11 million. While biManán® was the division's most important brand in Spain, it was only of local significance, did not focus on our health themes and recorded stagnant sales.

### Strong currency impact in key markets

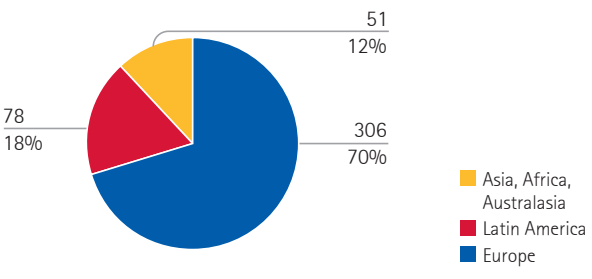
In many markets, negative currency effects seriously undermined our strong organic growth. The most significant impact was felt in the United Kingdom, a key market, as well as in the traditionally important markets of Mexico and Venezuela. By contrast, positive currency effects were registered in the growth markets of eastern Europe, for example Poland, the Czech Republic and Slovakia, though these were insufficient to offset the general trend.

The operating result of the Consumer Health Care division increased to € 61 million, 2.9% more than in 2007. Free cash flow adjusted for acquisitions and disposals decreased by 19% to € 38 million mainly as a result of higher capital spending.

**Consumer Health Care | Key figures**

| € million | 2008 | 2007 | Δ in % |
|---|---|---|---|
| Total revenues | 442 | 420 | 5.2 |
| Gross margin | 294 | 284 | 3.5 |
| R&D | 17 | 12 | 40 |
| Operating result | 61 | 60 | 2.9 |
| Exceptional items | – | – | – |
| Free cash flow (FCF) | 5.6 | 47 | –88 |
| FCF before acquisitions and disposals | 38 | 47 | –19 |
| ROS in % | 13.9 | 14.2 | – |

**Consumer Health Care | Sales by region**



France is the largest market for our Consumer Health Care division.

### Good performance in France

Europe remained our most important market. Sales totaled € 306 million. We performed well in the most important core markets, in many cases counteracting weak market developments. In France, where the market for over-the-counter prescription-free medicines declined by 3.2% in 2008, we increased sales by 4.2% to € 94 million in the same period. France was thus once again our largest market. Our subsidiary Merck Médication Familiale saw continued success there with the probiotic multivitamin brand Bion®, achieving a 21% increase in sales to € 23 million. Bion® is now the fifth-leading brand in the French OTC market. The strategic brand Femibion® for pregnant women and nursing mothers also posted a strong 12% increase in sales. Higher sales of strategic brands more than offset the decline in sales of cosmeceuticals from the local dermatology line, which fell to € 26 million. The success of our approach of focusing the business more strongly on strategic brands is apparent here. Merck Médication Familiale now ranks second in both the dietary supplement and OTC markets of France.

### Portfolio streamlined in the United Kingdom

Sales in the United Kingdom declined by 16% to € 64 million, primarily as a result of the weakness of the British pound, which had a double-digit currency impact. As a consequence, sales by Seven Seas, our UK subsidiary, decreased by 12%. In local currency, however, sales increased by 2.6%. Seven Seas thus achieved its goal of stabilizing the business despite a 4% decline in the vitamins and supplements market. Compensation payments of around € 4 million from a supplier whose product impurities triggered a recall in 2006 had a positive effect.

At the end of September, we also sold the Petcare business for a low seven-digit figure, thus moving ahead with our plan to streamline the portfolio and divest non-core assets. Sales by Lamberts Healthcare, our mail order business with high-quality vitamins and minerals, stagnated in local currency terms in a weak market.

### Kytta® gains market share in Germany

Sales in Germany increased by 16% to € 46 million in a market that declined by 2.5%. The largest contribution to sales came from the plant-based ointment Kytta® for muscle and joint pain. Following a successful advertising campaign, sales increased by 77% to € 14 million in 2008. As a result, Kytta® considerably increased its market share in Germany. Sales of the metafolin product Femibion® also developed favorably, increasing 14% to € 15 million.

The acquisition of the Belgian company Bio-Fyt will expand the portfolio .

### Acquisition in Belgium

We increased sales in Belgium by 18% to € 18 million. In particular, we achieved strong sales gains with the strategic brands sold in Belgium under the Omnibionta® umbrella: Sales of Femibion® and Bion®3 increased by 43% and 24% respectively. Sales of the cold remedy Nasivin® grew by 6.7%. In December, we acquired the company Bio-Fyt for € 30 million in order to strengthen our market position and to expand the product portfolio. Bio-Fyt develops, markets and sells mobility, women's health and everyday health-protection products. The acquisition of Bio-Fyt is therefore in line with our strategy of focusing on specific health themes and achieving leading positions within these defined segments.

### Expanding business in eastern Europe

Business in the growth markets of eastern Europe developed dynamically. In Poland, sales totaled € 26 million. Kidabion®, which was launched in Poland 2007, continued to show dynamic growth. Sales of the multivitamin product for children increased by 27%, confirming its position as the market leader. Sales of Femibion® climbed 61% to € 3.8 million and those of Nasivin® rose 23% to € 5.8 million in Poland. We also grew strongly in other eastern European countries, including the Czech Republic (by 31% to € 4.0 million), Hungary (by 32% to € 4.9 million) and Slovakia (by 6.3% to € 2.4 million).

### Global expansion

In Venezuela, we solidified our strong position. Apart from the success of Cebion®, sales of which grew by 27% to € 7.9 million, sales of the fish oil product Maxepa® for cardiovascular care surged again, rising 51% to € 5.7 million. Both products expanded their market leadership positions. Total sales in Venezuela grew by 27% to € 19 million, despite strong negative currency effects.

In India, sales grew by 47% to € 6.6 million despite currency effects. Nasivin® accounted for more than one-half of sales. This successful performance was driven by a dedicated sales force, which we established in 2008.

Sales in India soar by 47% despite substantial currency effects.

The Consumer Health Care division has been present in China since 2007 with the multivitamin syrup Kidabion®. We have meanwhile expanded distribution to five provinces and 12 major cities. In order to further expand the business in this key growth market, we established a legal entity based in Shanghai on January 1, 2009.

### Strong brands delivering value

In difficult markets and economically uncertain times, strong brands that consumers trust are more valuable than ever before. Our strategy is succeeding: Sales of Nasivin® grew by 39% to € 46 million in 2008. Sales of Kytta® soared by 75% to € 15 million. Bion®3 also posted strong growth of 24% to € 44 million, as did Femibion®, which grew 32% to € 26 million. Only our Seven Seas® brand saw a year-on-year decline in sales of 6.1% to € 42 million due to unfavorable exchange rate movements.

The future strategy builds on the success of our strategic brands, with which we already achieve more than 50% of our global sales.

# Chemicals business sector

## Seeing and being seen

Specialty chemicals from Merck provide for extremely high clarity and visibility. Whether as liquid crystals in high-resolution camera displays or as shiny effect pigments for cosmetics.

# Liquid Crystals


Liquid crystals from Merck are used all over the world – for example, in most LCD (liquid crystal display) televisions, computer monitors, notebooks, digital cameras and mobile phones, as well as in many other high-quality displays. Merck is the global market leader in this field and, thanks to continuous investments in research and production, also the technology leader. New lighting and display technologies such as OLEDs (organic light-emitting diodes) are another focus of our work. In addition to the core business with materials for displays, in view of climate change and high energy prices we are also active in growth markets. These include the use of solar energy and the development of innovative light sources for energy-saving LEDs.

### Key product

– licristal® – Liquid crystals and mixtures for displays

### Other product groups

– livilux® – Materials for OLEDs for displays and innovative lighting
– isishape® – Efficient and environmentally friendly materials for producing solar cells and touch-sensitive screens

### Key events in 2008

– Market and technology leadership in liquid crystals maintained
– Economic crisis and overcapacities in the market impacted our operating result
– Total revenues were diminished by negative currency effects, yet increased by 5.6% on a currency-adjusted basis

# Leading position maintained

www.merck-chemicals.com/lcd-emerging-technologies

Total revenues of the Liquid Crystals division decreased by 4.2% to € 877 million in 2008. Apart from market correction due to overcapacities, the economic downturn and negative currency effects played a major role. Sales are generated in U.S. dollars or in local currency such as the Japanese yen. As most manufacturing costs are booked in euros but sales are booked in currencies that are presently weak, there is no natural currency hedge for the division's business. On a currency-adjusted basis, growth was 5.6%.

At € 541 million, the division's gross margin fell 12% compared with the previous year. The operating result decreased by 20% to € 391 million as currency effects directly impacted the division's profit. At 44.6%, return on sales was below the previous year's level. Free cash flow declined by only 5.3% to € 402 million.

### Markets affected to varying degrees

Merck continues to do most of its business with major display manufacturers in Asia. Merck's customers – like other consumer goods manufacturers – are affected by the global economic crisis as well as market overcapacities. However, the impact in the individual regions varies: The first signs of declining demand became noticeable in October, mainly with manufacturers in Taiwan. We saw a more positive picture in Japan and South Korea: Despite the crisis, which was also distinctly felt in these countries during the fourth quarter, full-year sales increased slightly. The reason for this are the differences in the structure of manufacturers: In Taiwan, suppliers mainly serve the electronics industry (original equipment manufacturers), which in turn cover the increased demand of the major electronics companies at peak times. By contrast, in Japan and South Korea the major brand manufacturers predominate. They also produce their own displays and mainly cover the higher-value price segment.

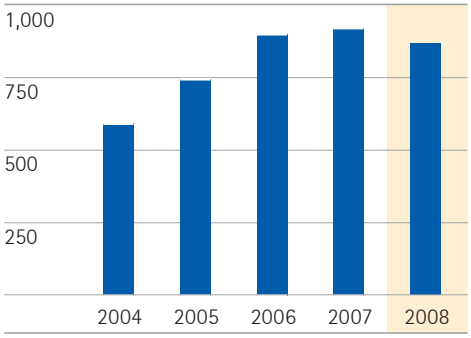
### Medium-size screens dominate the market

Televisions and notebooks continue to be the most important growth drivers of the LCD industry. After the trend of the past years toward ever-larger format screens, growth of this segment is slowing and the market is increasingly settling in the medium-price segment with screen diagonals of 32 to 40 inches. For 2009, the market research firm DisplaySearch assumes an increase in total display surface area produced globally.

**Liquid Crystals | Key figures**

| € million | 2008 | 2007 | Δ in % |
|---|---|---|---|
| Total revenues | 877 | 916 | –4.2 |
| Gross margin | 541 | 611 | –12 |
| R&D | 85 | 79 | 8 |
| Operating result | 391 | 487 | –20 |
| Exceptional items | – | – | – |
| Free cash flow (FCF) | 402 | 425 | –5.3 |
| FCF before acquisitions and disposals | 407 | 425 | –4.3 |
| ROS in % | 44.6 | 53.1 | – |

**Liquid Crystals | Total revenues**



### Investments in research and production

In order to maintain our leadership position in display materials, we continue to invest in research and development as well as in production plants. At € 85 million, the division's R&D spending exceeded the previous year's level. At the Darmstadt site we further expanded our production facilities and broke ground for a new chemical research center, which will also accommodate liquid crystal and organic light-emitting diode (OLED) research. We are expanding our site in South Korea in order to strengthen our research and development and further intensify our cooperation with customers.

### LC core business: Merck is technology leader

Merck is an important development partner to the global display industry.

Based on more than 100 years of experience in liquid crystal manufacturing, we are the global technology leader in the LC industry and the leading development partner to the global display industry, especially for highly complex, specific LC mixtures for technically sophisticated applications. Combining our expertise with our customers' allows us to continuously develop interesting products for consumers and introduce them to the market. We are already working together on technologies for the coming decade to further significantly improve picture quality.

### New technologies for displays

The new generation of displays offer higher definition and energy efficiency.

PS-VA (polymer stabilized vertical alignment) is the next generation in display technology. It offers better contrast, even faster switching times and, above all, better energy efficiency as backlighting can be significantly reduced. By means of an additional polymer layer, the VA molecules in the display are pre-aligned in a certain direction to achieve the above-mentioned advantages. Innovative materials from Merck have helped pioneer this technology. Some devices with PS-VA displays are already on the market, for example the new PlayStation Portable (PSP). Another innovation was presented in August at the International Consumer Electronics Trade Fair (IFA) in Berlin: the first LCD television with 200/240-hertz technology, produced with our liquid crystal mixtures. It enables even higher definition of fast moving pictures, for example sports programs.

### Touch panels

The division is not only a manufacturer of liquid crystal mixtures, but also an important partner to the display industry in other areas. Our patented etching pastes for the isishape® product range are an important component in the manufacture of touch panels. The very thin films used in touch panels must be selectively processed. The layers are often only a few nanometers thick, or about one-thousandth the thickness of a human hair. Touch panels are increasingly used, for example, in high-tech mobile phones, automatic ticket and other vending machines, as well as navigation devices.

### OLED materials

Aside from liquid crystal technology, our researchers are working on materials for innovative displays. Here the special focus of development is on OLED materials (organic light-emitting diodes). They are used in mobile phones, MP3 players and digital picture frames, and have been introduced in televisions. First TV prototypes with 30-inch screens have been announced. Here too, our researchers maintain a close exchange with manufacturers. Merck materials are already inside many OLED displays on the market. Merck also intends to position itself as a leading material supplier in this new display technology.

### Growth market of photovoltaics

In addition to display materials, the division is active in the growth market of photovoltaics and is developing new energy-saving lighting materials. In photovoltaics, we are focusing on the development of materials for printing technologies and for the production of organic solar cells. With the isishape® range, we offer solar cell manufacturers printable etching pastes for low-cost structuring of the materials required within the production process. A new production plant was commissioned for this at the Darmstadt site in 2008. New technologies for producing organic and thin-film solar cells are gaining an increasing share of the market as a result of cost advantages.

We supply materials for the production of solar cells.

### Alternative to conventional light bulbs

Under “solid-state lighting” we combine research activities focused on developing lighting materials for white LEDs (light-emitting diodes). These LEDs can be an alternative to conventional light bulbs and energy-saving lamps that consume relatively large amounts of energy and have low efficiency rates. If attempts to increase the efficiency of lighting materials succeed, experts estimate that this could eliminate the need for up to 200 coal-fired power plants worldwide. To support these developments, in July 2008 Merck acquired LITEC-LLL GmbH of Greifswald, Germany, a company specializing in the development, production and marketing of ortho-silicate lighting materials.

Our OLED materials are used not only for spot lighting but also for innovative area lighting, making it possible to illuminate large areas while saving energy. Here, prototypes have already been developed in cooperation with leading lighting manufacturers.

### Active in the top research cluster

Networks between science and industry play an essential role in developing cutting-edge technologies. Merck is actively participating in several research and cooperation projects, for example the “Organic Electronics” cluster of the Rhine-Neckar metropolitan region, which was one of the winners of the top-cluster competition launched by the German Federal Ministry of Education and Research. Areas of focus include developing organic light-emitting diodes and smart labels based on printed electronic circuits.

# Performance & Life Science Chemicals

Specialty chemicals from Merck are important components of the process chain from drug development to industrial production. They ensure reliable analysis in research and dependable production processes. Expertise in chemistry and customer-centric innovations have made us a successful supplier to the pharmaceutical, cosmetics, food, plastics, coatings and printing industries. We find answers to challenges in environmental protection, production safety and product protection. Our goal is to further expand our expertise in regulated markets and in markets with high barriers to entry. The division operates in three business areas:

The success of the Laboratory Business is based on a long tradition. We offer a broad portfolio of laboratory chemicals in a range of product grades including the relevant certificates of analysis, thus ensuring consistent and comparable results.

Life Science Solutions focuses on customer needs in a variety of sectors such as the pharmaceutical industry. We offer products and solutions using the latest technological expertise in chemical and biotechnological processes.

The Pigments business develops and manufactures innovative effect pigments for use in coatings, packaging and product design. Not only decorative, but also security-relevant aspects, for example brand and anti-counterfeit protection, are important here.

**Key events in 2008**

- High sales level maintained, organic growth of 4.0%
- Operating result increases by 15%, return on sales of 13.4%
- Double-digit growth in several important Asian markets

# Efficient structures in place

### Rise in operating result

Total revenues of the Performance & Life Science Chemicals division increased by 0.9% to € 1,246 million in 2008. Currency effects, particularly in the United States and Asia, impacted the division's growth, which amounted to 4.0% on a currency-adjusted basis. Gross margin increased by 2.3% to € 629 million. In comparison with the previous year, which saw restructuring costs, the operating result rose by 15% to € 167 million.

At 13.4%, return on sales was better than in the previous year. Free cash flow decreased by 56% to € 58 million, which was mainly the result of investments in property, plant and equipment, as well as changes in working capital. In 2008, the Performance & Life Science Chemicals division spent around € 58 million on research and development. We consolidated our global chemical production organization in 2008 in order to serve our markets more efficiently.

www.merck-chemicals.com

### Growth in the most important markets of Asia

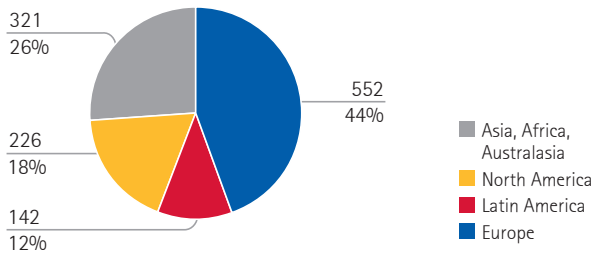
The division performed well in the most important markets of Asia, such as China and India, which recorded growth of 15% and 10%, respectively. Robust growth of 8.7% was also achieved in Latin America. In North America, sales dropped due to the economic downturn that already began in the third quarter. Laboratory Products recorded a slight nominal decline in sales compared with the previous year. The Pigments business, which accounted for around one-fifth of the division's total revenues, was the first to feel the effects of the economic crisis. The automotive coatings business was particularly impacted by declining production in the automotive industry. By contrast, the Life Science Solutions businesses, which are less dependent on economic cycles and accounted for around one-third of the division's total revenues, achieved an increase in sales.

**Performance & Life Science Chemicals | Key figures**

| € million | 2008 | 2007 | Δ in % |
|---|---|---|---|
| Total revenues | 1,246 | 1,235 | 0.9 |
| Gross margin | 629 | 615 | 2.3 |
| R&D | 58 | 58 | 0.0 |
| Operating result | 167 | 144 | 15 |
| Exceptional items | –46 | – | – |
| Free cash flow (FCF) | 58 | 132 | –56 |
| FCF before acquisitions and disposals | 67 | 132 | –49 |
| ROS in % | 13.4 | 11.7 | – |

**Performance & Life Science Chemicals**

**Sales by region | € million**



## Laboratory Business

**Growth in Asia and Latin America**

www.merck-chemicals.com/food-analytics

In 2008, total revenues of Laboratory Business decreased slightly by 1.6%. On a currency-adjusted basis, total revenues increased by 2.5%. We are represented by our own local companies in 42 countries worldwide with a broad range of laboratory chemicals. We were satisfied with growth in Asia, which reached 6.5% despite strong negative currency effects, and in Latin America, where sales rose by 7.4%. Sales in the European market remained stable, while a decline was recorded in the comparatively smaller market of North America.

**Innovative rapid food tests**

Rapid food tests are easy to use.

Our microbiology business achieved sustainable growth in 2008. Rapid microbiology tests have become a special highlight of our portfolio. They are used to detect harmful and pathogenic microorganisms in foods, such as salmonella and coli bacteria. The business for food and environmental tests with the newly launched Spectroquant® Pharo spectrophotometers got off to a good start. They are used to perform tests of the Spectroquant® range rapidly, precisely and efficiently. With our U.S.-based cooperation partner Rules-Based Medicine Inc., we further expanded the bioscience business with bead-based assays for biomarker detection in pharmaceutical research.

**New products for chromatography**

By acquiring the Swedish company SeQuant we rounded off the chromatography portfolio. SeQuant specializes in the development of products for chromatography, namely the separation of polar chemical compounds. The focus is on innovative ZIC-HILIC® technology. This product line ideally complements our existing portfolio in HPLC (high-performance liquid chromatography). In 2008, ZIC-HILIC® products were also used to test for melamine contamination in formula, as recommended by the U.S. Food and Drug Administration (FDA).

## Life Science Solutions

**Emprove® premium brand portfolio expanded**

www.merck-chemicals.com/life-science-research

Life Science Solutions achieved growth of 7.9%. On a currency-adjusted basis, the increase amounted to 10%. Sales rose by 16% in the important market of North America and by 19% in Latin America. The business with pharmaceutical raw materials generated particularly strong growth. Emprove®, Merck's premium brand of pharmaceutical raw materials, generated double-digit growth and was expanded. This brand stands for comprehensive service and excellent quality. The portfolio now comprises three application areas: "Emprove® exp" for use as a pharmaceutical excipient, "Emprove® bio" for use in biopharmaceutical production and "Emprove® api" for use as an active pharmaceutical ingredient.

The aim is to enable customers to work even faster and more cost-efficiently with Emprove®. The new generation of Fractogel™ for protein purification and separation in pharmaceutical production is scheduled for market launch in 2009. Innovations also include new, customized solutions for cleaning biopharmaceutical production facilities.

www.merck-chemicals.com/pharmaceutical-ingredients

**Targeted investments in innovative cosmetic actives**

Business with cosmetic active ingredients sustained a decline in sales owing to weaker demand, e.g. for the self-tanning agent DHA. Here we will concentrate more strongly on innovative, patent-protected products and expand the product range by making targeted investments. The new production plant for Oxynex® ST Liquid started up in India at the end of 2008. This is a stabilizer for light-sensitive raw materials used in cosmetic products and perfumes. We are completing a new plant at the Darmstadt site for producing active ingredients used in sunscreen formulations. Eusolex® UV-Pearls are tiny glass beads in which an innovative UV filter is encapsulated.

www.merck-chemicals.com/cosmetic-ingredients

**Cutting-edge technologies strengthened**

In 2008, the technology platform for ionic liquids was further expanded, laying the cornerstone for future growth. Certain ionic liquids can be used as electrolytes for producing a special type of solar cells (dye-sensitized solar cells). Another cutting-edge product are evaporation chemicals (Patinal) of the Solarpur™ range, which are used to coat the surfaces of solar cells to increase their efficiency.

## Pigments

**Business impacted by the economy**

Following good growth in the first half of 2008, the strong dependence of the Pigments business on economic trends became noticeable as of August. This was mainly reflected by weak demand from the automotive sector, to which we are an important supplier with pigments for automotive coatings. As of the fourth quarter, the economic weakening also hit the European business. Total revenues in Pigments declined overall by 9.7%.

www.merck-chemicals.com/pigments

Asia still offers potential, for example China with a growth rate of 7.5%. However, negative currency effects are impacting business there. Weak demand for consumer goods and current consumer uncertainty also affected the business with pigments for plastics, print products and cosmetics.

**Product lines rounded off**

In the current economic situation, we continue to focus on high-value, profitable pigments. In 2008, we added new color tones to our portfolio of the high-growth product lines Miraval® and Ronastar®, and we implemented the widespread launch of the new Pyrisma™ product line. These pigments, which were developed in close cooperation with our customers, offer very intense effects and cover a wide color range.

**Functional pigments**

Pigments make it difficult to counterfeit drugs.

Functional pigments performed very well, including pigments for laser marking and antistatic applications (Minatec® range). These are used, for example, to prevent the static charging of plastic floor coverings and for coating plastic parts. Sales of Candurin® pigments, which are used for color coatings of foods and pharmaceuticals, were also strong. While the focus is on decorative effects in the foods sector, pharmaceutical coatings are used to help patients to better identify their medications and to make drugs more counterfeit-proof. Approval has been granted in the United States and some other core countries. We are now focusing on countries where approval has not yet been obtained.

# Corporate and Other

The segment Corporate and Other comprises Group administrative costs with respect to holding companies, taxes as well as certain exceptional items not assigned to the individual divisions. The operating result of the segment Corporate and Other totaled € –81 million in 2008 as compared with € –72 million in 2007. The financial result was € –156 million, which was much better than in 2007. Since 2007, the financial result has been reported in full in the segment Corporate and Other. Free cash flow declined to € –581 million; free cash flow adjusted for acquisitions and disposals was € –470 million as compared with € –406 million in 2007, mainly owing to high tax payments.

**Corporate and Other | Key figures**

| € million | 2008 | 2007 | Δ in % |
|---|---|---|---|
| Total revenues | 6.6 | 29 | –77 |
| Gross margin | –2.7 | 2.5 | – |
| R&D | 0 | 0 | – |
| Operating result | –81 | –72 | – |
| Exceptional items | – | –32 | – |
| Free cash flow (FCF) | –578 | –406 | – |
| FCF before acquisitions and disposals | –470 | –406 | – |

# Risk report

### Risk and opportunity management

Every conscious business decision is based on weighing the associated risks and opportunities. Therefore, a targeted approach to handling opportunities and potentially negative developments is an integral component of a value-oriented company management.

Corporate-wide system helps to steer risk.

Risk management in the Merck Group is supported by a uniform, corporate-wide system. Risk management activities are aimed at identifying risks at an early stage and evaluating, controlling and managing them. In order to fulfill this task, corresponding roles and responsibilities have been defined and outlined throughout the Group by means of binding guidelines.

Within the scope of a standardized risk process, the current risk situation is reported to the Executive Board in six-month intervals or, in special cases, on an ad-hoc basis. The risk management system and compliance with the corresponding guidelines are reviewed regularly by the Internal Auditing department.

Opportunities are identified, analyzed and managed in the respective divisions by means of suitable processes. Information on the opportunities in the individual division, and particularly with respect to R&D, are described in more detail starting on page 39 as well as on pages 54 and 58. In agreement with the Executive Board, it is ensured that opportunities are seized actively and in line with the corporate strategy.

### Business-related risks

Merck has integrated its risk management system into the ongoing business planning processes. Potential negative developments, for example changes in customer demand or new political framework conditions, are described and evaluated in the risk reports, so that we can take countermeasures in good time if any events should lead to deviations from the business plan. Risks in connection with investment decisions are lowered by the use of detailed guidelines.

Merck's diversification contributes to risk minimization..

As of December 31, 2008, the Merck Group operated 54 production sites in 25 different countries. We have taken appropriate measures to minimize the risk of a supply bottleneck for important products. Total revenues and the operating result of the Merck Group depend on a large number of pharmaceutical and chemical products for various industries. This diversification itself minimizes risk, since the markets differ in their structure and economic cycles. This is also an expression of the Merck strategy to remain an integrated pharmaceutical and chemical company.

We try to prepare for the potential risks of a changing market environment, for example the current recession, further health care cost containment measures or new products from competitors, by continually observing market developments and acting with appropriate foresight.

With respect to the Liquid Crystals and Performance & Life Science Chemicals divisions, Merck is addressing the momentary decline in demand due to the economic situation by temporarily adjusting production capacities.

The special risks of pharmaceutical development are constantly monitored by a portfolio and project management system introduced in the Merck Group. In the course of portfolio management, research areas and all R&D pipeline projects are regularly evaluated and, if necessary, refocused. As a research-based pharmaceutical company, there is the risk for Merck of development projects having to be discontinued – in some cases only after substantial investment – at a late phase of clinical development. Decisions – such as those relating to the transition to the next clinical phase – are taken responsibly in order to minimize risk. Nevertheless, the danger still exists that undesirable side effects of a pharmaceutical product is not discovered until after approval or registration, which could result in restrictions or a product recall.

### Financial risks

Merck uses derivative financial instruments to minimize currency risks and financing costs caused by exchange rate or interest rate fluctuations. Financing transactions in foreign currencies are generally hedged. In certain cases, the company also hedges anticipated sales and future costs for a period of up to three years. (More details are available starting on page 126).

Merck's long-term liquidity is ensured.

Material financial transactions involving credit risk are only entered into with banks that have a good credit rating and a minimum rating of A- from Standard & Poor's. The rating of the commercial banks is constantly observed in order to quickly respond to deterioration. From 2007, we have access to a € 2 billion syndicated multicurrency credit facility with 19 banks, which have good credit ratings. Our long-term liquidity is ensured by our positive operating cash flow, the centralized liquidity management within the Group and an available credit facility with a remaining term of six years. We do not see any threat to Merck of a credit bottleneck, even in connection with the current financial crisis. Due to its broad customer base, Merck is likewise only exposed to a low credit risk in its sales markets.

The carrying values of individual items in the balance sheet are exposed to the risk of changing market and business circumstances and thus also to changes in fair values. This can adversely impact profit and affect balance sheet ratios. This applies in particular to the adjustment of book values of acquired companies to the respective fair values. In particular, the share of goodwill and other intangible assets in the consolidated financial statements increased significantly as a result of the Serono acquisition in 2007. (More details are available starting on page 102).

Merck has obligations in connection with pension commitments. The bulk of these obligations is covered by the provisions disclosed in the balance sheet, while the smaller remainder is externally funded. The obligations are regularly evaluated by preparing annual actuarial valuations. Changes in the valuation parameters, for example in the interest rate, salary increase rate or death probabilities, can negatively influence the value of pension obligations and necessitate additional expenditure for pension plans. As far as pension obligations are covered by plan assets consisting of interest-bearing securities, shares, real estate and other financial assets, decreasing or negative returns on these assets can adversely impact the value of the plan assets and thus result in further additions.

### Assessment by independent rating agencies

Moody's upgrades Merck's long-term rating.

The capital market makes use of the assessments published by independent rating agencies in order to assist debt providers in estimating the risks attaching to a financial instrument. Merck is currently rated by the agencies Standard & Poor's and Moody's. Since June 30, 2008, Standard & Poor's has given Merck a long-term rating of A-, with a stable outlook. The short-term rating by this agency is A-2. Since December 16, 2008, Moody's has given Merck an improved long-term rating of A3, with a positive outlook. Moody's short-term rating for Merck is P-2. Moody's decision to upgrade our long-term rating was founded on the rapid retirement of debt following the Serono acquisition and the solid cash flow that Merck generates. Thus, both agencies confirm a stable investment grade rating for us.

### Legal risks

Merck is engaged in legal proceedings and government investigations, the outcome of which cannot currently be predicted. We also continue to bear the risks from certain proceedings against companies of the Generics group that we sold to Mylan in 2007. Thus Merck continues to be responsible for example for risks arising from cases concerning drug pricing in the United States. In addition, the Merck Serono division is involved in a licensing dispute in Israel as well as a dispute with a former sales partner in Italy. The company has taken all possible measures to protect its own legal position. (More details can be found starting on page 115).

Should individual products of the Merck Group prove to be defective and/or display undesirable side effects, this could lead to possible compensation claims and legal proceedings owing to product liability.

As a research-based company, Merck has a valuable portfolio of industrial property rights, such as patents and brand names. This can become the target of attacks and infringements. We have taken the necessary precautions to identify threats and defend our rights where necessary. Generally, Merck endeavors to prevent legal risks from arising.

Compliance program is binding on all Merck employees.

A compliance program applies for our employees worldwide, which enjoins them to comply with laws and guidelines, and provides them with the relevant training and support. The core of the program is the Merck Code of Conduct, which defines ethical behavior guidelines. This is complemented by a training and testing program as well as a global network of compliance officers.

Insofar as possible and sensible, the company limits liability and damage risks through insurance coverage, the type and scope of which is continually adjusted to current requirements.

### Human resource risks

Merck's success is significantly influenced by the competence and dedication of its employees. The search for qualified specialists, particularly for fields of activity specific to the pharmaceutical sector, is subject to increasingly intensive competition with other companies. We are countering this development by continuously advancing our international personnel marketing measures.

Merck minimizes the consequences of personnel turnover among qualified specialists and executives by means of a Talent & Succession Management Process established throughout the Group. This helps to identify both key positions and talents, thus enabling appropriate vacancies to be quickly filled with suitable employees as a result of targeted selection. Short-term vacancies are managed by means of clearly defined, appropriate deputizing arrangements.

### Information technology risks

Business-critical application systems and access to business-relevant data are set up in such a way that, even in the event of individual failures, they are continually available thanks to redundant technical components, networks and sites.

Security guidelines are in place for the entire Merck Group that include appropriate organizational, technical and software-related precautions for access control, access rights, virus protection and data protection. The adherence to and efficacy of these measures are continuously monitored. A dedicated IT risk management process ensures that IT risks are evaluated and appropriate measures taken. This has been confirmed by successful ISO 20000 and ISO 27001 certifications.

### Environmental and safety risks

Global adherence to high technical and corporate governance standards prevents potential damage, minimizes the potential effects of such damage, and thus ensures the continuity of plant and equipment. Merck updates these preventive measures regularly; we systematically carry out internal health and environmental safety audits, and through checks and advice, we minimize the risks to people and the environment.

### Management assessment of the overall risk situation

Currently no risks can be identified that could jeopardize the continued existence of the Merck Group. This is the finding of this risk report, which was prepared in accordance with German Accounting Standard 5.

## Report on expected developments

At the present time, overall economic environment cannot be assessed. Within just a short period of time, the U.S. subprime mortgage and banking crisis developed into a global financial and economic crisis. The dynamics of this development, coupled with the complexity and interdependencies of the global financial and real markets, is without precedent. The resulting uncertainties reflect the transitory nature of all the economic forecasts made during the past year and the grotesque miscalculations.

These special circumstances make it impossible for us to give any quantitative forecasts. Likewise, qualitative statements concerning trends are – in view of the strong dynamics and limited soundness of such estimates – at the present time not compatible with the planning horizon provided for in this management report.

## Subsequent events

There were no material events at Merck after the balance sheet date.

# Corporate governance

**Joint Report of the Executive Board and the Supervisory Board according to section 3.10 of the German Corporate Governance Code**

The German Corporate Governance Code is geared exclusively toward the conditions at a German stock corporation (Aktiengesellschaft). Merck KGaA has therefore independently examined and determined how the Code can be applied logically to a partnership limited by shares (Kommanditgesellschaft auf Aktien) to serve the interests of shareholders. In order to enable shareholders to compare the situation at other companies more easily, we have decided to base corporate governance on the conduct recommendations made by the Code Commission relating to management and supervision (governance) and to forego having our own, also permissible, code. With a few exceptions, the recommendations of the Code, the intent and meaning of which are applied, are complied with. To improve understanding, the following gives a general explanation of the company form Kommanditgesellschaft auf Aktien (KGaA) followed by the specific situation at Merck.

**Partnership limited by shares (Kommanditgesellschaft auf Aktien)**

The KGaA is a hybrid of a stock corporation and limited partnership.

"The partnership limited by shares (Kommanditgesellschaft auf Aktien or KGaA) is a company with its own legal personality, at which at least one partner has unlimited liability for the company's creditors (general partner) and the others hold an interest in the share capital without any personal liability for the company's debts (limited liability shareholders)" (section 278 (1) of the German Stock Corporation Act (AktG)). It is therefore a hybrid of an Aktiengesellschaft (German Stock Corporation) and a Kommanditgesellschaft (limited partnership) with a focus on stock corporation law. Distinctive differences to the Aktiengesellschaft include the presence of general partners, who essentially also manage the company's business activities, the absence of a management board and the restriction of rights and obligations of the supervisory board. In particular, the supervisory board is not responsible for appointing general partners or for regulating the terms and conditions of contracts, while at the Aktiengesellschaft it appoints the management board. At the KGaA, it also does not have the legal authority to issue rules of procedure for the executive board or a catalog of business transactions requiring approval. There are also special features with regard to the Annual General Meeting. For example, many of the resolutions made require the approval of the general partners (section 285 (2) AktG), including the adoption of the annual financial statements (section 286 (1) AktG). A large number of the conduct recommendations contained in the Code, which is geared towards Aktiengesellschaften, can therefore only be applied to a KGaA as appropriate.

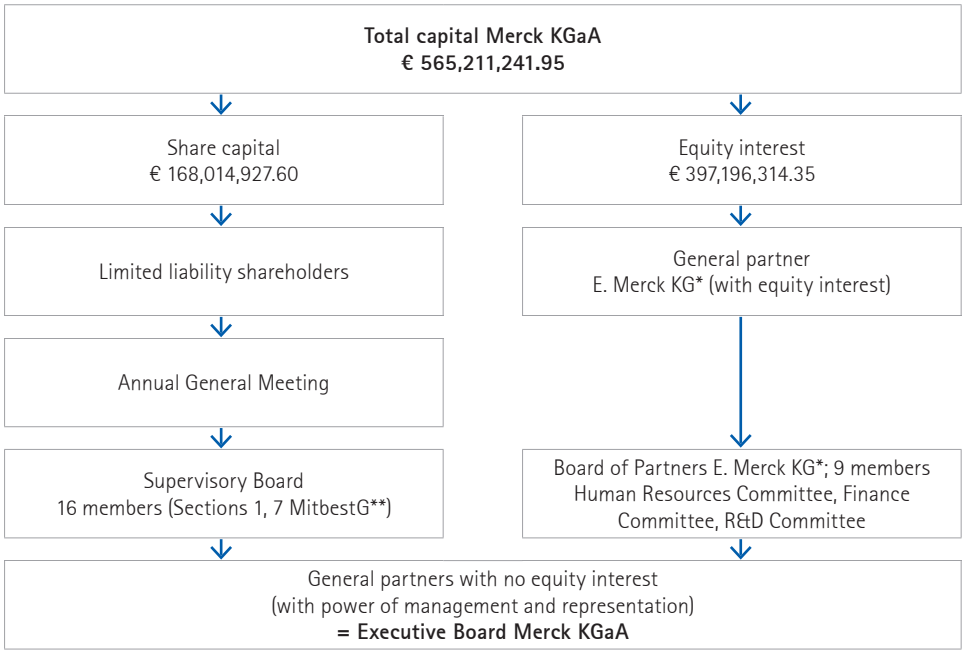
**Merck KGaA**

The general partner E. Merck KG (until and including December 31, 2008 E. Merck OHG) holds around 70% of the total capital of Merck KGaA (equity interest); the limited liability shareholders hold the remainder, which is divided into shares (share capital). E. Merck KG is excluded from the management of business activities. The general partners with no equity interest (Executive Board), on the other hand, manage business activities. Nevertheless, due to its substantial capital investment and unlimited personal liability, E. Merck KG is an influential authority with a strong interest in compliance with procedures and efficiency of business operations at Merck KGaA. Merck KGaA's participation in the profit or loss of E. Merck KG in accordance with Articles 26 et seq. of the Articles of Association provides for further harmonization of the interests of the limited liability shareholders and E. Merck KG.

Rules for Merck KGaA meet the requirements of the Code.

E. Merck KG appoints and dismisses the Executive Board. In addition, E. Merck KG has created bodies – complementing the expertise and activities of the Supervisory Board – to ensure that the Executive Board is monitored and advised. This applies primarily to the Board of Partners of E. Merck KG. Based on the provisions of the German Stock Corporation Act, the Articles of Association of Merck KGaA and the rules of procedure of the various committees, Merck KGaA has a set of regulations for the Executive Board and its supervision that meet the requirements of the Code. The investors, who bear the entrepreneurial risk, are protected as foreseen by the Code.

This is illustrated by the following chart:




* Until and including December 31, 2008: E. Merck OHG
** German Co-Determination Act

Deviations from the German Corporate Governance Code:

1. In accordance with 2.3.2, the company shall send notification of the convening of the General Meeting together with the convention documents to all domestic and foreign financial services providers, shareholders and shareholders' associations by electronic means if the approval requirements are fulfilled. Since Merck KGaA has issued bearer shares, it relies on the cooperation of the depositary banks for electronic transmissions. Past experience has shown that we reach far more shareholders via post than electronically, which is why we have previously refrained from establishing the approval requirements. In order to comply with the Code in the future, the approval requirements will be established at the next Annual General Meeting.
2. Contrary to section 3.8 (2), the Directors & Officers ("D&O") liability insurance policy, which Merck KGaA maintains for its committee members, does not include a deductible. The company has dispensed with a deductible because D&O insurance policies with the required deductible are not actively offered by the insurance sector and the individual agreement on a deductible is not countered by a substantial reduction in the premium.

3. Contrary to section 5.4.1 sentence 2, no age limit is taken into account when proposing the election of Supervisory Board members. The age of Supervisory Board members is not a criterion for their qualifications and competence. Moreover, the many years of experience of Supervisory Board members should not be dispensed with.
4. Contrary to section 5.4.6 (3), the remuneration paid to the members of the Supervisory Board is not reported individually. The amount of compensation received by the members of the Supervisory Board can be calculated in accordance with the Articles of Association of Merck KGaA, making a separate disclosure unnecessary.

## Main features of the Executive Board remuneration system
(section 4.2.5 of the German Corporate Governance Code)

The compensation of the general partners, who comprise the Executive Board of Merck KGaA, is composed of salary payments (fixed portion), profit participation and additions to pension provisions. Profit participation is based on the rolling three-year average of profit after tax. Payments in fiscal 2008 were as follows: fixed salary € 2.4 million, profit sharing € 9.9 million.

## Remuneration of Supervisory Board Members
(Section 5.4.6 of the German Corporate Governance Code)

Subject to the approval of the Annual General Meeting on the proposed distribution of a dividend of € 1.50 per share, the remuneration of the Supervisory Board in 2008 amounting to € 586 thousand consists of a fixed portion of € 116 thousand and a variable portion of € 470 thousand.

## Ownership, purchase or sale of shares in the company by members of the Executive Board and the Supervisory Board
(Section 6.6 of the German Corporate Governance Code)

As of December 31, 2008, the members of the Executive Board and the Supervisory Board held 17,337 shares. Their total ownership represents less than 1% of the issued shares of Merck KGaA.

Information on reportable transactions by members of the Executive Board and the Supervisory Board during fiscal 2008 pursuant to Section 15a of the German Securities Trading Act can be found on the Merck Web site at www.merck.de/investors –> Corporate governance.

# Board of Partners of E. Merck KG

Dr. Frank Stangenberg-Haverkamp, Chairman
Jon Baumhauer, Vice Chairman | Karl-Heinrich Kraft
Prof. Dr. Dr. h.c. Rolf Krebs | Albrecht Merck | Dr. Arend Oetker
Dr. Norbert Schweickert | Prof. Dr. Theo Siegert | Prof. Dr. Wilhelm Simson

# Report of the Supervisory Board

During fiscal 2008, the Executive Board provided the Supervisory Board with regular written and verbal reports on the business development of Merck KGaA and the Merck Group. In particular, the Supervisory Board was informed about the market and sales situation of the company against the background of macroeconomic developments, the financial position of the company and its subsidiaries, as well as their earnings development and corporate planning. The major business policy transactions were also discussed in five joint meetings with the Executive Board, specifically the integration of Serono S.A. No permanent Supervisory Board committees have been set up.

The annual financial statements of Merck KGaA, the consolidated financial statements of the Merck Group and the management reports for Merck KGaA and the Merck Group, including the accounts, were audited by KPMG AG Wirtschaftsprüfungsgesellschaft. The auditors issued an unqualified audit opinion on the annual financial statements and management report for Merck KGaA in accordance with German Auditing Standards. For the consolidated financial statements prepared in accordance with International Financial Reporting Standards, the auditors issued the auditor's report, reproduced in the Annual Report of the Merck Group. In addition, the auditors audited the calculation of Merck KGaA's participation in the profits of E. Merck KG in accordance with Art. 27 (3) of the Articles of Association. The annual financial statements of Merck KGaA, the consolidated financial statements of the Merck Group, the management reports for Merck KGaA and the Merck Group, and the proposal by the Executive Board for the appropriation of the net retained profit were presented and distributed to the Supervisory Board, together with the auditor's reports.

In accordance with Art. 14 (2) of the Articles of Association, the Supervisory Board also examined the annual financial statements of Merck KGaA and the management report for Merck KGaA, the proposal for the appropriation of the net retained profit and the auditor's report presented in accordance with Art. 27 (3) of the Articles of Association. It also examined the consolidated financial statements of the Merck Group, the management report for the Merck Group, and took note of the auditor's report of KPMG AG Wirtschaftsprüfungsgesellschaft.

The discussion of the relevant agenda item at the Supervisory Board's meeting on February 12, 2009 to approve the financial statements was also attended by the auditors signing the audit opinion on the annual financial statements of Merck KGaA and the consolidated financial statements of the Merck Group, who reported on their audit. The Supervisory Board took note of and approved the results of the audit. On completion of its examination, the Supervisory Board raised no objections and thus approves the annual financial statements and management report for Merck KGaA, the consolidated financial statements of the Merck Group and the management report for the Merck Group prepared by the Executive Board, as well as the report presented by the auditors in accordance with Art. 27 (3) of the Articles of Association. The Supervisory Board gives its consent to the proposal for the appropriation of the net retained profit.

In 2008, considerable changes were made to the Supervisory Board in terms of both organization and personnel: The number of employees at Merck KGaA and associated companies in Germany has increased steadily. Merck now has more than 10,000 employees throughout Germany. Therefore the Supervisory Board was enlarged from 12 to a total of 16 members. The term of office of all members of the Supervisory Board legally ended with the 2008 Annual General Meeting. New elections were therefore necessary.

The Annual General Meeting elected the following shareholder representatives to the Supervisory Board: Johannes Baillou, Frank Binder, Prof. Dr. Rolf Krebs, Dr. Arend Oetker, Prof. Dr. Theo Siegert and Prof. Dr. Wilhelm Simson. The holder of the registered share appointed Michaela Freifrau von Glenck and Albrecht Merck to the Supervisory Board. Jon Baumhauer, the former member representing the holder of the registered share on the Supervisory Board, no longer stood for re-election. It was not possible to hold an election of the employee representatives on the Supervisory Board in accordance with the applicable rules within the time period available. A procedure for the court appointment of the employee representatives was therefore initiated. Darmstadt District Court appointed Heiner Wilhelm, Claudia Flauaus and Michael Fletterich as the employee representatives, Dr. Daniele Bruns as the senior executive representative and Mr. Osman Ulusoy as the union representative. The District Court appointed Edeltraud Glänzer as the second union representative in place of Klaus Brauer, who was no longer available. Judith Delp and Frieder Kaufmann were appointed as additional members of the Supervisory Board. The election of the employee representatives is expected to be completed in the course of 2009.

The General Partner E. Merck KG, the Supervisory Board and the Executive Board thanked Messrs. Baumhauer and Brauer, who each served as members of the Supervisory Board for over a decade, for their critical and constructive as well as objective work in advising and supervising the Executive Board of Merck KGaA.

Darmstadt, February 12, 2009
The Supervisory Board of Merck KGaA

Prof. Dr. Wilhelm Simson
Chairman

# Supervisory Board of Merck KGaA

Prof. Dr. Wilhelm Simson, Chairman
Heiner Wilhelm*, Vice Chairman | Johannes Baillou | Frank Binder
Dr. Daniele Bruns* | Judith Delp* | Claudia Flauaus* | Michael Fletterich*
Edeltraud Glänzer* | Michaela Freifrau von Glenck | Frieder Kaufmann*
Prof. Dr. Dr. h.c. Rolf Krebs | Albrecht Merck | Dr. Arend Oetker | Prof. Dr. Theo Siegert
Osman Ulusoy*

*Employee representatives

# Consolidated Financial Statements of the Merck Group

# Income Statement

Notes to the Income Statement: see page 90

| € million | Note | 2008 | 2007 |
|---|---|---|---|
| **Sales** | [1] | **7,201.6** | **6,775.1** |
| Royalty income | [2] | 356.4 | 282.0 |
| **Total revenues** | | **7,558.0** | **7,057.1** |
| Cost of sales | [3] | –1,906.0 | –1,779.8 |
| **Gross margin** | | **5,652.0** | **5,277.3** |
| Marketing and selling expenses | [4] | –2,096.6 | –1,932.7 |
| Administration expenses | [5] | –446.2 | –444.7 |
| Other operating income and expenses | [6] | –170.1 | –339.8 |
| Research and development | [7] | –1,234.4 | –1,027.7 |
| Amortization of intangible assets | [8] | –573.4 | –556.7 |
| Investment result | [9] | 0.1 | 0.3 |
| **Operating result** | | **1,131.4** | **976.0** |
| Exceptional items | [10] | –400.0 | –775.6 |
| **Earnings before interest and tax (EBIT)** | | **731.4** | **200.4** |
| Financial result | [11] | –156.5 | –311.3 |
| **Profit before tax** | | **574.9** | **–110.9** |
| Income tax | [12] | –195.8 | 23.1 |
| **Profit after tax from continuing operations** | | **379.1** | **–87.8** |
| Profit after tax from discontinued operations | [13] | – | 3,608.0 |
| **Profit after tax** | | **379.1** | **3,520.2** |
| Minority interest | [14] | –12.0 | –20.1 |
| **Net profit after minority interest** | | **367.1** | **3,500.1** |
| **Earnings per share from continuing operations (in €)** | [15] | | |
| basic | | 1.69 | –0.50 |
| diluted | | 1.69 | –0.50 |
| **Earnings per share from continuing and discontinued operations (in €)** | | | |
| basic | | 1.69 | 16.21 |
| diluted | | 1.69 | 16.21 |

# Balance Sheet

Notes to the Balance Sheet: see page 98

| € million | Note | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|---|
| **Current assets** | | | |
| Cash and cash equivalents | [16] | 692.7 | 426.6 |
| Marketable securities and financial assets | [17] | 176.8 | 565.3 |
| Trade accounts receivable | [18] | 1,659.4 | 1,378.3 |
| Inventories | [19] | 1,407.4 | 1,158.5 |
| Other current assets | [20] | 283.3 | 226.4 |
| Tax receivables | [21] | 139.1 | 43.5 |
| Assets held for sale | [22] | – | 26.9 |
| | | **4,358.7** | **3,825.5** |
| **Non-current assets** | | | |
| Intangible assets | [23] | 8,203.4 | 8,164.6 |
| Property, plant and equipment | [24] | 2,440.1 | 2,274.5 |
| Investments at equity | [25] | 1.3 | 1.4 |
| Non-current financial assets | [25] | 97.4 | 130.3 |
| Other non-current financial assets | [20] | 63.7 | 61.8 |
| Deferred tax assets | [12] | 480.1 | 464.2 |
| | | **11,286.0** | **11,096.8** |
| **Total assets** | | **15,644.7** | **14,922.3** |
| **Current liabilities** | | | |
| Current financial liabilities | [26] | 266.2 | 300.4 |
| Trade accounts payable | [27] | 843.7 | 646.9 |
| Other current liabilities | [28] | 694.2 | 981.3 |
| Tax liabilities | [29] | 347.2 | 337.1 |
| Current provisions | [30] | 227.1 | 297.0 |
| Liabilities held for sale | [22] | – | 8.0 |
| | | **2,378.4** | **2,570.7** |
| **Non-current liabilities** | | | |
| Non-current financial liabilities | [26] | 1,080.1 | 1,046.6 |
| Other non-current liabilities | [28] | 19.6 | 39.5 |
| Non-current provisions | [30] | 563.4 | 570.0 |
| Provisions for pensions and other post-employment benefits | [31] | 1,144.0 | 1,185.5 |
| Deferred tax liabilities | [12] | 896.2 | 822.4 |
| | | **3,703.3** | **3,664.0** |
| **Net equity** | [32] | | |
| Equity capital | | 565.2 | 565.2 |
| Reserves | | 8,940.2 | 8,060.5 |
| Minority interest | | 57.6 | 61.9 |
| | | **9,563.0** | **8,687.6** |
| **Total liabilities and stockholders' equity** | | **15,644.7** | **14,922.3** |

# Segment Reporting

Notes to the Segment Reporting: see page 123

| € million | Merck Serono | | Consumer Health Care | | Pharmaceuticals | | Liquid Crystals | | Performance & Life Science Chemicals | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 |
| Sales | 4,649.6 | 4,187.0 | 439.9 | 418.2 | 5,089.5 | 4,605.2 | 864.6 | 909.4 | 1,240.9 | 1,231.3 |
| Royalty income | 337.2 | 270.7 | 1.8 | 1.5 | 339.0 | 272.2 | 12.3 | 6.3 | 5.1 | 3.5 |
| Total revenues | 4,986.8 | 4,457.7 | 441.7 | 419.7 | 5,428.5 | 4,877.4 | 876.9 | 915.7 | 1,246.0 | 1,234.8 |
| Gross margin | 4,191.3 | 3,764.7 | 293.7 | 283.7 | 4,485.0 | 4,048.4 | 540.6 | 611.3 | 629.1 | 615.1 |
| Selling. general and administration | –1,958.9 | –1,980.9 | –213.4 | –210.0 | –2,172.3 | –2,190.9 | –61.4 | –42.5 | –401.4 | –409.9 |
| Research and development | –1,074.4 | –878.6 | –16.8 | –12.0 | –1,091.2 | –890.6 | –84.8 | –78.8 | –58.4 | –58.3 |
| Operating result | 593.7 | 356.9 | 61.3 | 59.6 | 655.0 | 416.5 | 391.2 | 486.6 | 166.5 | 144.4 |
| Exceptional items | –354.0 | –743.6 | – | – | –354.0 | –743.6 | – | – | –46.0 | – |
| Earnings before interest and tax (EBIT) | 239.7 | –386.7 | 61.3 | 59.6 | 301.0 | –327.1 | 391.2 | 486.6 | 120.5 | 144.4 |
| Net operating assets | 10,355.9 | 9,884.8 | 325.9 | 281.0 | 10,681.8 | 10,165.8 | 944.3 | 915.1 | 1,127.7 | 1,053.0 |
| Segment liabilities | –972.1 | –799.0 | –62.6 | –54.5 | –1,034.7 | –853.5 | –98.2 | –90.0 | –173.6 | –176.9 |
| Capital spending on property. plant and equipment | 235.4 | 147.6 | 14.1 | 6.1 | 249.5 | 153.7 | 64.5 | 48.6 | 78.9 | 57.9 |
| Investments in intangible assets | 123.2 | 91.7 | 2.4 | 0.8 | 125.6 | 92.5 | 2.0 | 1.5 | 3.4 | 7.5 |
| Net cash flows from operating activities | 926.8 | 875.9 | 45.6 | 50.9 | 972.4 | 926.8 | 472.7 | 474.0 | 146.5 | 181.1 |
| Net cash flows from investing activities | –373.1 | –7,381.0 | –40.0 | –4.0 | –413.1 | –7,385.0 | –70.6 | –49.2 | –88.8 | –49.3 |
| Free cash flow* | 553.8 | –6,505.1 | 5.6 | 46.9 | 559.4 | –6,458.2 | 402.1 | 424.8 | 57.7 | 131.8 |
| Impairment losses | –338.8 | –100.2 | – | – | –338.8 | –100.2 | –0.6 | –0.2 | –6.1 | –8.9 |

| | Germany | | France | | Switzerland | | Rest of Europe | |
|---|---|---|---|---|---|---|---|---|
| € million | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 |
| Sales by customer location | 722.2 | 711.2 | 779.0 | 737.8 | 77.9 | 75.7 | 1,944.4 | 1,797.2 |
| Sales by company | 1,093.1 | 1,050.5 | 885.5 | 847.9 | 197.9 | 184.3 | 1,643.8 | 1,495.9 |
| Total revenues | 1,109.6 | 1,061.7 | 892.0 | 854.5 | 441.4 | 382.0 | 1,644.5 | 1,496.0 |
| Intragroup sales with other regions | 1,604.0 | 1,444.5 | 129.9 | 115.5 | 2,038.6 | 1,875.6 | 932.7 | 820.6 |
| Operating result | 382.4 | 483.5 | 262.3 | 174.2 | –966.5 | –1,002.8 | 615.6 | 551.6 |
| Exceptional items | –16.1 | –32.0 | –11.9 | 1.9 | –244.1 | –734.0 | –26.8 | –11.5 |
| Earnings before interest and tax (EBIT) | 239.5 | 451.5 | 250.5 | 176.1 | –1,210.6 | –1,736.8 | 588.8 | 540.1 |
| Net operating assets | 1,870.1 | 2,027.6 | 458.5 | 559.0 | 8,049.5 | 6,939.9 | 984.0 | 975.0 |
| Capital spending on property, plant and equipment | 160.4 | 128.9 | 12.4 | 13.9 | 118.5 | 43.9 | 40.1 | 25.8 |
| Investments in intangible assets | 73.2 | 36.0 | 2.1 | – | 34.0 | 43.6 | 3.2 | 5.8 |
| Research and development | –571.1 | –445.6 | –55.0 | –92.3 | –558.7 | –476.2 | –31.6 | –24.2 |
| Number of employees | 10,301 | 10,142 | 2,364 | 2,415 | 2,090 | 1,812 | 4,351 | 4,561 |

* including Discontinued operations

| Chemicals | | Corporate and Other | | Discontinued Operations (Generics) | | Reversal Discontinued Operations (Generics) | | Group/ Continuing Operations | |
|---|---|---|---|---|---|---|---|---|---|
| 2008 | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 |
| 2,105.5 | 2,140.7 | 6.6 | 29.2 | – | 1,391.8 | – | –1,391.8 | 7,201.6 | 6,775.1 |
| 17.4 | 9.8 | – | – | – | 2.7 | – | –2.7 | 356.4 | 282.0 |
| 2,122.9 | 2,150.5 | 6.6 | 29.2 | – | 1,394.5 | – | –1,394.5 | 7,558.0 | 7,057.1 |
| 1,169.7 | 1,226.4 | –2.7 | 2.5 | – | 656.8 | – | –656.8 | 5,652.0 | 5,277.3 |
| –462.8 | –452.4 | –77.8 | –73.8 | – | –364.6 | – | 364.6 | –2,712.9 | –2,717.1 |
| –143.2 | –137.1 | – | – | – | –95.3 | – | 95.3 | –1,234.4 | –1,027.7 |
| 557.7 | 631.0 | –81.3 | –71.5 | – | 188.7 | – | –188.7 | 1,131.4 | 976.0 |
| –46.0 | – | – | –32.0 | – | 3,561.5 | – | –3,561.5 | –400.0 | –775.6 |
| 511.7 | 631.0 | –81.3 | –103.5 | – | 3,750.2 | – | –3,750.2 | 731.4 | 200.4 |
| 2,072.0 | 1,968.1 | 14.4 | 46.0 | – | 19.4 | – | –19.4 | 12,768.2 | 12,179.9 |
| –271.8 | –266.9 | –10.2 | –7.6 | – | –7.5 | – | 7.5 | –1,316.7 | –1,128.0 |
| 143.4 | 106.5 | 1.8 | 3.1 | – | 19.5 | – | –19.5 | 394.7 | 263.3 |
| 5.4 | 9.0 | 9.9 | 0.1 | – | 19.5 | – | –19.5 | 140.9 | 101.6 |
| 619.2 | 655.1 | –567.6 | –400.5 | – | 36.9 | – | –36.9 | 1,024.0 | 1,181.4 |
| –159.4 | –98.5 | 490.8 | –41.9 | – | 4,797.9 | – | –4,797.9 | –81.7 | –7,525.4 |
| 459.8 | 556.6 | –580.8 | –406.3 | – | 4,834.8 | – | –4,834.8 | 438.4 | –6,307.9 |
| –6.7 | –9.1 | –0.1 | – | – | – | – | – | –345.6 | –109.3 |

| North America | | Latin America | | Asia | | Rest of World | | Group | |
|---|---|---|---|---|---|---|---|---|---|
| 2008 | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 | 2008 | 2007 |
| 1,015.1 | 968.2 | 806.2 | 699.8 | 1,663.4 | 1,604.5 | 193.4 | 180.7 | 7,201.6 | 6,775.1 |
| 978.0 | 935.8 | 791.1 | 690.9 | 1,511.6 | 1,456.9 | 100.6 | 112.9 | 7,201.6 | 6,775.1 |
| 979.1 | 937.1 | 791.1 | 690.7 | 1,599.7 | 1,522.2 | 100.6 | 112.9 | 7,558.0 | 7,057.1 |
| 36.5 | 36.1 | 3.0 | 3.3 | 37.2 | 36.0 | – | – | 4,781.9 | 4,331.6 |
| 390.2 | 344.5 | 180.9 | 169.7 | 240.8 | 226.8 | 25.7 | 28.5 | 1,131.4 | 976.0 |
| –61.9 | – | –25.7 | – | –13.5 | – | – | – | –400.0 | –775.6 |
| 455.1 | 344.5 | 155.2 | 169.7 | 227.2 | 226.8 | 25.7 | 28.5 | 731.4 | 200.4 |
| 224.7 | 532.8 | 321.4 | 285.2 | 833.5 | 813.0 | 26.5 | 47.4 | 12,768.2 | 12,179.9 |
| 18.4 | 12.9 | 19.5 | 10.3 | 24.1 | 26.4 | 1.3 | 1.2 | 394.7 | 263.3 |
| 18.5 | 9.2 | 6.4 | 5.2 | 3.5 | 1.8 | – | – | 140.9 | 101.6 |
| 4.7 | 32.1 | –6.1 | –3.6 | –13.7 | –15.9 | –2.9 | –2.0 | –1,234.4 | –1,027.7 |
| 2,157 | 2,034 | 4,370 | 4,054 | 6,504 | 5,325 | 663 | 625 | 32,800 | 30,968 |

# Cash Flow Statement

Notes to the Cash Flow Statement: see page 124

| € million | Note | 2008 | 2007 |
|---|---|---|---|
| **Profit after tax** | | **379.1** | **3,520.2** |
| Depreciation/amortization and impairment losses (non-current assets) | | 1,215.3 | 923.6 |
| Changes in inventories | | –225.5 | –170.5 |
| Changes in trade receivables | | –268.1 | –152.6 |
| Changes in trade payables | | 189.3 | 131.2 |
| Changes in provisions | | –71.0 | 53.2 |
| Changes in other assets and liabilities | | –187.3 | –330.2 |
| Gains/Losses on disposals of assets | | –4.0 | –3,481.3 |
| Other non-cash income and expenses | | –3.8 | 724.7 |
| **Net cash flows from operating activities** | [33] | **1,024.0** | **1,218.3** |
| thereof: Discontinued Operations | | – | 36.9 |
| Purchase of intangible assets | | –140.9 | –121.1 |
| Purchase of property, plant and equipment | | –394.7 | –282.8 |
| Acquisitions and investments in other financial assets | | –78.2 | –7,318.0 |
| Disposal of non-current assets | | 35.7 | 4,995.8 |
| Changes in securities | | –7.5 | 34.7 |
| Changes in other financial assets | | 503.9 | –36.1 |
| **Net cash flows from investing activities** | [34] | **–81.7** | **–2,727.5** |
| thereof: Discontinued Operations | | – | 4,797.9 |
| Dividend payments | | –212.5 | –77.0 |
| Capital increase including amounts due to stock option plans | | 0.2 | 2,038.4 |
| Profit transfers to E. Merck KG and changes in reserves | | –239.9 | –535.8 |
| Changes in liabilities to E. Merck KG | | –291.0 | 396.4 |
| Bonds issued | | – | 497.9 |
| Changes in current and non-current financial liabilities | | 76.5 | –827.1 |
| **Net cash flows from financing activities** | [35] | **–666.7** | **1,492.8** |
| thereof: Discontinued Operations | | – | –7.8 |
| **Changes in cash and cash equivalents** | | **275.6** | –16.4 |
| Changes in cash and cash equivalents due to currency translation | | –9.5 | –17.1 |
| Cash and cash equivalents as of January 1 | | 426.6 | 460.1 |
| **Cash and cash equivalents as of December 31** | [36] | **692.7** | **426.6** |

# Free Cash Flow

| € million | Note | 2008 | 2007 |
|---|---|---|---|
| **Net cash flows from operating activities** | | **1,024.0** | **1,218.3** |
| Purchase of intangible assets | | –140.9 | –121.1 |
| Purchase of property, plant and equipment | | –394.7 | –282.8 |
| Acquisitions and investments in other financial assets | | –78.2 | –7,318.0 |
| Disposal of assets | | 35.7 | 4,995.8 |
| Purchase/sale of marketable securities | | –7.5 | 34.7 |
| **Free cash flow** | [37] | **438.4** | **–1,473.1** |
| **Free cash flow before acquisitions and divestments** | | **601.3** | **977.7** |

# Statement of Recognized Income and Expense

| € million | Note | | 2008 | | 2007 |
|---|---|---|---|---|---|
| **Profit after tax** | | | **379.1** | | **3,520.2** |
| Gains/losses recognized immediately in equity | | | | | |
| Unrealized gains/losses from the fair value measurement of financial instruments | [32] | 58.7 | | 71.4 | |
| Actuarial gains/losses from defined benefit pension commitments and similar obligations | [31] | 31.7 | | 102.4 | |
| Deferred taxes on gains/losses recognized immediately in equity | [12] | –17.9 | | –30.8 | |
| Currency translation difference | | 878.0 | 950.5 | –205.8 | –62.8 |
| **Comprehensive income** | | | **1,329.6** | | **3,457.4** |
| of which attributable to minority interest | | | 3.7 | | 20.1 |
| of which attributable to shareholders of the Group | | | 1,325.9 | | 3,437.3 |

# Statement of Changes in Net Equity including Minority Interest

| | Equity capital | | Reserves | | | | |
|---|---|---|---|---|---|---|---|
| € million | General partner's equity Merck KGaA | Subscribed capital Merck KGaA | Capital reserves (share premium) Merck KGaA | Retained earnings/ Net retained profit | Gains/losses recognized immediately in equity | Minority interest | Total |
| **Balance as of January 1, 2007** | **363.2** | **133.4** | **1,826.1** | **2,018.3** | **–587.7** | **54.1** | **3,807.4** |
| Profit after tax | – | – | – | 3,500.1 | – | 20.1 | 3,520.2 |
| Dividend payments | – | – | – | –67.8 | – | –9.2 | –77.0 |
| Profit transfers to/from E. Merck KG including transfers to reserves | – | – | – | –535.8 | – | – | –535.8 |
| Capital increase due to the exercise of stock options | – | 0.1 | 0.6 | – | – | – | 0.7 |
| Capital increase | 34.0 | 34.5 | 1,986.8 | –17.6 | – | – | 2,037.7 |
| Other changes in equity | – | – | – | – | –62.8 | – | –62.8 |
| Changes in companies consolidated/Other | – | – | – | 0.3 | – | –3.1 | –2.8 |
| **Balance as of December 31, 2007** | **397.2** | **168.0** | **3,813.5** | **4,897.5** | **–650.5** | **61.9** | **8,687.6** |
| | | | | | | | |
| **Balance as of January 1, 2008** | **397.2** | **168.0** | **3,813.5** | **4,897.5** | **–650.5** | **61.9** | **8,687.6** |
| Profit after tax | – | – | – | 367.1 | – | 12.0 | 379.1 |
| Dividend payments | – | – | – | –206.8 | – | –5.7 | –212.5 |
| Profit transfers to/from E. Merck KG including transfers to reserves | – | – | – | –239.9 | – | – | –239.9 |
| Capital increase due to the exercise of stock options | – | – | 0.2 | – | – | – | 0.2 |
| Other changes in equity | – | – | – | – | 958.8 | –8.3 | 950.5 |
| Changes in companies consolidated/Other | – | – | – | 0.3 | – | –2.3 | –2.0 |
| **Balance as of December 31, 2008** | **397.2** | **168.0** | **3,813.7** | **4,818.2** | **308.3** | **57.6** | **9,563.0** |

# Notes

### Preliminary remarks

The accompanying consolidated financial statements have been prepared with Merck KGaA – which manages the operations of the Merck Group – as parent company. In accordance with the provisions of the German financial reporting disclosure law (Publizitätsgesetz), consolidated financial statements are also prepared for E. Merck KG (until and including December 31, 2008: E. Merck OHG), the general partner of Merck KGaA with an equity interest of 70.3% as of December 31, 2008. These include Merck KGaA and its subsidiaries. The authoritative German versions of these financial statements are filed with the electronic German Federal Gazette (elektronischer Bundesanzeiger) and can then be accessed at www.ebundesanzeiger.de.

### Application of International Financial Reporting Standards (IFRS)

The consolidated financial statements of the Merck Group – with Merck KGaA as parent company – have been prepared in accordance with consistent accounting policies. Pursuant to Section 315a HGB (German Commercial Code), the International Financial Reporting Standards (IFRS) in force on the reporting date and adopted by the European Union as issued by the International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC) have been applied.

The following amendments to standards as well as the following interpretations were effective for the first time in fiscal 2008:
– Amendments to IAS 39 and IFRS 7: "Reclassification of Financial Instruments"
– IFRIC 11: "IFRS 2: Group and Treasury Share Transactions"
The new rules had no material effects on the consolidated financial statements of the Merck Group.

The following standard and amendments to standards and the following interpretations will take effect as of fiscal 2009:
– IFRS 8 "Operating Segments"
– Revised version of IAS 1 "Presentation of Financial Statements: A Revised Presentation"
– Revised version of IAS 23 "Borrowing Costs"
– Amendment to IAS 32 and IAS 1: "Puttable Financial Instruments and Obligations Arising on Liquidation"
– Amendment to IFRS 1 and IAS 27: "Cost of an Investment in a Subsidiary, Jointly Controlled Entity or Asscociate"
– Amendment to IFRS 2 "Share-based payment - Vesting Conditions and Cancellations"
– "Improvements to International Financial Reporting Standards"
– IFRIC 13 "Customer Loyalty Programmes"
– IFRIC 14: "IAS 19 – The Limit on a Defined Benefit Asset, Minimum Funding Requirements and their Interaction"
We do not expect the new rules to have any material effects on the consolidated financial statements.

In addition, the following amendments to standards were published by the International Accounting Standards Board (IASB) and the following interpretations published by the International Financial Reporting Interpretations Committee (IFRIC), but not yet adopted by the EU:

- Amendment to IAS 27 "Consolidated and Separate Financial Statements"
- Amendment to IAS 39 "Financial Instruments: Recognition and Measurement: Eligible Hedged Items"
- Amendment to IAS 39 and IFRS 7: "Reclassification of Fianancial Assets: Effective Date and Transition"
- Revised version of IFRS 1 "First-time Adoption of Internatioanl Financial Reporting Standards"
- Revised version of IFRS 3 "Business Combinations"
- IFRIC 12 "Service Concession Arrangements"
- IFRIC 15 "Agreements for the Construction of Real Estate"
- IFRIC 16 "Hedges of a Net Investment in a Foreign Operation"
- IFRIC 17 "Distributions of Non-cash Assets to Owners"
- IFRIC 18 "Transfers of Assets from Customers"

We currently do not expect the new rules to have any material effects on the consolidated financial statements.

### Companies consolidated

Including the parent company Merck KGaA, Darmstadt, 178 companies are fully consolidated in the annual financial statements of the Merck Group. One associate is included using the equity method. Due to secondary importance 40 investments are not consolidated and are presented under non-current financial assets. In fiscal 2008, ten companies were included in the consolidated financial statements for the first time, and 24 companies were deconsolidated, mainly as a result of company mergers.

## Acquisitions

At the end of 2007, we completed the acquisition of a 100% interest in Solvent Innovation GmbH of Cologne, Germany, for a purchase price of € 2.0 million. The company, which was consolidated for the first time as of January 1, 2008, is strengthening the research activities of our Performance & Life Science Chemicals division in the field of ionic liquids.

On February 29, 2008, Merck acquired a 100% interest in SeQuant AB of Umea, Sweden, for € 6.9 million. This included transaction costs of € 0.1 million. The company is strengthening the activities of our Performance & Life Science Chemicals division in the field of chromatography. The company was consolidated for the first time on March 1, 2008.

On June 30, 2008, Litec-LLL GmbH of Greifswald, Germany was acquired in full for € 5.6 million (including transaction costs of € 0.6 million). The company specializes in research and development as well as production and marketing of ortho-silicate lighting materials. The acquisition of the company, which was founded in 2002, gives Merck access to the business with light sources for LEDs. The company was consolidated for the first time on July 1, 2008 and is part of the Liquid Crystals division.

On August 21 and 27, we increased our interest in the fully consolidated Indonesian company PT Merck Tbk of Jakarta, Indonesia, by a total of 12.66% to 86.65%, for € 10.2 million.

On December 1, 2008, Merck acquired Bio-Fyt Pharma N.V. of Sint-Jans-Molenbeek, Belgium, in full for € 30.0 million. Including the assumption of cash and transaction costs of € 0.2 million, the total cost of the acquisition was € 32.6 million. The company, which is now part of the Consumer Health Care division, develops and markets products for mobility, women's health and everyday health protection. The company was consolidated for the first time on December 1, 2008.

Overall, the changes in the companies consolidated due to acquisitions had the following effects on the consolidated balance sheet:

| | Acquisitions | | | Disposals/ Deconsolidations |
|---|---|---|---|---|
| € million | Pre-acquisition book value | Adjustment | Fair value | Disposal at book value |
| Goodwill | – | 26.7 | 26.7 | – |
| Other intangible assets | 0.4 | 30.6 | 31.0 | – |
| Property, plant and equipment | 1.1 | –0.3 | 0.8 | – |
| Other non-current assets | 0.2 | 0.1 | 0.3 | – |
| Cash and cash equivalents | 4.3 | – | 4.3 | – |
| Other current assets | 3.4 | 1.6 | 5.0 | – |
| Current and non-current liabilities | 3.5 | 9.8 | 13.3 | – |

The acquisition of Bio-Fyt Pharma N.V, of Sint-Jans-Molenbeek, Belgium, was responsible for € 14.8 million of the effect from the adjustment of goodwill. A further € 7.7 million was due to the purchase of additional holdings in PT Merck Tbk of Jakarta, Indonesia. € 4.2 million resulted from the other named acquisitions.

The adjustment of other intangible assets primarily includes the purchase price allocation to brands, product rights, patents and technical know-how.

Taking into account the acquisitions made in 2008, sales and operating result were impacted as follows in the reporting period:

| € million | Acquisitions/ First-time consolidations | Disposals/ Deconsolidations |
|---|---|---|
| Sales | 1.4 | – |
| Cost of sales | –2.2 | – |
| Other income/expenses | –1.9 | – |
| Operating result | –2.7 | – |

### Disposals/Discontinued operations

On May 13, 2007, Merck and Mylan Inc., Canonsburg, PA (USA), entered into an agreement concerning the sale of the Generics business. The business was transferred to the acquirer with the closing on October 2, 2007.

In accordance with IFRS 5, the gain on the disposal pursuant to this agreement is combined with the result of this activity up until the closing date under profit/loss from discontinued operations.

Within the scope of the agreement, Mylan Inc. was granted an option to purchase the Generics business remaining with the Merck Group after the transfer. This option was already reflected in the purchase price. The remaining Generics business is immaterial for Merck and is reported in 2008 as part of the Merck Serono division.

The reported profit/loss from discontinued operations for 2007 comprises the following:

| € million | 2007 |
|---|---|
| Total revenues | 1,394.5 |
| Cost of sales | –737.7 |
| Marketing and selling expenses | –271.9 |
| Administration expenses | –66.0 |
| Other operating income and expenses | –34.9 |
| Research and development costs | –95.3 |
| **Operating result** | **188.7** |
| Exceptional items | 3,561.5 |
| **Earnings before interest and tax (EBIT)** | **3,750.2** |
| Financial result | 10.1 |
| **Profit before tax** | **3,760.3** |
| Taxes on income | –168.3 |
| **Profit after tax** | **3,592.0** |
| Reversal of depreciation in accordance with IFRS 5 | 16.0 |
| **Profit after tax in accordance with IFRS 5** | **3,608.0** |
| thereof: | |
| Profit before tax of current business | 207.2 |
| Taxes on income | –70.1 |
| **Profit after tax of current business** | **137.1** |
| Gain on disposal before tax | 3,569.1 |
| Taxes on income | –98.2 |
| **Gain on disposal after tax** | **3,470.9** |

# Accounting policies

The preparation of the consolidated financial statements in accordance with IFRS requires the use of estimates when reporting and measuring assets and liabilities. These are reviewed on an ongoing basis. Changes are recorded in the reporting period or in future periods. Assumptions and estimates are made in particular in connection with the measurement of intangible assets and provisions. If these do not prove to be accurate, this may give rise to the need for write-downs, which could materially impact the consolidated result. The material assumptions and parameters for the estimates made are disclosed in the Notes.

### Consolidation methods

The consolidated financial statements are based on the single-entity financial statements of the consolidated companies as of December 31, 2008, which were prepared applying consistent accounting polices in accordance with IFRS.

Acquisitions are accounted for using the purchase method in accordance with IFRS 3. Subsidiaries consolidated for the first time in the reporting period are measured at the carrying values at the time of acquisition on the basis of corresponding annual and interim financial statements. Resulting differences are recognized as assets and liabilities to the extent that their fair values differ from the values actually carried in the financial statements. Any remaining difference is recognized as goodwill within intangible assets, and is subjected to a regular impairment test.

Intragroup sales, expenses and income, as well as all receivables and payables between the consolidated companies, were eliminated. The effects of intragroup deliveries reported under non-current assets and inventories have been adjusted by eliminating any intragroup profits.

### Currency translation

The functional currency concept applies to the translation of financial statements of consolidated companies prepared in foreign currencies. The companies of the Merck Group conduct their operations independently. The functional currency of these companies is the respective local currency. In accordance with IAS 21 "The Effects of Changes in Foreign Exchange Rates", assets and liabilities are translated at the closing rate, and income and expenses are translated at weighted average annual rates to euros, the reporting currency. If Group companies are deconsolidated, existing currency differences are reversed and recognized in income.

Business transactions that are conducted in currencies other than the local currency are recorded using the current exchange rate on the date of the transaction. Foreign currency monetary items (cash and cash equivalents, receivables and payables) in the single-entity financial statements of the consolidated companies prepared in the local currency are translated at the respective closing rates. Exchange differences from the translation of monetary items are recognized in the income statement with the exception of cases of IAS 21.15, 21.15A and 21.33 (Net investment in a foreign operation). Hedged items are likewise carried at the closing rate in accordance with IAS 21. The resulting gains or losses are eliminated in the income statement against offsetting amounts from the fair value measurement of derivatives. Non-monetary items denominated in foreign currencies are carried at historical cost.

**Recognition of sales and other revenue**

Sales are recognized net of rebates, discounts and returns as well as related taxes. They are deemed realized once the goods are delivered, the services have been rendered or the material opportunities and risks of ownership have been transferred. In addition, payment must be sufficiently probable. Sales also include revenue from services, but the volume involved is insignificant. Depending on the substance of the relevant agreements, compensation for use of assets by others and license royalties are recognized either immediately or on an accruals basis if a contractual obligation concerning further payments exists, Dividend revenue is recognized when the shareholders' right to receive the dividend is established. This is normally the date of the dividend resolution. Interest revenue is recognized on a time-proportionate basis using the effective rate method.

**Research and development**

The breakdown of research and development costs by divisions and regions is presented under "Segment Reporting". In addition to the costs of research departments and process development, this item also includes the cost of purchased services and the cost of clinical trials. The costs of research and development are expensed in full in the period in which they are incurred. Development expenses in the Pharmaceuticals business sector cannot be capitalized since the high level of risk up to the time that pharmaceutical products are marketed means that the requirements of IAS 38 are not satisfied in full. Costs incurred after regulatory approval are insignificant. In the same way, the risks involved until products are marketed means that development expenses in the Chemicals business sector cannot be capitalized. In addition to our own research and development, Merck is also a partner in collaborations aimed at developing marketable products. These collaborations typically involve payments for the achievements of certain milestones.

With respect to this situation, an assessment is required as to whether these upfront or milestone payments represent compensation for services performed (ongoing research and development expense) or whether the payments represent the acquisition of a right which has to be capitalized. Reimbursements for R&D are offset against research and development costs.

### Cash and cash equivalents

Cash and cash equivalents include cash and monetary deposits with a maturity of 90 days from the date of acquisition.

### Receivables and other assets

Receivables and other assets are carried at amortized cost. Write-downs are charged for default risks unless these are covered by insurance. Non-interest-bearing or low-interest non-current receivables are carried at their present value. Derivative financial assets are reported at fair value (see also “Financial Instruments”).

### Inventories

Inventories are carried at cost using the weighted average method. In accordance with IAS 2, in addition to directly attributable unit costs, manufacturing costs also include overheads attributable to the production process, including an appropriate share of depreciation charges on production facilities, which are determined on the basis of normal capacity utilization of the production facilities. Financing costs are not included.

Inventories are written down if the net realizable value is lower than the acquisition or manufacturing cost carried in the balance sheet.

### Intangible assets

Acquired intangible assets are recognized at cost and are classified as assets with finite and indefinite useful lives. Intangible assets acquired within the scope of business combinations are recognized at fair value on the date of acquisition. If such assets have not yet reached market maturity, they are disclosed as intangible assets with indefinite useful lives and are not amortized.

Assets with a finite useful life are depreciated using the straight-line method. The useful lives of acquired concessions, property rights, licenses, patents, brand names, trademarks and software are between 3 and 15 years. Amortization of intangible assets – except for software – are disclosed separately before the operating result. This item primarily comprises amortization in connection with the allocation of the Serono purchase price, but also to a lesser extent amortization of other intangible assets. Depending on the type of asset concerned, other types of depreciation are allocated to the corresponding operating expense line in the income statement. If there are any indications of a decline in value, an impairment test is performed, and if necessary, impairment losses are recognized.

Assets with indefinite useful lives are not amortized, but tested annually for impairment instead. Goodwill is likewise not amortized. Goodwill is tested annually for impairment. Goodwill is allocated to cash-generating units. A cash-generating unit is normally a segment as presented under “Segment Reporting”. In a few cases, the cash-generating unit is a company or a business field (reporting level within a segment). Necessary write-downs are determined by comparing the book value of the cash-generating unit with the recoverable amount. The recoverable amount of a cash-generating unit is determined as the higher of fair value less costs to sell and value in use as computed using the discounted cash flow method. The discounted cash flow method discounts future cash flows at the weighted average cost of capital (WACC) of 9.5% after taxes.

**Property, plant and equipment**

Property, plant and equipment is carried at the cost of acquisition or manufacture less depreciation. The component approach is applied here in accordance with IAS 16. Subsequent acquisition and manufacturing costs are only capitalized if it is probable that future economic benefits will arise for the Group and the cost of the asset can be measured reliably. The cost of manufacture of self-constructed property, plant and equipment is calculated on the basis of the directly attributable unit costs and an appropriate share of overheads, including depreciation and write-downs. Financing costs are not capitalized. In accordance with IAS 20, costs of acquisition or manufacture are reduced by the amount of government grants in those cases where government grants or subsidies have been paid for the acquisition or manufacture of assets (investment grants). Grants related to expenses which no longer offset future expenses are recognized in income. Property, plant and equipment is depreciated by the straight-line method over the useful life of the asset concerned. The useful life applied to production buildings is a maximum of 33 years. Administration buildings are depreciated over a maximum of 40 years. The useful lives of machinery and technical equipment is between 6 and 20 years, and between 3 and 10 years for other facilities, factory and office equipment. The useful lives are reviewed regularly and adjusted if necessary. Impairment losses are charged in accordance with IAS 36 where required, and these are subsequently reversed if the original grounds for the impairment no longer apply.

**Financial investments in real estate**

Assets of this category are of minor importance to the Merck Group and are carried at cost.

### Leasing

Where assets are rented or leased and economic ownership lies with the Group company (finance lease), the asset is recorded at the lower of present value of the lease payments and fair value in accordance with IAS 17 and depreciated over its useful life. The corresponding payment obligations from future lease payments are recorded as liabilities.

### Marketable securities, investments and other financial assets

Marketable securities and financial assets are recorded in the balance sheet in accordance with IAS 39. Marketable securities and non-current financial assets classified as "available-for-sale" are generally carried at fair value. Unrealized gains and losses arising from changes in the fair value are recognized in equity. If the fair value of a security or financial asset cannot be reliably determined, the asset is carried at cost less any applicable write-downs. Held-to-maturity securities are generally measured at amortized cost.

Interests in companies over which Merck has significant influence but does not control are normally included using the equity method of accounting in accordance with IAS 28 and are recognized at amounts corresponding to their net equity.

Non-interest-bearing or low-interest loans are carried at their present value. All securities and financial assets are subject to an impairment test whenever there is an indication that the asset may be impaired. The resulting write-downs are charged to income. If the reasons for the impairment no longer exist, the impairment is reversed and recognized as income. The carrying amount of the asset is increased to no more than the amortized cost. Equity instruments held for sale are recognized in equity.

### Deferred taxes

Deferred tax assets and liabilities result from temporary accounting differences in the IFRS and tax accounts of Group companies as well as from consolidation measures. In addition, deferred tax assets are recorded in particular for tax loss carryforwards if and insofar as their utilization is probable in the foreseeable future. In accordance with the liability method, the tax rates applicable or enacted as of balance sheet date are used.

### Liabilities

Liabilities are generally carried at their repayment amount in accordance with IAS 39. Any differences arising between the amounts already paid and the amount payable at final maturity are amortized. Liabilities in foreign currencies are translated at the closing rates. Hedged items in foreign currency are likewise translated at the closing rates in accordance with IAS 21.

### Provisions

In accordance with IAS 37, provisions are disclosed in the balance sheet for legal or de facto obligations if the payment amount to settle the obligation is probable and can be reliably estimated. The amount recognized as provisions takes into account the resources required to cover future payment obligations, recognizable risks and uncertain obligations of the Group vis-à-vis third parties. Measurement is based on the settlement amount with the highest probability or if the probabilities are equivalent, then using the expected value of the settlement amounts. Provisions are discounted and carried at their present value as of the balance sheet date. To the extent that reimbursement claims exist within the meaning of IAS 37, they are recognized as a separate asset if their realization is virtually certain.

### Provisions for pensions and other post-employment benefits

Provisions for pensions and other post-employment benefits are disclosed in the balance sheet in accordance with IAS 19. Depending on the legal, economic and fiscal circumstances prevailing in each country, different retirement benefit systems are provided for the employees of the Merck Group. In principle, these systems are based on length of service and salary of the employees. Pension obligations of the Merck Group include both defined benefit and defined contribution plans and comprise both obligations from current pensions and accrued benefits for pensions payable in the future. In the Merck Group, defined benefit plans are funded and unfunded. The bulk of obligations from current pensions and accrued benefits for pensions payable in the future is covered by the provisions recognized in the balance sheet. The rest is externally funded. These provisions also contain other post-employment benefits, such as accrued future health care costs for retirees in the United States. The obligations of our companies under defined benefit plans are measured using the projected unit credit method. Under the projected unit credit method, dynamic parameters are taken into account in calculating the expected benefit payments after an insured event occurs; these payments are spread over the entire period of service of the participating employees. In accordance with the option under IAS 19.93A, actuarial gains and losses resulting from changes in actuarial assumptions and/or experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred) are recognized immediately in equity as soon as they are incurred taking deferred taxes into account. The gains and losses recognized in equity are disclosed separately in the Statement of Recognized Income and Expense.

# Notes to the income statement

## [1] Sales

Merck Group sales totaled € 7,201.6 million in 2008. This corresponds to an increase of 6.3% over the previous year. Adjusted for the impact of currency and acquisitions, organic growth amounted to 10.7%.

Sales are presented by business sector, division and region under "Segment Reporting".

## [2] Royalty income

In 2008, royalty income totaled € 356.4 million (2007: € 282.0 million) and mainly included royalty income from the products Avonex® (Biogen Idec), Humira® (Abbott), Enbrel® (Amgen) and Puregon® (Schering-Plough) as well as income from the pharmaceutical active ingredients bisoprolol and metformin.

## [3] Cost of sales

The cost of sales includes the cost of manufactured products as well as goods purchased for resale. In accordance with IAS 2, the cost comprises overheads directly attributable to the production process, including depreciation charges on production facilities, in addition to directly attributable costs, such as the cost of materials, personnel and energy. We also disclose write-downs of inventories as part of cost of sales.

## [4] Marketing and selling expenses

In addition to the cost of sales and marketing departments and of the sales force, marketing and selling expenses include advertising, logistics and license costs. Suspense items for oncharged freight expenses amounting to € 6.6 million were deducted from marketing and selling expenses (2007: € 7.9 million). This item also includes the net amount of commission expenses totaling € 165.2 million (2007: € 132.9 million) and commission income of € 31.6 million (2007: € 24.3 million) are also included here.

## [5] Administration expenses

Personnel costs and material expenses of management and administrative functions are presented under this item unless they have been charged to other cost centers as internal services.

## [6] Other operating income and expenses

Other operating income and expenses can be broken down as follows:

| € million | 2008 | 2007 |
|---|---|---|
| Gains from disposals of assets | 16.3 | 31.0 |
| Exchange rate differences from operating activities | –6.8 | 11.5 |
| Write-ups | 0.3 | 2.2 |
| Other operating income | 88.2 | 91.8 |
| | **98.0** | **136.5** |

Other operating income mainly includes income from ancillary business such as rental and leasing agremeents, as well as payments from third parties for services performed and compensation payments.

Other operating expenses comprise the following:

| € million | 2008 | 2007 |
|---|---|---|
| Restructuring and Serono integration costs | –27.0 | –181.8 |
| Project costs | –58.0 | –44.4 |
| Bonuses, fees and contributions | –47.9 | –36.0 |
| Litigation | –24.2 | –33.0 |
| Impairment losses | –10.5 | –73.2 |
| Losses on disposals of assets | –10.9 | –7.9 |
| Write-downs of receivables | –4.9 | –10.0 |
| Special environmental protection costs | –4.9 | –5.3 |
| Other operating expenses | –79.8 | –84.7 |
| | **–268.1** | **–476.3** |

Project costs relate mainly to the costs incurred in connection with Group-wide IT projects. These include, for example, projects to harmonize IT applications and infrastructure throughout the Group. Other operating expenses also include expenses for services performed for third parties as well as costs of ancillary businesses and clearing balances.

### [7] Research and development

Reimbursements for R & D amounting to € 20.1 million (2007: € 19.2 million) were offset against research and development costs.

### [8] Amortization of intangible assets

This item primarily comprises amortization of intangible assets in connection with the allocation of the Serono purchase price.

### [9] Investment result

| € million | 2008 | 2007 |
|---|---|---|
| Dividend income from associates | 0.2 | 0.2 |
| Other investment income/expenses | –0.1 | 0.1 |
| | **0.1** | **0.3** |

## [10] Exceptional items

Exceptional items comprise:

| € million | 2008 | 2007 |
|---|---|---|
| Impairment losses on product technologies | –194.5 | – |
| Impairment losses on licenses | –42.9 | – |
| Impairment losses on goodwill | –41.7 | – |
| Impairment losses on development technology | –20.2 | – |
| Impairment losses on financial assets | –29.2 | – |
| Restructuring | –71.5 | 2.0 |
| Write-down of Serono inventories | – | –734.0 |
| Environmental protection measures | – | –38.5 |
| Disposal of the Genmab interest | – | –11.5 |
| Release of the provision for Electronic Chemicals | – | 6.4 |
| **Exceptional items** | **–400.0** | **–775.6** |

The product technologies capitalized for the product Raptiva® within the scope of the Serono purchase price allocation were written off in full due to a sharp decline in sales expectations.

Based on new estimations of the amount and timing of royalty income, we partially wrote down the relevant licensing rights to Enbrel® (Amgen), which were capitalized within the scope of the Serono purchase price allocation.

In connection with the termination of research projects, the goodwill resulting from the acquisition of the EMD Lexigen Research Center Corp., United States, was written off in full. This relates to the Merck Serono division.

The assets relating to technology and research know-how that were capitalized within the scope of the Serono purchase price allocation for the development of a high-dose recombinant human growth hormone for the indication HIV-associated adipose redistribution syndrome (HARS) were written off since the development of this indication has been terminated.

Write-downs of financial assets were made owing to the decline in the stock market value of the interest in ZymoGenetics, Inc. These were charged to the Merck Serono division.

Exceptional items for “Restructuring” relate on the one hand to closures and business disposals amounting to € –45.9 million within the Performance & Life Science Chemicals division and concern sites in the United States and Brazil. In addition, in the Merck Serono division we recognized expenses of € 25.6 million in connection with the restructuring of the sales force in a number of European countries.

## [11] Financial result

| € million | 2008 | 2007 |
|---|---|---|
| Interest income and similar income | 13.1 | 59.1 |
| Interest expenses and similar expenses | –84.9 | –321.9 |
| | **–71.8** | **–262.8** |
| Interest component of the addition to pension provisions and other provisions for personnel expenses | –66.4 | –59.5 |
| Exchange rate differences from financing activities | –18.4 | 8.5 |
| Income from financial interests | 0.1 | 2.5 |
| | **–156.5** | **–311.3** |

## [12] Income tax

| € million | 2008 | 2007 |
|---|---|---|
| Taxes in the period under review on operating activities | –242.4 | –235.4 |
| Taxes in the period under review on exceptional items | 2.6 | –0.1 |
| Taxes for other periods | 2.9 | –29.8 |
| Deferred taxes on operating activities | –11.7 | 78.1 |
| Deferred taxes on exceptional items | 52.8 | 210.3 |
| | **–195.8** | **23.1** |
| Tax rate | 34.1% | 20.8% |
| Tax rate before exceptional items | 25.8% | 28.2% |

The tax expense consists of corporation and trade taxes for the companies domiciled in Germany as well as comparable income taxes for foreign companies. As a result of changes in tax rates at individual companies, a total deferred tax expense of € 1.7 million was recorded (2007: € 21.3 million). Taxes on exceptional items relate mainly to write-downs of intangible assets and financial assets as well as to restructuring measures. Deferred taxes on exceptional items in 2007 mainly comprise deferred taxes resulting from the remeasurement of inventories within the scope of the purchase price allocation owing to the acquisition of the Serono companies in January 2007.

The reconciliation between deferred tax assets and liabilities shown in the balance sheet and deferred taxes in the income statement is presented below:

| € million | 2008 | 2007 |
|---|---|---|
| Change in deferred tax assets (balance sheet) | 15.9 | 195.1 |
| Change in deferred tax liabilities (balance sheet) | –73.8 | –780.3 |
| Deferred taxes credited/debited to equity | 17.9 | 30.8 |
| Changes in companies consolidated First-time consolidation of the Serono companies | – | 788.0 |
| Changes in companies consolidated/ Deconsolidation of the Generics companies | – | 82.0 |
| Other changes in companies consolidated/currency translation/ Other changes | 81.1 | –27.2 |
| **Deferred taxes (income statement)** | **41.1** | **288.4** |

Tax loss carryforwards are structured as follows:

| | Dec. 31, 2008 | | | Dec. 31, 2007 | | |
|---|---|---|---|---|---|---|
| € million | Germany | Abroad | Total | Germany | Abroad | Total |
| Tax loss carry-forwards | 121.6 | 288.1 | **409.7** | 126.4 | 401.6 | **528.0** |
| thereof: | | | | | | |
| Including de-ferred tax asset | – | 29.2 | **29.2** | 124.8 | 227.4 | **352.2** |
| Deferred tax asset | – | 7.4 | **7.4** | 18.9 | 45.0 | 63.9 |
| thereof: | | | | | | |
| Excluding de-ferred tax asset | 121.6 | 258.9 | **380.5** | 1.6 | 174.2 | **175.8** |
| Theoretical deferred tax asset | 18.5 | 34.2 | **52.7** | 0.4 | 29.8 | **30.2** |

The decrease in tax loss carryforwards compared with the previous year is mainly the result of the positive business development of the relevant Group companies. Deferred tax assets are recognized for tax loss and interest carryforwards only if realization of the related tax benefit is probable in the foreseeable future. Due to overall economic development, existing deferred tax assets of € 40.2 million were written down at year-end.

The vast majority of the loss carryforwards either have no expiry date or can be carried forward for up to 20 years. The interest carryforward results from the German earnings stripping rule and has no expiry date. Deferred tax assets on interest carryforwards were not recognized. The theoretically possible deferred tax asset amounts to € 10.0 million. In 2008, the income tax burden was reduced by € 7.5 million due to the utilization of tax loss carryforwards and tax credits from prior years for which no deferred tax asset had been recognized in prior periods (2007: € 8.3 million).

The tax loss carryforwards accumulated in Germany for corporation tax amount to € 57.6 million (2007: € 54.5 million) and to € 64.0 million (2007: € 71.9 million) for trade tax. The increase in additional theoretically possible deferred tax assets for non-German Group companies to € 52.7 million (2007: € 30.2 million) results mainly from the write-down of deferred tax assets for capitalized tax-loss carryforwards.

Deferred tax assets and liabilities correspond to the following balance sheet items:

| | Dec. 31, 2008 | | Dec. 31, 2007 | |
|---|---|---|---|---|
| € million | Assets | Liabilities | Assets | Liabilities |
| Intangible assets | 37.5 | 758.3 | 41.4 | 753.9 |
| Property, plant and equipment | 4.5 | 84.1 | 6.7 | 86.8 |
| Current and non-current financial assets | 2.3 | 28.1 | 1.1 | 1.9 |
| Inventories | 261.1 | 47.1 | 198.4 | 15.8 |
| Current and non-current receivables/ Other assets | 28.7 | 9.1 | 12.6 | 1.0 |
| Provisions for pensions and other post-employment benefits | 58.6 | 10.3 | 84.1 | 15.5 |
| Current and non-current other provisions | 131.6 | 7.7 | 121.1 | 4.2 |
| Current and non-current liabilities | 22.3 | 9.1 | 6.2 | 7.6 |
| Tax loss carryforwards | 7.4 | – | 63.9 | – |
| Tax refund claims/Other | 0.3 | 16.6 | 27.5 | 34.5 |
| Netted deferred tax assets and liabilities | –74.2 | –74.2 | –98.8 | –98.8 |
| **Total deferred taxes** | **480.1** | **896.2** | **464.2** | **822.4** |

Deferred tax liabilities of € 23.0 million (2007: € 10.9 million) were set up for temporary timing differences for interests in subsidiaries. These relate to planned dividend payments. No deferred tax liabilities were recognized for other temporary differences since the reversal of these differences is not foreseeable.

Deferred tax assets of € 472.7 million (2007: € 400.3 million) were recognized for other temporary timing differences for interests in subsidiaries.

The following table presents a tax reconciliation of the theoretical tax rate to consolidated profit. The theoretical tax rate is determined by applying the statutory tax rates of the German and foreign companies in proportion to their contribution to consolidated profit. The change in comparison with 2007 results from the change in the consolidated contributions in relation to local tax rates.

| € million | 2008 | 2007 |
|---|---|---|
| Consolidated profit before tax | 574.9 | –110.9 |
| Exceptional items | –400.0 | –775.6 |
| **Consolidated profit before tax and exceptional items** | **974.9** | **664.7** |
| | | |
| Theoretical tax rate | 29.6% | 30.9% |
| Theoretical tax expense before exceptional items | –288.6 | –205.6 |
| Tax effect of companies with a negative contribution to consolidated profit | –41.1 | –23.7 |
| Taxes for other periods | 2.9 | –29.8 |
| Tax credits | 66.6 | 35.0 |
| Effect of non-deductible expenses/ tax-free income/tax allowances | 9.0 | 36.9 |
| **Tax expense before exceptional items** | **–251.2** | **–187.1** |
| | | |
| Tax rate before exceptional items | 25.8% | 28.2% |
| | | |
| Taxes on exceptional items | 55.4 | 210.2 |
| **Tax expense according to income statement** | **–195.8** | **23.1** |
| | | |
| Tax rate according to income statement | 34.1% | 20.8% |

### [13] Profit after tax from discontinued operations

In addition to the gain on the sale of the Generics business, profit after tax from discontinued operations in 2007 included the profit/loss of the current business classified as discontinued operations. More details can be found under “Disposals/Discontinued operations”.

### [14] Minority interest

Minority interest in net profit is primarily composed of the minority interests in Merck Ltd., Thailand and Merck Serono SpA, Italy, as well as the listed company Merck Ltd., India.

## [15] Earnings per share

Basic earnings per share are calculated by dividing the net profit after minority interest by the weighted average number of theoretical shares outstanding. The use of a theoretical number of shares takes into account the fact that the general partner's capital is not represented by shares. In accordance with the division of the share capital in the amount of € 168.0 million into 64,621,126 shares, the general partner's capital amounts to € 397.2 million or 152,767,813 theoretical shares. Overall, the total capital thus amounts to € 565.2 million or 217,388,939 theoretical shares. It should be noted that in accordance with IAS 33, the 8,000 shares issued in 2008 by the Merck stock option program may only be included in basic earnings per share on a time proportionate basis from the date of their conversion.

Earnings per share from continuing operations

| | 2008 | 2007 |
|---|---|---|
| Earnings after minority interest (€ million) | 367.1 | –107.9 |
| Weighted average number of theoretical shares outstanding (in millions) | 217.4 | 215.9 |
| **Basic earnings per share (€)** | **1.69** | **–0.50** |

Earnings per share from continuing and discontinued operations

| | 2008 | 2007 |
|---|---|---|
| Earnings after minority interest (€ million) | 367.1 | 3,500.1 |
| Weighted average number of theoretical shares outstanding (in millions) | 217.4 | 215.9 |
| **Basic earnings per share (€)** | **1.69** | **16.21** |

As of December 31, 2008, there were no potentially dilutive shares. Details on the stock option programs, which expired on April 8, 2008, can be found in Note [32] "Net equity" to these financial statements.

# Notes to the balance sheet

## [16] Cash and cash equivalents

This item comprises:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Cheques, cash and bank balances | 329.1 | 292.6 |
| Short-term cash investments | 363.6 | 134.0 |
| | **692.7** | **426.6** |

Changes in cash and cash equivalents as defined by IAS 7 are presented in the cash flow statement. This item includes short-term receivables due from related parties and affiliates amounting to € 2.6 million (2007: € 3.0 million).

## [17] Marketable securities and financial assets

This item comprises the following categories:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Financial investments held to maturity | 27.0 | 39.3 |
| Available for sale financial investments | 20.5 | 10.9 |
| Financial investments held for trading | 0.9 | 0.7 |
| Short-term financial investments/loans to third parties | 0.1 | 500.5 |
| Derivative assets (financial transactions) | 128.3 | 13.9 |
| | **176.8** | **565.3** |

In 2007, the funds from the issuance of a bond amounting to € 497.9 million were invested in short-term financial investments and used in 2008 for intragroup financing purposes.

Loans to third parties declined in value by € 1.3 million (2007: € 0.0 million). They were not past due for 2008 or 2007.

No reclassifications of assets were made across the individual categories during the fiscal year.

## [18] Trade accounts receivable

This item comprises:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Receivables from other affiliates | 0.0 | 0.4 |
| Receivables from third parties | 1,659.4 | 1,377.9 |
| | **1,659.4** | **1,378.3** |

Receivables past due are as follows:

| € million | Book value Dec. 31, 2008 | thereof: Neither impaired nor past due on the reporting date | thereof: Not impaired, past due in the following periods as of the reporting date | | | |
|---|---|---|---|---|---|---|
| | | | up to 3 months | and 6 months | and 12 months | over 1 year |
| Trade accounts receivable – Third parties | **1,659.4** | 1,209.5 | 236.9 | 92.8 | 73.8 | 46.0 |

| € million | Book value Dec. 31, 2007 | thereof: Neither impaired nor past due on the reporting date | thereof: Not impaired, past due in the following periods as of the reporting date | | | |
|---|---|---|---|---|---|---|
| | | | up to 3 months | and 6 months | and 12 months | over 1 year |
| Trade accounts receivable – Third parties | **1,377.9** | 1,148.7 | 155.7 | 20.9 | 27.8 | 24.8 |

With regard to trade accounts receivable that are neither impaired nor delayed, as of the reporting date, there are no indications that the debtors will not meet their payment obligations. Write-downs of outstanding trade accounts receivable amount to € 16.6 million as of the balance sheet date.

The increase in trade accounts receivable is due to the fact that the program to sell receivables was discontinued in 2008.

## [19] Inventories

This item comprises:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Raw materials and production supplies | 253.6 | 238.9 |
| Work in progress, finished goods and goods purchased for resale | 1,152.3 | 917.0 |
| Advance payments | 1.5 | 2.6 |
| | **1,407.4** | **1,158.5** |

Write-downs of inventories amounted to € 93.5 million as of the balance sheet date (2007: € 98.3 million). The fair value of inventories that were written down amounts to € 377.6 million (2007: € 340.0 million). As of the balance sheet date, no inventories were used to secure liabilities. There were no significant contracts to be accounted for in accordance with IAS 11 (Construction Contracts) as of the balance sheet date.

## [20] Other assets

This item comprises:

### Other current assets

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Other receivables from associates | – | – |
| Other receivables from other affiliates | 2.8 | 0.9 |
| Other receivables from third parties | 138.4 | 118.4 |
| Receivables from related parties | 22.5 | 26.6 |
| Derivative assets (operational) | 47.0 | 3.1 |
| Prepaid expenses | 40.7 | 32.4 |
| Refund claims on plan assets | 19.9 | 29.8 |
| Other assets | 12.0 | 15.2 |
| | **283.3** | **226.4** |

### Other non-current assets

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Other receivables from associates | – | – |
| Other receivables from third parties | 50.6 | 50.4 |
| Prepaid expenses | 1.6 | 1.9 |
| Other assets | 11.5 | 9.5 |
| | **63.7** | **61.8** |

Other receivables and other assets include in particular refund claims in connection with non-income-related taxes (mainly value added tax), prepayments, interest deferrals as well as claims in connection with duties and import fees. In addition, receivables in the form of profits resulting from co-marketing agreements with other companies are recorded in this item.

Other receivables past due are as follows:

| € million | Book value Dec. 31, 2008 | thereof: Neither impaired nor past due on the reporting date | thereof: Not impaired, past due in the following periods as of the reporting date | | | |
|---|---|---|---|---|---|---|
| | | | up to 3 months | and 6 months | and 12 months | over 1 year |
| Other receivables – Third parties | **189.0** | 172.3 | 12.6 | 1.2 | 0.7 | 2.2 |

| € million | Book value Dec. 31, 2007 | thereof: Neither impaired nor past due on the reporting date | thereof: Not impaired, past due in the following periods as of the reporting date | | | |
|---|---|---|---|---|---|---|
| | | | up to 3 months | and 6 months | and 12 months | over 1 year |
| Other receivables – Third parties | **168.8** | 161.0 | 3.5 | 3.5 | 0.2 | 0.6 |

With regard to other receivables that are neither impaired nor delayed, as of the reporting date, there are no indications that the debtors will not meet their payment obligations.

### [21] Tax receivables

Tax receivables amounted to € 139.1 million (2007: € 43.5 million) and result from tax refund claims for tax prepayments that exceed the actual amount of tax payable for the past and prior fiscal years, and from refund claims for prior years owing to tax audits as well as withholding tax credits.

### [22] Assets/liabilities held for sale

In 2007, the balance sheet items allocable to the Generics business were presented collectively under “Assets/liabilities held for sale”.

## [23] Intangible assets

| € million | Patents, licenses and similar rights, as well as brands, trademarks/Other – Finite useful life | Patents, licenses and similar rights, as well as brands, trademarks/Other – Indefinite useful life | Goodwill | Software | Advance payments | Total |
|---|---|---|---|---|---|---|
| **Acquisition cost January 1, 2007** | **342.4** | **42.3** | **854.0** | **85.8** | **9.4** | **1,333.9** |
| Currency translation | 0.7 | – | –35.9 | –0.9 | 0.1 | –36.0 |
| Changes in companies consolidated | 6,482.7 | 321.2 | 974.5 | 63.8 | –3.3 | 7,838.9 |
| Additions | 25.2 | 63.0 | – | 15.6 | 17.3 | 121.1 |
| Disposals | –19.9 | –1.2 | – | –13.0 | –1.6 | –35.7 |
| Transfers | 2.8 | 1.0 | – | 15.2 | –12.4 | 6.6 |
| Reclassification to assets held for sale | –0.9 | – | –0.2 | – | –0.1 | –1.2 |
| **December 31, 2007** | **6,833.0** | **426.3** | **1,792.4** | **166.5** | **9.4** | **9,227.6** |
| **Accumulated amorization and impairment losses January 1, 2007** | **–202.2** | **–** | **–0.4** | **–67.8** | **–** | **–270.4** |
| Currency translation | 0.4 | – | 0.1 | 0.6 | – | 1.1 |
| Changes in companies consolidated | –148.9 | 0.1 | 0.2 | –32.0 | – | –180.6 |
| Amortization in impairment losses | –522.6 | –90.1 | – | –23.4 | – | –636.1 |
| Disposals | 18.0 | – | – | 11.9 | – | 29.9 |
| Transfers | 3.0 | –0.6 | – | –9.4 | – | –7.0 |
| Reclassification to assets held for sale | 0.1 | – | – | – | – | 0.1 |
| **December 31, 2007** | **–852.2** | **–90.6** | **–0.1** | **–120.1** | **–** | **–1,063.0** |
| **Net carrying amount as of December 31, 2007** | **5,980.8** | **335.7** | **1,792.3** | **46.4** | **9.4** | **8,164.6** |
| **Acquisition cost January 1, 2008** | **6,833.0** | **426.3** | **1,792.4** | **166.5** | **9.4** | **9,227.6** |
| Currency translation | 679.0 | 33.1 | 152.7 | 8.2 | –1.0 | 872.0 |
| Changes in companies consolidated | 29.4 | 0.7 | 26.1 | –0.7 | – | 55.5 |
| Additions | 8.6 | 88.3 | – | 25.2 | 18.8 | 140.9 |
| Disposals | –8.2 | –5.1 | –0.1 | –38.1 | –0.5 | –52.0 |
| Transfers | –2.1 | –0.3 | – | 16.8 | –9.6 | 4.8 |
| Reclassification of assets held for sale | 0.9 | – | 0.2 | – | 0.1 | 1.2 |
| **December 31, 2008** | **7,540.6** | **543.0** | **1,971.3** | **177.9** | **17.2** | **10,250.0** |
| **Accumulated amortization and impairment losses January 1, 2008** | **–852.2** | **–90.6** | **–0.1** | **–120.1** | **–** | **–1,063.0** |
| Currency translation | –102.4 | –8.8 | –0.4 | –6.1 | – | –117.7 |
| Changes in companies consolidated | – | – | – | 0.5 | – | 0.5 |
| Amortization in impairment losses | –812.1 | –30.1 | –41.7 | –23.7 | – | –907.6 |
| Disposals | 8.1 | 0.2 | – | 35.3 | – | 43.6 |
| Transfers | 0.3 | – | – | –3.2 | – | –2.9 |
| Write-ups | 0.6 | – | – | – | – | 0.6 |
| Reclassification of assets held for sale | –0.1 | – | – | – | – | –0.1 |
| **December 31, 2008** | **–1,757.8** | **–129.3** | **–42.2** | **–117.3** | **–** | **–2,046.6** |
| **Net carrying amount as of December 31, 2008** | **5,782.8** | **413.7** | **1,929.1** | **60.6** | **17.2** | **8,203.4** |

The increase in currency translation differences is due mainly to the translation of intangible assets reported in Swiss francs in connection with the Serono purchase price allocation into euros - the Group currency.

The stated effects resulting from changes in the companies consolidated relate to the additions mentioned under "Acquisitions".

The net carrying amount of patents, licenses and similar rights with finite useful lives amounting to € 5,782.8 million mainly include the recognized assets from the Serono purchase price allocation in 2007. The vast majority is attributable to technologies and know-how. The remaining useful lives range between 10 and 13 years. Licenses with remaining useful lives of between 4.5 and 9 years have been recognized and are reported in this item.

In fiscal 2008, impairment losses on intangible assets with finite useful lives totaled € 237.8 million. Of this amount, € 194.5 million is attributable to amounts captailzed in respect of Raptiva® within the scope of the purchase price allocation. These were written off in full due to sharply reduced sales expectations. Based on new estimates concerning the amount and the timing of royalty income, the relevant license rights to Enbrel® (Amgen), which were capitalized within the scope of the Serono purchase price allocation, were written down by € 42.9 million to the lower value in use. Both of these issues are disclosed under Exceptional items.

Since goodwill and intangible assets with indefinite useful lives are not amortized, these are subjected to an annual impairment test. Here, book values were compared with values in use. Consequently, impairment losses of € 71.4 million result in fiscal 2008. Of this amount € 41.7 million is attributable to the goodwill of EMD Lexigen Research Center Corp., which was written off in full in connection with the termination of research projects. The technology and know-how assets in connection with the development of a high-dose recombinant human growth hormone for HIV-associated adipose redistribution syndrome (HARS) amounting to € 20.2 million and capitalized within the scope of the Serono purchase price allocation were written off in full since the development of this indication was discontinued. Both of these issues are disclosed under Exceptional items and had a negative effect on the Merck Serono division.

The remaining impairments are due mainly to the termination of various research projects and the related write-offs of the capitalized assets within the Merck Serono division. These impairment losses are disclosed under Other operating expenses.

Goodwill can be allocated to the divisions as follows:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Merck Serono | 1,670.7 | 1,559.5 |
| Consumer Health Care | 164.3 | 148.0 |
| Performance & Life Science Chemicals | 90.0 | 80.7 |
| Liquid Crystals | 4.1 | 4.1 |
| **Total** | **1,929.1** | **1,792.3** |

The increase in goodwill at Merck Serono results from the translation of Serono goodwill from Swiss francs into euros – the reporting currency of the Group. This translation effect outweighed the impairment losses. The increase in goodwill attributable to the Consumer Health Care and Performance & Life Science Chemicals division is due to the first-time consolidation of Bio-Fyt Pharma N.V., Solvent Innovation GmbH and SeQuant AB as well as to currency translation effects.

## [24] Property, plant and equipment

| € million | Land, land rights and buildings, including buildings on third-party land | Plant and machinery | Other facilities, operating and office equipment | Construction in progress and advance payments to vendors and contractors | Total |
|---|---|---|---|---|---|
| **Acquistion cost January 1, 2007** | **1,216.5** | **2,042.8** | **718.9** | **147.4** | **4,125.6** |
| Currency translation | –12.4 | –9.1 | –7.0 | –1.5 | –30.0 |
| Changes in companies consolidated | 536.6 | 200.5 | 59.9 | 13.4 | 810.4 |
| Additions | 22.1 | 46.3 | 43.2 | 171.2 | 282.8 |
| Disposals | –36.4 | –52.1 | –60.0 | –2.1 | –150.6 |
| Transfers | 29.8 | 98.7 | 5.8 | –140.9 | –6.6 |
| Reclassification to assets held for sale | –1.3 | –1.8 | –0.6 | –0.1 | –3.8 |
| **December 31, 2007** | **1,754.9** | **2,325.3** | **760.2** | **187.4** | **5,027.8** |
| **Accumulated depreciation and impairment losses January 1, 2007** | **–510.6** | **–1,315.4** | **–509.0** | **–10.8** | **–2,345.8** |
| Currency translation | 2.3 | 6.1 | 4.7 | 0.1 | 13.2 |
| Changes in companies consolidated | –110.8 | –125.5 | –46.0 | 0.2 | –282.1 |
| Depreciation and impairment losses | –63.5 | –150.8 | –69.6 | –3.6 | –287.5 |
| Disposals | 32.8 | 47.5 | 56.7 | – | 137.0 |
| Transfers | 0.6 | –7.7 | 14.1 | – | 7.0 |
| Write-ups | 2.2 | 0.2 | 0.1 | 0.3 | 2.8 |
| Reclassification to assets held for sale | 0.5 | 1.2 | 0.4 | – | 2.1 |
| **December 31, 2007** | **–646.5** | **–1,544.4** | **–548.6** | **–13.8** | **–2,753.3** |
| **Net carrying amount as of December 31, 2007** | **1,108.4** | **780.9** | **211.6** | **173.6** | **2,274.5** |
| **Acquisition cost January 1, 2008** | **1,754.9** | **2,325.3** | **760.2** | **187.4** | **5,027.8** |
| Currency translation | 72.5 | 37.5 | 4.7 | 4.8 | 119.5 |
| Changes in companies consolidated | – | –2.4 | 1.4 | 0.2 | –0.8 |
| Additions | 25.2 | 44.6 | 46.4 | 278.5 | 394.7 |
| Disposals | –16.4 | –80.8 | –71.1 | –4.1 | –172.4 |
| Transfers | 48.3 | 65.6 | 32.5 | –151.2 | –4.8 |
| Reclassification of assets held for sale | 1.3 | 1.8 | 0.6 | 0.1 | 3.8 |
| **December 31, 2008** | **1,885.8** | **2,391.6** | **774.7** | **315.7** | **5,367.8** |
| **Accumulated depreciation and impairment losses January 1, 2008** | **–646.5** | **–1,544.4** | **–548.6** | **–13.8** | **–2,753.3** |
| Currency translation | –19.2 | –32.3 | –4.4 | –0.4 | –56.3 |
| Changes in companies consolidated | –0.5 | 1.7 | –1.6 | –0.1 | –0.5 |
| Depreciation and impairment losses | –68.4 | –146.0 | –62.5 | –1.1 | –278.0 |
| Disposals | 13.9 | 76.7 | 67.9 | 0.1 | 158.6 |
| Transfers | 0.4 | 0.4 | 2.1 | – | 2.9 |
| Write-ups | 0.4 | 0.5 | 0.1 | – | 1.0 |
| Reclassification of assets held for sale | –0.5 | –1.2 | –0.4 | – | –2.1 |
| **December 31, 2008** | **–720.4** | **–1,644.6** | **–547.4** | **–15.3** | **–2,927.7** |
| **Net carrying amount as of December 31, 2008** | **1,165.4** | **747.0** | **227.3** | **300.4** | **2,440.1** |

Impairment losses totaled € 6.6 million in fiscal 2008. Of this amount, € 6.0 million relates to expenses in connection with closures and disposal measures within the Performance & Life Science Chemicals division and the relevant sites in the United States and Brazil. This expense is recognized under Exceptional items.

Property, plant and equipment amounting to € 9.1 million serve as collateral (2007: € 15.9 million). Total government grants and subsidies during the fiscal year amounted to € 7.1 million (2007: € 7.1 million).

Property, plant and equipment also includes assets that are rented or leased. The total value of capitalized leased assets amounts to € 12.7 million and the corresponding obligations amount to € 9.5 million (see Note [26] "Financial liabilities").

The book values of capitalized leased assets are as follows:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Capitalized leased buildings | 11.7 | 11.7 |
| Capitalized leased vehicles | 0.8 | 0.2 |
| Capitalized leased other property, plant and equipment | 0.2 | 0.3 |
| | **12.7** | **12.2** |

## [25] Non-current financial assets and equity method financial assets

| | Investments in | | Securities | | Loans | | |
|---|---|---|---|---|---|---|---|
| € million | available for sale companies | other affiliates | available for sale financial investments | financial investments held to maturity | and other non-current financial assets | Total | Equity method financial assets |
| **Acquisition cost Januar 1, 2007** | **1,606.2** | **24.4** | **5.8** | **0.4** | **30.6** | **1,667.4** | **1.7** |
| Currency translation | – | – | – | – | – | – | – |
| Changes in companies consolidated | 165.6 | –9,974.7 | 167.5 | – | –0.1 | –9,641.7 | 0.3 |
| Additions | 16.6 | 9,272.4 | – | 11.3 | 5.8 | 9,306.1 | 0.3 |
| Disposals | –118.3 | –870.2 | –167.7 | – | –20.1 | –1,176.3 | –0.4 |
| Transfers | –1,575.4 | 1,575.5 | – | – | – | 0.1 | –0.1 |
| **December 31, 2007** | **94.7** | **27.4** | **5.6** | **11.7** | **16.2** | **155.6** | **1.8** |
| **Accumulated depreciation and impairment losses January 1, 2007** | **–22.3** | **–0.1** | **–4.2** | **–** | **–0.4** | **–27.0** | **–0.4** |
| Currency translation | –0.2 | – | –0.3 | – | – | –0.5 | – |
| Changes in companies consolidated | – | – | – | – | – | – | – |
| Depreciation and impairment losses | – | – | – | – | – | – | – |
| Disposals | 3.5 | – | – | – | – | 3.5 | – |
| Fair value adjustments of long-term investments taken directly to equity | –1.3 | – | – | – | – | –1.3 | – |
| **December 31, 2007** | **–20.3** | **–0.1** | **–4.5** | **–** | **–0.4** | **–25.3** | **–0.4** |
| **Net carrying amount as of December 31, 2007** | **74.4** | **27.3** | **1.1** | **11.7** | **15.8** | **130.3** | **1.4** |
| **Acquisition cost January 1, 2008** | **94.7** | **27.4** | **5.6** | **11.7** | **16.2** | **155.6** | **1.8** |
| Currency translation | 0.3 | – | – | –1.6 | –0.1 | –1.4 | –0.3 |
| Changes in companies consolidated | – | –58.5 | – | – | – | –58.5 | – |
| Additions | 19.0 | 57.2 | 0.1 | – | 6.2 | 82.5 | 0.2 |
| Disposals | –3.4 | –0.4 | –0.5 | – | –6.7 | –11.0 | – |
| Transfers | – | – | – | – | – | – | – |
| **December 31, 2008** | **110.6** | **25.7** | **5.2** | **10.1** | **15.6** | **167.2** | **1.7** |
| **Accumulated depreciation and impairment losses January 1, 2008** | **–20.3** | **–0.1** | **–4.5** | **–** | **–0.4** | **–25.3** | **–0.4** |
| Currency translation | – | – | – | – | – | – | – |
| Changes in companies consolidated | – | –0.1 | – | – | – | –0.1 | – |
| Depreciation and impairment losses | –29.7 | – | – | – | – | –29.7 | – |
| Disposals | – | – | 0.2 | – | 0.1 | 0.3 | – |
| Fair value adjustments of long-term investments taken directly to equity | –15.0 | – | – | – | – | –15.0 | – |
| **December 31, 2008** | **–65.0** | **–0.2** | **–4.3** | **–** | **–0.3** | **–69.8** | **–0.4** |
| **Net carrying amount as of December 31, 2008** | **45.6** | **25.5** | **0.9** | **10.1** | **15.3** | **97.4** | **1.3** |

As of December 31, 2008, non-current financial assets available for sale (investments) were carried at cost with a book value of € 17.0 million since a market price could not be determined.

The development of the value of minority investments is often dependent on developments on the stock exchanges, which is why the value of minority investments generally declined.

Due to the sustained decline in stock market values, an investment in ZymoGenetics Inc. classified as available for sale was written down by € 29.2 million to the lower fair value. The corresponding expense has been reported under Exceptional items and relates to the Merck Serono division.

No non-current financial assets were reclassified between the individual categories of financial instruments during the fiscal year. The following amounts arising from non-current financial assets classified as "available-for-sale" were recognized in equity as of the balance sheet date:

| € million | Available for sale interests | Available for sale securities | Total Dec. 31, 2008 | Available for sale interests | Available for sale securities | Total Dec. 31, 2007 |
|---|---|---|---|---|---|---|
| Fair values/ Book values | 45.6 | 0.9 | 46.5 | 74.4 | 1.1 | 75.5 |
| Amortized acquisition cost | –59.7 | –0.9 | –60.6 | –73.5 | –1.1 | –74.6 |
| Unrealized gains/losses | –14.1 | – | –14.1 | 0.9 | – | 0.9 |

A statement of the Merck Group's equity interests is filed with the electronic Federal Gazette and can be accessed at www.ebundesanzeiger.de. Major companies of the Merck Group as of December 31, 2008 are presented in the following table:

| Major companies of the Merck Group by region | Direct equity interest in % | Sales* € million | Profit after tax* € million | Net equity* € million | Employees |
|---|---|---|---|---|---|
| **Germany/Europe** | | | | | |
| Merck KGaA, Darmstadt, Germany | Parent company | 2,367.8 | 63.0 | 4,720.5 | 9,068 |
| Ares Trading SA, Aubonne, Switzerland | 100.00 | 2,365.5 | 86.5 | 222.7 | 99 |
| Laboratoires Serono SA, Coinsins, Switzerland | 100.00 | 1,444.9 | –115.6 | 8,628.0 | 640 |
| Merck Serono S.p.A., Rome, Italy | 96.72 | 1,128.2 | 67.1 | 298.9 | 647 |
| Merck Lipha Santé S.A.S., Lyon, France | 100.00 | 529.2 | 29.2 | 58.2 | 486 |
| Merck Santé S.A.S., Lyon, France | 100.00 | 489.1 | 99.2 | 295.9 | 1,145 |
| Merck Pharma GmbH, Darmstadt, Germany | 100.00 | 404.5 | – | – | 147 |
| Merck Farma y Quimica S.L., Madrid, Spain | 100.00 | 388.8 | 41.4 | 132.1 | 864 |
| Merck Serono UK, West Drayton, United Kingdom | 100.00 | 147.5 | 12.1 | 1.7 | 205 |
| Merck CHC France Group, Lyon, France | 100.00 | 104.2 | 7.2 | 44.4 | 211 |
| Laboratoire Théramex S.A.M., Monaco | 99.88 | 93.2 | 9.7 | 20.6 | 370 |
| Seven Seas Group, Hull, United Kingdom | 100.00 | 81.4 | 3.8 | 10.4 | 340 |
| Merck AG, Zug, Switzerland and Darmstadt, Germany | 100.00 | – | 74.0 | 1,761.9 | – |
| **North America** | | | | | |
| EMD Serono US Group, Rockland, MA United States | 100.00 | 689.2 | 13.1 | 227.8 | 810 |
| EMD Chemicals, Inc., Gibbstown, NJ United States | 100.00 | 231.3 | 4.0 | 244.6 | 950 |
| EMD Serono Canada Inc., Mississauga, Canada | 100.00 | 77.6 | 1.7 | 14.4 | 95 |
| **Latin America** | | | | | |
| Merck S.A., Rio de Janeiro, Brazil | 100.00 | 251.2 | 13.0 | 52.4 | 1,132 |
| Merck, S.A. de C.V., Estado de México, Mexico | 100.00 | 174.5 | 20.3 | 47.9 | 977 |
| Merck Venezuela Group, Caracas, Venezuela | 100.00 | 106.7 | 21.2 | 29.8 | 276 |
| Ares Trading Uruguay S.A., Montevideo, Uruguay | 100.00 | 93.4 | 39.6 | 20.6 | 23 |
| Merck S.A., Bogota, Colombia | 100.00 | 69.5 | 2.8 | 25.3 | 577 |
| Merck Quimica Argentina S.A.I.C., Buenos Aires, Argentina | 100.00 | 65.5 | –2.8 | 6.0 | 356 |
| **Asia, Africa, Australasia** | | | | | |
| Korean companies, South Korea | 100.00 | 397.9 | 69.9 | 88.6 | 361 |
| Merck Ltd., Tokyo, Japan | 100.00 | 333.7 | 28.4 | 105.7 | 468 |
| Taiwanese companies, Taiwan | 100.00 | 327.8 | 30.6 | 89.6 | 390 |
| Merck Pharmaceutical (HK) Co., Ltd., Hong Kong, China | 100.00 | 123.1 | 3.5 | 2.5 | 37 |
| Merck Ltd., Mumbai, India | 51.00 | 61.2 | 9.6 | 72.3 | 1,072 |
| PT Merck Tbk, Jakarta, Indonesia | 86.65 | 44.7 | 7.0 | 21.5 | 782 |

* Figures for the entire company unconsolidated, irrespective of the equity interest

## [26] Financial liabilities

This item comprises:

### Current financial liabilities

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Bank loans and overdrafts | 101.2 | 126.6 |
| Liabilities to related parties | 98.2 | 93.5 |
| Liabilities from derivatives (financial transactions) | 41.5 | 40.0 |
| Loans from third parties | 15.3 | 22.9 |
| Financial liabilities to other affiliates | 7.2 | 7.1 |
| Financial leasing liabilities | 1.1 | 1.0 |
| Commercial paper | – | 7.0 |
| Other financial liabilities | 1.7 | 2.3 |
| | **266.2** | **300.4** |

### Non-current financial liabilities

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Bonds | 997.7 | 969.2 |
| Loans from third parties | 50.1 | 52.9 |
| Bank loans and overdrafts | 20.5 | 15.5 |
| Financial leasing liabilities | 8.4 | 8.9 |
| Liabilities from derivatives (financial transactions) | 3.4 | 0.1 |
| | **1,080.1** | **1,046.6** |

### Credit facilities granted to the Merck Group are as follows:

| € million | Bank credit facilities | Utilization* as of Dec. 31, 2008 | Interest | Due |
|---|---|---|---|---|
| Syndicated loan 2007 | 2,000.0 | – | variable | 2014 |
| Bilateral credit facilities with banks | 10.0 | 10.0 | fix | 2018 |
| Bilateral credit facilities with banks | 11.3 | 11.3 | fix | 2017 |
| Various bank lines | 455.4 | 101.2 | fix/variable | < 1 year |
| | **2,476.7** | **122.5** | | |

* Booked disagios are not taken into account in the disclosure

In fiscal 2007, a € 2 billion multi-currency term loan and revolving credit facility was agreed. The loan has a term of seven years and was placed with an international banking syndicate.

The current and non-current liabilities of the Merck Group to banks are denominated in the following currencies:

| in % | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Euros | 33.1 | 68.8 |
| U.S. dollars | 0.4 | 0.6 |
| Pounds sterling | 0.1 | – |
| Swiss francs | – | – |
| Yen | – | 1.8 |
| Other currencies | 66.4 | 28.8 |
| | **100.0** | **100.0** |

In 2005, Merck KGaA launched its first euro benchmark bond in the European debt capital market via Merck Finanz AG, Luxembourg. The size of the issue was € 500 million with a maturity of seven years. The bond pays a coupon of 3.75% and was issued at a price of 99.716%. The interest expense of the bond has been fixed to the six-month Euribor rate through interest rate swaps. Since the hedging instruments are based on the same fundamentals that determine the value of the underlying transaction, changes in the market interest rates lead to opposite changes in the value of the bond. The measurement of the bond reflects fair value taking into account disagios and transaction costs. The costs of issuing the bond are reflected in the book value and are distributed evenly over the term of the bond.

In 2007, Merck KGaA launched another euro benchmark bond for € 500 million in the European debt capital market. It has a term of three years. The bond pays a coupon of 4.75% and was issued at a price of 99.7%. The measurement reflects amortized cost. In order to meet short-term capital requirements, Merck KGaA issued a commercial paper program with a volume of € 2 billion, which had not been utilized as of the reporting date. Liabilities from financial leasing represent the discounted amount of future payments arising from finance leases. This item primarily relates to liabilities from finance leases for buildings. Information on liabilities due to related parties can be found in Note [48].

## [27] Trade accounts payable

Trade accounts payable consist of the following:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Liabilities due to associates | – | – |
| Liabilities due to other affiliates | 0.9 | 0.3 |
| Liabilities due to third parties | 842.8 | 646.6 |
| | **843.7** | **646.9** |

Trade accounts payable include accrued amounts of € 521.0 million (2007: € 355.5 million) for outstanding invoices and accrued reductions in sales revenues.

## [28] Other liabilities

This item comprises:

Other current liabilities

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Other liabilities to associates | – | – |
| Other liabilities to other affiliates | 1.6 | 1.5 |
| Other liabilities to third parties | 87.7 | 75.3 |
| Advance payments received from customers | 13.6 | 6.9 |
| Liabilities to related parties | 234.6 | 533.2 |
| Liabilities from profit distributions | 0.9 | 0.3 |
| Liabilities from derivatives (operational) | 8.8 | 1.9 |
| Payroll liabilities | 45.5 | 51.2 |
| Deferred income | 4.2 | 6.9 |
| Accruals for personnel expenses | 297.3 | 304.1 |
| | **694.2** | **981.3** |

## Other non-current liabilities

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Other liabilities to associates | – | – |
| Other liabilities to other affiliates | 0.1 | 0.1 |
| Other liabilities to third parties | 4.6 | 25.6 |
| Payroll liabilities | 0.2 | 0.1 |
| Deferred income | 14.7 | 13.7 |
| | **19.6** | **39.5** |

Other liabilities due to other companies include liabilities in connection with non-income-related taxes as well as obligations in connection with duties and import fees. Liabilities due to insurance companies as well as contractually agreed payment obligations vis-à-vis other companies are also disclosed here.

### [29] Tax liabilities

Tax liabilities amount to € 347.2 million (2007: € 337.1 million). This item also includes provisions for tax liabilities amounting to € 245.5 million (2007: € 272.9 million).

## [30] Provisions

Provisions developed as follows:

| € million | Restructuring | Personnel | Litigation | Other | Total |
|---|---|---|---|---|---|
| **January 1, 2008** | **102.8** | **149.8** | **412.6** | **201.8** | **867.0** |
| Exchange differences | 0.1 | 2.9 | 5.8 | 1.6 | 10.4 |
| Utilizations | –45.4 | –63.5 | –36.8 | –62.6 | –208.3 |
| Additions | 43.7 | 56.4 | 44.5 | 54.6 | 199.2 |
| Release | –10.8 | –4.8 | –53.0 | –9.3 | –77.9 |
| Changes in companies consolidated/Other | 0.1 | 3.5 | –0.2 | –3.3 | 0.1 |
| **December 31, 2008** | **90.5** | **144.3** | **372.9** | **182.8** | **790.5** |
| thereof current | 58.8 | 53.4 | 17.0 | 97.9 | 227.1 |
| thereof non-current | 31.7 | 90.9 | 355.9 | 84.9 | 563.4 |

Provisions for restructuring: This item mainly includes provisions for severance payments for employees in connection with restructuring projects, contractually agreed severance obligations and contingent liabilities. The relevant provisions are recognized in accordance with IAS 37 when detailed restructuring plans have been prepared and communicated.

Provisions for personnel: Personnel provisions mainly include the expenses of obligations for the partial early retirement program, other severance pay and anniversary bonuses.

Provisions for litigation: Provisions for litigation risks in connection with our former U.S. generics subsidiary Dey Inc. concerning allegedly false reporting of price information amounted to € 92.2 million on the balance sheet date. Although the company was divested within the scope of the sale of the Generics business to Mylan Inc., PA (USA), Merck continues to be liable for costs incurring from the aforementioned legal disputes since the mentioned risk was not transferred to Mylan.

As of the balance sheet date, there are provisions in connection with the legal dispute with the company Israel Bio-Engineering Project Limited Partnership (IBEP), in which IBEP claims intellectual property rights and license fees in connection with funding and developing Rebif® and other products.

In addition, there are provisions in connection with a legal dispute with Italfarmaco S.p.A., Italy. The background is a license and supply agreement relating to the product Rebif® that was concluded between the parties and has been terminated by Italfarmaco S.p.A. in the meantime on account of alleged violations of the agreement by Serono. Italfarmaco S.p.A. claims compensation for, among other things, loss of profit.

For various smaller pending legal disputes at companies of the Merck Group, provisions that are considered appropriate from today's perspective have been recognized.

Other provisions: This item mainly includes provisions for uncertain commitments in the context of environmental protection measures as well as contributions, duties and fees.

### [31] Provisions for pensions and other post-employment benefits

The calculation of obligations as well as the relevant plan assets is based on the following actuarial parameters:

| in % | 2008 | 2007 |
|---|---|---|
| Discount rate | 5.8 | 5.2 |
| Future salary increases | 3.2 | 3.2 |
| Future pension increases | 2.3 | 2.1 |
| Staff turnover | 2.0 | 2.1 |
| Expected return on plan assets | 5.6 | 5.9 |
| Future increases in health care benefits | 6.8 | 9.0 |

These are average values weighted by the present value of the respective benefit obligation. The average expected return on plan assets is weighted by the fair value of the respective plan assets. Plan assets for funded benefit obligations primarily comprise equities, fixed-income securities and real estate. They do not include financial instruments issued by Merck Group companies or real estate used by Group companies.

The balance sheet item "Provisions for pensions and other post-employment benefits" can be broken down as follows:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Present value of benefit obligations funded by provisions | 1,051.5 | 1,129.2 |
| Present value of funded benefit obligations | 534.4 | 536.7 |
| **Present value of all benefit obligations** | **1,585.9** | **1,665.9** |
| Fair value of plan assets of all funds | –462.6 | –520.5 |
| **Funded status** | **1,123.3** | **1,145.4** |
| Other changes | 0.8 | 10.3 |
| **Net liability recognized in the balance sheet** | **1,124.1** | **1,155.7** |
| Deferred pension payments | 19.9 | 29.8 |
| **Provisions for pensions and other post-employment benefits** | **1,144.0** | **1,185.5** |

In 2008, the following items were recognized in income:

| € million | 2008 | 2007 |
|---|---|---|
| Current service cost | 58.4 | 61.6 |
| Past service cost | 1.2 | –2.8 |
| Interest cost on pension obligations | 82.8 | 77.6 |
| Expected return on plan assets | –27.1 | –26.0 |
| Other effects | –3.3 | –4.1 |
| **Total amount recognized in income** | **112.0** | **106.3** |

The present value of commitments for future health care expenses of retirees in the United States is based on an expected future increase in health care costs of 6.8%. If the rate of increase is one percentage point higher or lower, the measurement of the present value of the commitment would be either € 0.7 million higher or € 0.6 million lower. The expenses recognized in 2008 would have been € 0.1 million higher or lower.

The actual loss on plan assets amounted to € 70.6 million (2007: return of € 18.2 million). Apart from the interest component stemming from provisions for pension obligations, which is disclosed in the financial result, the relevant expense of defined benefit and defined contribution plans is distributed across the individual functional areas.

During 2008, the present value of all defined obligations changed as follows:

| € million | 2008 | 2007 |
|---|---|---|
| Present value of all defined benefit obligations on January 1 | 1,665.9 | 1,607.2 |
| Currency translation differences | –34.7 | –28.9 |
| Current service cost | 58.4 | 61.6 |
| Interest cost on pension obligations | 82.8 | 77.6 |
| Other effects recognized in income | –7.9 | –4.1 |
| Actuarial gains/losses | –123.5 | –115.3 |
| Pension payments in the reporting period | –82.0 | –84.7 |
| Transfers/Changes in companies consolidated/Other changes | 26.9 | 152.5 |
| **Present value of all defined benefit obligations on December 31** | **1,585.9** | **1,665.9** |

The fair value of the plan assets changed as follows in the reporting period:

| € million | 2008 | 2007 |
|---|---|---|
| Fair value of the plan assets on January 1 | 520.5 | 346.2 |
| Currency translation differences | –25.5 | –22.3 |
| Expected return on plan assets | 27.1 | 26.0 |
| Other effects recognized in income | –4.6 | – |
| Actuarial losses/gains | –97.6 | –7.2 |
| Employer contributions | 44.4 | 50.1 |
| Employee contributions | 9.8 | 8.5 |
| Pension payments in the reporting period | –24.8 | –32.0 |
| Transfers/Changes in companies consolidated/Other changes | 13.3 | 151.1 |
| **Fair value of the plan assets on December 31** | **462.6** | **520.5** |

In the reporting period, actuarial gains (+) and losses (-) as well as the effects of limiting accrued pension payments in accordance with IAS 19.58 amounting to € 31.7 million (2007: € 102.4 million) were taken to equity. As of December 31, 2008, for the aforementioned reasons a cumulative total of € –133.1 million (2007: € –164.8 million) was taken to equity.

The fair value of the plan assets can be allocated to the individual asset categories as follows. Weighted average values are used here:

| in % | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Equity instruments | 34.4 | 44.2 |
| Debt instruments | 38.4 | 39.7 |
| Real estate | 11.7 | 5.8 |
| Other assets | 15.5 | 10.3 |

On average, the expected rate of return on equity instruments is 8.3%, on debt instruments 4.3% and on real estate 4.5%. The respective rates of return take into account country-specific conditions and are based, among other things, on interest and dividend income expected over the long term as well increases in the value of the investment portfolio after the deduction of directly allocable taxes and expenses.

The development of pension plan assets was below expectations due to the generally sharp decline in the capital markets. A corresponding diversification spreads risks.

Over the past five years, the funded status, composed of the present value of the defined benefit obligations and the fair value of the plan assets, has changed as follows:

| € million as of Dec. 31 | 2008 | 2007 | 2006 | 2005 | 2004 |
|---|---|---|---|---|---|
| Present value of the defined benefit obligations | 1,585.9 | 1,665.9 | 1,607.2 | 1,491.4 | 1,301.3 |
| Fair value of the plan assets | –462.6 | –520.5 | –346.2 | –276.5 | –234.9 |
| Funded status | 1,123.3 | 1,145.4 | 1,261.0 | 1,214.9 | 1,066.4 |

It is expected that the payments to beneficiaries from unfunded pension plans will amount to around € 62 million in 2009 (2008: € 59 million) while payments to fund-financed pension plans will probably amount to around € 24 million in 2009 (2008: € 31 million).

The cost of ongoing contributions in 2008 for defined contribution plans that are financed exclusively by external funds and for which the companies of the Merck Group are only obliged to pay the contributions, amounted to € 8.6 million in 2008 (2007: € 13.5 million). In addition, employer contributions of € 46.2 million (2007: € 45.6 million) were transferred to the German statutory pension insurance system and € 5.5 million (2007: € 7.7 million) to statutory pension insurance systems abroad.

### [32] Net equity

A strong equity position is important for Merck to ensure the continued existence of the company. Based on our financial strategy, the Executive Board regularly reviews various key figures that reflect the capitalization of the company. Gearing (ratio of net debt and pension provisions to net equity) and the equity ratio are important indicators here.

During the reporting period a further 8,000 shares were issued as part of the stock option program. This led to a further increase in the number of shares to a total of 64,621,126. The amount resulting from the issue of shares by Merck KGaA exceeding the nominal amount is recognized in the capital reserves. The reserves also contain the retained earnings and the net retained profit of the consolidated subsidiaries as well as the income and expenses taken directly to equity. The currency translation difference includes the differences not recognized in income from currency translation by subsidiaries abroad. Currency translation differences increased equity in 2008 by € 878.0 million (2007: decreased by € 205.8 million). Accordingly, as of December 31, 2008, currency translation differences in equity amounted to a gain of € 529.6 million (2007: loss of € 348.4 million).

The disclosure of minority interest is based on the stated equity of the subsidiaries concerned after any adjustment required to ensure compliance with the accounting policies of the Merck Group, as well as pro rata consolidation entries. The interests of other shareholders in net equity mainly relates to the minority interests in Merck Ltd. India, Merck Serono S.A., Switzerland, PT Merck Tbk, Indonesia and Merck Ltd., Thailand.

In addition to the dividend payments to the shareholders of Merck KGaA and to minority shareholders in subsidiary companies of the Merck Group, the appropriation of profits includes the transfer of profits from Merck & Cie KG to E. Merck KG in accordance with the company agreements and the reciprocal transfer of profits between E. Merck KG and Merck KGaA in accordance with the Articles of Association. In accordance with the capital ratios, E. Merck KG has a 70.27% interest in the profit/loss of Merck KGaA while Merck KGaA has an interest of 29.73% in the profit/loss of E. Merck KG. Merck KGaA's profit from ordinary activities less trade income tax, on which the appropriation of its profit is based, amounts to € 180.0 million. Merck KGaA transferred € 126.5 million of its profit to E. Merck KG (2007: € 65.1 million). In 2008, € 34.9 million was transferred from Merck & Cie KG (2007: € 30.4 million). The profit/loss of E. Merck KG, on which the appropriation of profit/loss is based, amounts to € 5.9 million (2007: € –7.2 million). Consequently, this results in a profit transfer to Merck KGaA of € 1.8 million (2007: € –2.1 million).

For 2007, a dividend of € 1.20 plus a bonus of € 2.00 per share was distributed. The dividend proposal for fiscal 2008 will be € 1.50 per share, corresponding to a total dividend payment of € 96.9 million to the limited liability shareholders.

The following table shows the development of changes taken directly to equity as a result of recognizing financial instruments at fair value in accordance with IAS 39.

| € million | Available for sale current and non-current financial assets | Derivative financial instruments | Total |
|---|---|---|---|
| **Balance as of January 1, 2008** | **0.9** | **0.1** | **1.0** |
| Fair value adjustments | –45.4 | 53.9 | 8.5 |
| Reclassification to income statement | 29.6 | 20.6 | 50.2 |
| Reclassification to assets | – | – | – |
| **Subsequent measurement in fiscal year** | **–15.8** | **74.5** | **58.7** |
| Deferred taxes recognized in equity | –0.1 | –10.5 | –10.6 |
| **Balance as of December 31, 2008** | **–15.0** | **64.1** | **49.1** |

As part of the stock option program for senior executives resolved by the Merck KGaA Annual General Meeting 2000, the creation of € 5,720,000 contingent capital for issuing stock rights was approved. As a result, a maximum of 2,200,000 stock options could be issued from the approved contingent capital. A total of 2,153,500 options were granted in two tranches. Each option entitled the bearer to acquire one share of Merck KGaA, provided that the exercise requirements are met. The term of the program for both tranches was six years. Both tranches had a minimum vesting period of 25 months. Stock options may only be exercised after the minimum vesting period if the stock price on the day before exercise was at least 30% higher than the option exercise price. The exercise price was the mean value of Merck's shares in the Frankfurt XETRA trading system, commencing 30 days before the date of issue of the stock rights. In addition, the rights are subject to a lockup period that begins two calendar weeks before the date of publication of the Q1 and Q3 reports and eight calendar weeks before the date of publication of the H1 and Annual Reports. When granted, the first tranche included 766,500 options. It was possible to exercise these options from 2002 to 2006. When granted, the second tranche included 1,387,000 options. These stock options could be exercised from May 2004 to April 8, 2008 at an exercise price of € 32.73, provided that Merck's share price was not below € 42.55. Upon exercising the options, the shares carry dividend rights for the current and following fiscal years.

The development of all options on shares of Merck KGaA in the second tranche is presented in the following table:

| | 2008 | 2007 |
|---|---|---|
| **Oustanding options as of January 1** | **20,000** | **40,310** |
| Options exercised during the period | 8,000 | 20,310 |
| Options forfeited during the period | 12,000 | 0 |
| **Outstanding options as of December 31** | **0** | **20,000** |
| thereof exercisable as of December 31 | 0 | 20,000 |
| Recognized capital increase (in € million) | 0.2 | 0.7 |

The weighted average price of Merck KGaA's shares in XETRA trading at the time of exercise of the stock options was € 81.05 in 2008.

# Notes to the segment reporting

The classification of asset and income figures as well as of other key figures by business sector or by region in accordance with IAS 14 is presented in "Segment Reporting". Segmentation was performed in accordance with the internal reporting of the Merck Group. The financial result and taxes on income are allocated in full in the Corporate and Other segment. The operating segments are described in detail in the chapter about the divisions in this Annual Report.

Transfer prices for intragroup sales are determined on an arm's-length basis. There were no significant intercompany relations between the business segments. In the Segment Reporting, the United States and Canada are combined to form a single region "North America", as the two countries are managed as a single territory in the Merck Group's internal reporting.

The reconciliation of operating assets included in "Segment Reporting" is as follows:

| € million | Dec. 31, 2008 | Dec. 31, 2007 |
|---|---|---|
| Assets | 15,644.7 | 14,922.3 |
| Monetary assets (cash and equivalents, loans, securities) | –895.7 | –1,020.5 |
| Non-operating receivables, tax receivables, deferred taxes and accruals and deferred pension payments | –664.2 | –567.0 |
| Trade accounts payable | –843.7 | –646.9 |
| Other operating liabilities | –472.9 | –481.1 |
| Operating assets of discontinued operations | – | –26.9 |
| **Operating assets** | **12,768.2** | **12,179.9** |

The Merck Serono division accounted for € 0.7 million (2007: € 0.3 million) and the Performance & Life Science Chemicals division for € 0.2 million (2007: € 0.2 million) of the investment result disclosed in the income statement. Losses of € 0.8 million were attibutable to the segment Corporate and Other in 2008 (2007: € 0.2 million).

# Notes to the cash flow statement

**[33] Net cash flows from operating activities**

Tax payments in 2008 totaled € 289.6 million (2007: € 209.0 million). Interest expense totaled € 95.7 million (2007: € 302.8 million) and interest income totaled € 49.9 million (2007: € 51.6 million). The increase in trade accounts receivable is due to the fact that the program to sell receivables was discontinued in 2008.

**[34] Net cash flows from investing activities**

A total of € 78.2 million was used for acquisitions and investments in other financial assets. Of this amount, € 6.9 million was used to acquire SeQuant AB, of Umea, Sweden, € 4.6 million to acquire Litec-LLL GmbH of Greifswald, Germany, and € 30.2 million to acquire Bio-Fyt Pharma N.V., of Sint-Jans-Molenbeek, Belgium. In addition, additional holdings in PT Merck Tbk of Jakarta, Indonesia, were acquired for € 10.2 million. Investments in other financial assets totaled € 26.3 million.

| € million | SeQuant AB | Litec-LLL GmbH | PT Merck Tbk | Bio-Fyt Pharma N.V. |
|---|---|---|---|---|
| Purchase price | 6.9 | 5.6 | 10.2 | 32.6 |
| Cash and cash equivalents acquired | - | –1.0 | – | –2.4 |
| **Net cash outflows** | **6.9** | **4.6** | **10.2** | 30.2 |

There were no cash inflows from disposals of Group companies in 2008.

The decline in other financial assets is due to the withdrawal of € 497.9 million from a monetary investment for financing purposes.

## [35] Net cash flows from financing activities

Disclosed dividend payments and transfers of profits in accordance with the Articles of Association were broken down as follows in the fiscal year:

| € million | 2008 | | 2007 | |
|---|---|---|---|---|
| **Dividend payments** | | | | |
| Dividends to shareholders | –206.8 | | –67.8 | |
| Dividends to minority shareholders | –5.7 | **–212.5** | –9.2 | **–77.0** |
| **Net profits transferred by Merck KGaA to E. Merck KG** | | | | |
| Profit transfer in accordance with the Articles of Association from E. Merck KG to Merck KGaA | 1.8 | | –2.1 | |
| Profit transfer in accordance with the Articles of Association from Merck KGaA to E. Merck KG | –126.5 | | –65.1 | |
| Withdrawals by E. Merck KG from the reserves/profit carried forward by Merck KGaA | –80.3 | **–205.0** | –438.2 | **–505.4** |
| **Profit transfer from Merck & Cie KG to E. Merck KG** | | **–34.9** | | **–30.4** |
| **Total dividend payments and profit transfers** | | **–452.4** | | **–612.8** |

Free cash flow after dividend payments and profit transfers totaled € –14.0 million (2007: € –2,085.9 million).

## [36] Cash and cash equivalents

The composition of cash and cash equivalents is presented under “Notes to the Balance Sheet”.

## [37] Free cash flow

Free cash flow is an indicator that we use internally to measure the contribution of our divisions to liquidity. Free cash flow includes all net cash flows from operating activities as well as investing activities performed in connection with operating business. We do not include in free cash flow pure financial investments and similar monetary deposits of more than three months, which are also to be reported as net cash flows from investing activities under IFRS.

# Other disclosures

**[38] Derivative financial instruments**

We use derivative financial instruments exclusively to hedge currency and interest rate positions, and thereby minimize currency risks and financing costs caused by exchange rate or interest rate fluctuations. The instruments used are marketable forward exchange contracts and interest rate swaps. The strategy to hedge the transaction risk arising from currency fluctuations is set by a Group interest rate and currency committee, which meets on a regular basis. A review period of up to 36 months normally serves as the basis. Every hedge must relate to an underlying transaction that either already exists or is definitely expected to take place (ban on speculation). Currency risks from financial assets or loans denominated in foreign currencies are generally hedged. The use of such derivative contracts is governed by internal regulations, and derivative transactions are subject to continuous risk management procedures. Trading, settlement and control functions are strictly separated, and this separation is monitored by our internal audit department. Derivative contracts are only entered into with banks that have a good credit rating and they are restricted to the hedging of our business operations and related financing transactions.

The following derivative financial positions were held as of the balance sheet date:

| | Nominal volume | | Fair value | |
|---|---|---|---|---|
| € million | Dec. 31, 2008 | Dec. 31, 2007 | Dec. 31, 2008 | Dec. 31, 2007 |
| Cash flow hedge | 936.9 | 760.9 | 74.6 | 0.1 |
| Fair value hedge | 53.5 | 102.1 | 2.6 | –0.2 |
| Without hedge accounting | 3,283.9 | 2,064.2 | 44.9 | 4.7 |
| **Total forward exchange contracts** | **4,274.3** | **2,927.2** | **122.1** | **4.6** |
| Interest rate swaps | 500.0 | 500.0 | –0.6 | –28.3 |
| | **4,774.3** | **3,427.2** | **121.5** | **–23.7** |

The nominal volume is the aggregate of all buy and sell amounts relating to derivative contracts. The fair values result from the valuation of open positions at market prices, ignoring any opposite movements in the value of the underlyings. They correspond to the income or expenses which would result if the derivatives contract were closed out as of balance sheet date. Transactions are recognized at fair value on the basis of quoted prices or current market data provided by a recognized information service.

The maturity structure of the hedging transactions (nominal volume) is as follows as of the balance sheet date:

| € million | Remaining maturity less than 1 year | Remaining maturity more than 1 year | Total Dec. 31, 2008 | Remaining maturity less than 1 year | Remaining maturity more than 1 year | Total Dec. 31, 2007 |
|---|---|---|---|---|---|---|
| Forward exchange contracts | 4,003.6 | 270.7 | 4,274.3 | 2,717.0 | 210.2 | 2,927.2 |
| Interest rate swaps | – | 500.0 | 500.0 | – | 500.0 | 500.0 |
| | **4,003.6** | **770.7** | **4,774.3** | **2,717.0** | **710.2** | **3,427.2** |

Gains and losses on the fair value of derivatives and underlyings are usually recognized directly in the income statement. If cash flows are being hedged and the requirements for hedge accounting in accordance with IAS 39.88 are met, the effective portions of the gains and losses from the fair value measurement of derivatives are recognized in equity until the underlying transaction occurs. These amounts are only reclassified from equity and carried to the income statement after accounting for the underlying transactions. Amounts reclassified to the income statement are either recognized in the operating result, or in the financial result in the case of financial transactions.

Hedge accounting in accordance with IAS 39 was used for some hedging transactions:

| | Nominal volume | | Fair value | |
|---|---|---|---|---|
| € million | Dec. 31, 2008 | Dec. 31, 2007 | Dec. 31, 2008 | Dec. 31, 2007 |
| Cash flow hedge | 936.9 | 760.9 | 74.6 | 0.1 |
| Fair value hedge | 53.5 | 102.1 | 2.6 | –0.2 |
| Interest rate swap | 500.0 | 500.0 | –0.6 | –28.3 |
| | **1,490.4** | **1,363.0** | **76.6** | **–28.4** |

The forward exchange contracts that are entered into to reduce the exchange rate risk with a total nominal volume of € 4,274.3 million primarily serve to hedge intercompany financing in foreign currency. These primarily served to hedge fluctuations in the exchange rates of the U.S. dollar (€ 1,116.0 million), the Swiss franc (€ 2,046.9 million), the Japanese yen (€ 706.4 million) and the British pound (€ 281.9 million).

Forecast transactions are only cash flow-hedged if the occurrence can be assumed to be highly probable. The nominal volume of hedged future transactions amounted to € 936.9 million as of the balance sheet date and related mainly to the hedging of future sales in U.S. dollars, Taiwanese dollars and Japanese yen as well as future costs in Swiss francs. The occurrence of hedged items is expected within the next 36 months. During the fiscal year, gains of € 53.9 million from the fair value measurement of derivatives were recognized in equity. € 20.6 million was transferred from equity to expenses.

Due to planned payments that did not materialize, cash flow hedges with a nominal volume of € 79.4 million were removed from hedge accounting in 2008. Expenses of € 10.9 million were thus recognized in the financial result.

The interest expense of the euro benchmark bond, which was issued in 2005 with a volume of € 500.0 million and a coupon of 3.75% was fixed to the six-month Euribor rate through interest rate swaps and is measured as a fair value hedge.

### [39] Management of financial risks

Fluctuations in the price of currencies and interest rates can result in significant profit and cash flow risks for Merck. Therefore, Merck centralizes these risks as far as possible and steers them in a forward-looking manner, also by using derivative financial instruments.

#### Foreign currency risks

Transaction risks: Owing to its international business focus, Merck is subject to currency risks within the scope of both ordinary business and financing activities. Different strategies are used to limit or exclude these risks.

In principle, currency risks from financing activities are eliminated as far as possible through the use of forward exchange contracts. Currency risks arising from operating business are analyzed regularly and reduced if necessary through forward exchange contracts or currency options using hedge accounting.

The following table presents the net currency risk from expected and recognized transactions in 2009 in the most important currencies:

| € million as of Dec. 31 | CHF | GBP | JPY | TWD | USD |
|---|---|---|---|---|---|
| Foreign exchange risk from balance sheet items | –464.6 | 136.3 | 185.4 | 6.6 | –329.4 |
| Foreign exchange risk from contingent business and anticipated transactions | –234.4 | 70.0 | 241.0 | 176.4 | 722.4 |
| Transaction-related foreign exchange position | –699.0 | 206.3 | 426.4 | 183.0 | 393.0 |
| Position hedged by derivatives | 674.5 | –193.3 | –370.4 | –75.6 | –169.4 |
| Open-end foreign exchange risk position | –24.6 | 13.0 | 56.0 | 107.4 | 223.6 |
| Change in foreign exchange position due to a 10% appreciation of the euro | 2.5 | –1.3 | –5.6 | –10.7 | –22.4 |

Translation risks: Many Merck companies are outside the euro zone. The financial statements of these companies are translated into euros. Exchange differences in the assets of these companies resulting from currency fluctuations are recognized in equity.

#### Interest rate risks

Interest rate risks relate mainly to financial liabilities of € 1,301.4 million and monetary deposits of € 756.4 million. If necessary, derivative financial instruments are used to change fixed interest payments into variable interest payments. The aim is to optimize the interest result and to minimize interest rate risks. Relative to net interest liabilities on the balance sheet date, a parallel shift in interest rates by 100 basis points would affect profits by € –1.0 million. This corresponds to an increase in interest income of € 5.9 million on financial assets and additional interest expense of € 6.9 million on financial liabilities.

### Liquidity risks

The liquidity risk, i.e. the risk that Merck cannot meet its financial obligations, is limited by effective cash management and by establishing the required financial flexibility. Apart from liquid assets of € 869.5 million, Merck has at its disposal a multicurrency revolving credit line of € 2 billion to be used for business purposes with a remaining term of six years as well as bilateral credit facilities of € 476.7 million. There are no indications that the availability of credit lines already extended will be restricted. Moreover, a commercial paper program with a volume of € 2 billion exists. Liquidity risks are regularly monitored and reported to the management.

The following table presents the contractually set payments such as repayments and interest on financial liabilities carried in the balance sheet and derivative financial instruments with a negative market value:

| | Book value Dec. 31, | Cash Flows 2009 | | Cash Flows 2010 – 2014 | | Cash Flows 2015 – 2020 | |
|---|---|---|---|---|---|---|---|
| € million | 2008 | Interest | Repayment | Interest | Repayment | Interest | Repayment |
| Debt securities and commercial paper | 997.7 | 42.5 | – | 76.2 | 1,000.0 | – | – |
| Bank loans and overdrafts | 121.7 | 8.5 | 101.9 | 3.1 | 12.7 | 0.6 | 7.9 |
| Other financial liabilities | 67.1 | 3.5 | 17.0 | 6.2 | 40.0 | – | 10.1 |
| Miscellaneous other liabilities | 105.4 | – | 105.4 | – | – | – | – |
| Financial leasing liabilities | 9.5 | 0.1 | 5.1 | 0.2 | 4.4 | – | – |
| Derivative financial liabilities | 44.9 | 1.7 | 40.9 | 4.9 | 3.4 | – | – |
| | **1,346.3** | **56.3** | **270.3** | **90.6** | **1,060.5** | **0.6** | **18.0** |

### Credit risks

Merck is subject to a very low credit risk, i.e. the unexpected loss of payment funds or income. On the one hand, financial contracts are only entered into with banks with good ratings. On the other hand, the broad-based business structure of the Merck Group means that there is no particular concentration of credit risks with respect to customers or specific countries.

The credit risk with customers is continuously monitored by analyzing the age structure of trade accounts receivable.

## [40] Other disclosures on financial instruments

The carrying values of financial instruments by category are as follows:

| € million | Book value Dec. 31, 2008 | Balance sheet measurement according to IAS 39: Amortized cost | Acquisition cost | Fair value recognized in equity | Fair value included in profit/loss |
|---|---|---|---|---|---|
| **Assets** | | | | | |
| Cash and cash equivalents | 692.7 | 692.7 | – | – | – |
| Trade receivables | 1,659.4 | 1,659.4 | – | – | – |
| Loans | 15.5 | 15.5 | – | – | – |
| Other receivables | 214.3 | 214.3 | – | – | – |
| Other designated financial assets of the category | | | | | |
| Held to maturity | 37.1 | 37.1 | – | – | – |
| Available for sale | 67.0 | – | 18.0 | 41.4 | 7.6 |
| Held for trading | 0.9 | – | – | – | 0.9 |
| Derivative financial assets | | | | | |
| Unhedged derivatives | 90.6 | – | – | – | 90.6 |
| Hedged derivatives | 84.7 | – | – | 83.5 | 1.2 |
| **Liabilities** | | | | | |
| Debt securities and commercial paper | 997.7 | 498.6 | – | – | 499.1 |
| Bank loans and overdrafts | 121.7 | 121.7 | – | – | – |
| Other financial liabilities | 172.5 | 172.5 | – | – | – |
| Trade accounts payable | 843.7 | 843.7 | – | – | – |
| Miscellaneous other liabilities | 342.9 | 342.9 | – | – | – |
| Financial leasing liabilities | 9.5 | – | – | – | – |
| Derivative financial liabilities | | | | | |
| Unhedged derivatives from financing transactions | 45.7 | – | – | – | 45.7 |
| Other unhedged derivatives | – | – | – | – | – |
| Hedged derivatives | 8.1 | – | – | 8.9 | –0.8 |
| **thereof aggregated by category acc. to IAS 39** | | | | | |
| Loans and receivables | 2,581.9 | 2,581.9 | – | – | – |
| Assets of the category | | | | | |
| Held to maturity | 37.1 | 37.1 | – | – | – |
| Available for sale | 67.0 | – | 18.0 | 41.4 | 7.6 |
| Held for trading | 91.5 | – | – | – | 91.5 |
| Liabilities of the category | | | | | |
| Carried at amortized cost | 1,979.4 | 1,979.4 | – | – | – |
| Carried at fair value, inclued in profit/loss | 544.8 | – | – | – | 544.8 |

| | | | Balance sheet measurement according to IAS 39 | | | | | |
|---|---|---|---|---|---|---|---|---|
| Carrying value according to IAS 17 | Fair value Dec. 31, 2008 | Book value Dec. 31, 2007 | Amortized cost | Acquisition cost | Fair value recognized in equity | Fair value included in profit/loss | Carrying value according to IAS 17 | Fair value Dec. 31, 2007 |
| – | 692.7 | 426.6 | 426.6 | – | – | – | – | 426.6 |
| – | 1,659.4 | 1,378.3 | 1,378.3 | – | – | – | – | 1,378.3 |
| – | 15.4 | 515.1 | 515.1 | – | – | – | – | 515.1 |
| – | 214.3 | 196.3 | 196.3 | – | – | – | – | 196.3 |
| – | 37.1 | 51.0 | 51.0 | – | – | – | – | 51.0 |
| – | 67.0 | 86.4 | – | 23.7 | 62.7 | – | – | 86.4 |
| – | 0.9 | 0.7 | – | – | – | 0.7 | – | 0.7 |
| – | 90.6 | 16.1 | – | – | – | 16.1 | – | 16.1 |
| – | 84.7 | 2.1 | – | – | 1.2 | 0.9 | – | 2.1 |
| – | 1,005.5 | 976.1 | 504.8 | – | – | 471.3 | – | 977.3 |
| – | 119.6 | 142.2 | 142.2 | – | – | – | – | 141.6 |
| – | 172.3 | 178.7 | 178.7 | – | – | – | – | 182.0 |
| – | 843.7 | 646.9 | 646.9 | – | – | – | – | 646.9 |
| – | 342.5 | 642.8 | 642.8 | – | – | – | – | 641.7 |
| 9.5 | 9.5 | 9.9 | – | – | – | – | 9.9 | 8.9 |
| – | 45.7 | 10.7 | – | – | – | 10.7 | – | 10.7 |
| – | – | 0.9 | – | – | – | 0.9 | – | 0.9 |
| – | 8.1 | 30.5 | – | – | 1.1 | 29.4 | – | 30.5 |
| – | 2,581.8 | 2,516.3 | 2,516.3 | – | – | – | – | 2,516.3 |
| – | 37.1 | 51.0 | 51.0 | – | – | – | – | 51.0 |
| – | 67.0 | 86.4 | – | 23.7 | 62.7 | – | – | 86.4 |
| – | 91.5 | 16.8 | – | – | – | 16.8 | – | 16.8 |
| – | 1,984.5 | 2,115.4 | 2,115.4 | – | – | – | – | 2,118.2 |
| – | 544.8 | 482.9 | – | – | – | 482.9 | – | 482.9 |

The net results of financial instruments by category are as follows:

| | Interest | Subsequent measurement | | |
|---|---|---|---|---|
| 2008 in € million | | Write-downs | Write-up | Disposal gains/losses |
| Loans and receivables | 29.5 | –10.1 | 5.2 | – |
| Assets of the category | | | | |
| Held to maturity | 3.8 | – | – | 1.1 |
| Available for sale | 2.1 | – | – | –0.2 |
| Held for trading | – | –29.7 | – | – |
| Liabilities of the category | | | | |
| Carried at amortized cost | –68.1 | – | – | – |
| Held for trading | – | – | – | – |
| **2007 in € million** | | | | |
| Loans and receivables | 40.9 | –10.0 | 17.9 | – |
| Assets of the category | | | | |
| Held to maturity | 3.4 | – | – | 0.1 |
| Available for sale | 17.3 | – | – | 2.8 |
| Held for trading | – | – | – | – |
| Liabilities of the category | | | | |
| Carried at amortized cost | –251.1 | – | – | – |
| Held for trading | – | – | – | – |

In 2008, exchange rate gains of € 11.4 million resulting from receivables and payables in operating business were recognized (2007: € 3.8 million). Expenses totaling € 18.2 million were recorded for hedging transactions in operating business (2007: income of € 7.7 million). Exchange rate losses of € 18.4 million (2007: exchange rate gains of € 8.5 million) were booked for financial receivables/payables. A loss of € 23.5 million (2007: € 2.5 million) was booked for hedging of financing transactions.

The interest expense of the bond has been made variable through interest rate swaps. The fair value measurement of the bond led to an expense of € 27.4 million (2007: € 6.7 million). This was offset by the same amount of income from an interest rate swap.

## [41] Contingent liabilities

| € million | Dec. 31, 2008 | thereof subsidiaries | Dec. 31, 2007 | thereof subsidiaries |
|---|---|---|---|---|
| Bills endorsed and in circulation | 0.1 | – | 0.1 | – |
| Guarantees | 71.2 | – | 57.4 | – |
| Warranties | 1.4 | – | 0.7 | – |
| Other contingent liabilities | 27.8 | – | 34.1 | – |

Most of the guarantees issued exist in connection with our pharmaceutical business in Italy, where pursuant to tax legislation, guarantees must be given for reimbursements of tax receivables from the Italian fiscal authorities exist as well as to secure the supply of products to public hospitals. Other contingent liabilities include, among other things, collateral security given on property, plant and equipment, for example buildings and potential obligations from legal disputes, for which the probability of an outflow of resources did not suffice to recognize a provision as of the balance sheet date.

### [42] Other financial obligations

Other financial obligations comprise the following:

| € million | Dec. 31, 2008 | thereof subsidiaries | Dec. 31, 2007 | thereof subsidiaries |
|---|---|---|---|---|
| Obligations to acquire intangible assets | 1,643.1 | – | 1,247.7 | – |
| Orders for capital expenditure on property, plant and equipment | 265.1 | – | 76.3 | – |
| Future rental payments | 70.0 | – | 62.9 | – |
| Future operating lease payments | 77.4 | – | 87.4 | – |
| Long-term purchase commitments | 8.3 | – | 0.3 | – |
| Other financial obligations | 22.6 | – | 30.9 | – |
| | **2,086.5** | **–** | **1,505.5** | **–** |

Obligations to acquire intangible assets exist in particular within the scope of research and development collaborations. Here Merck has obligations to make milestone payments when its partner achieves certain objectives. In the unlikely event that all contract partners achieve all milestones, Merck would be obligated to pay up to € 1,643.1 million (2007: € 1,247.7 million) for the acquisition of intangible assets. The obligations are as follows:

| € million | potential due date in 1 year | potential due date in 1–5 years | potential due date over 5 years | Total Dec. 31, 2008 |
|---|---|---|---|---|
| Obligations to acquire intangible assets | 50.8 | 405.6 | 1,186.7 | **1,643.1** |

Other financial obligations are carried at nominal value. Liabilities from lease agreements are composed as follows:

| € million | Remaining maturity less than 1 year | Remaining maturity 1 to 5 years | Remaining maturity more than 5 years | Total Dec. 31, 2008 |
|---|---|---|---|---|
| Present value of future payments from finance leases | 1.1 | 8.4 | – | 9.5 |
| Interest component of finance leases | 0.1 | 0.1 | – | 0.2 |
| **Future finance lease payments** | 1.2 | 8.5 | – | **9.7** |
| **Future operating lease payments** | 22.8 | 47.2 | 7.4 | **77.4** |

### [43] Personnel expenses/Headcount

Personnel expenses comprise the following:

| € million | 2008 | 2007 |
|---|---|---|
| Wages and salaries | 1,668.3 | 1,586.8 |
| Compulsory social security contributions and special financial assistance | 254.2 | 225.1 |
| Pension expenses | 93.0 | 121.5 |
| (in both years excluding Discontinued Operations (Generics)) | **2,015.4** | **1,933.4** |

As of December 31, 2008, the companies of the Merck Group had 32,800 employees (2007: 30,968). The average number of employees during the year was 31,971 (2007: 30,791).

### [44] Material costs

Material costs amounted to € 1,089 million in 2008 (2007: € 1,045 million - excluding Generics).

### [45] Auditors' fees

The costs of the auditors of the financial statements of the Merck Group (KPMG) can be broken down as follows:

| | 2008 | | 2007 | |
|---|---|---|---|---|
| Cost in € for | Merck Group | thereof Germany | Merck Group | thereof Germany |
| Audits of financial statements | 5.6 | 1.7 | 8.3 | 3.9 |
| Other audit-related services | 0.2 | 0.0 | 0.4 | 0.1 |
| Tax consultancy services | 0.4 | 0.1 | 0.4 | 0.1 |
| Other services | 0.8 | 0.6 | 2.2 | 1.7 |
| | **7.0** | **2.4** | **11.3** | **5.8** |

In 2007, the costs for audits included special expenses for audits in connection with the acquisition of Serono.

### [46] Corporate governance

The Statement of Compliance in accordance with Section 161 of the German Stock Corporation Act (Aktiengesetz) was published in the Corporate governance section of our Web site (www.merck.de/investors -> Corporate governance) in February 2008 and thus made permanently available.

**[47] Companies opting for exemption under Section 264 (3) of the German Commercial Code**

The following companies, which have been consolidated in these financial statements, have opted for exemption under Section 264 (3) of the German Commercial Code:

Merck Pharma GmbH, Darmstadt
Chemische Fabrik Lehrte Dr. Andreas Kossel GmbH, Lehrte
Merck Selbstmedikation GmbH, Darmstadt
Serono GmbH, Darmstadt

**[48] Related-party disclosures**

Related parties in respect of the Merck Group are E. Merck KG as well as the companies Emanuel Merck Vermögens KG and E. Merck Beteiligungen KG (until and including December 31, 2008: E. Merck Beteiligungen OHG). In principle, direct or indirect subsidiaries of Merck KGaA, associates and joint ventures of the Merck Group as well as pension funds that are classified as funded defined benefit plans in accordance with IAS 19, are also related parties within the meaning of IAS 24. Members of the Executive Board and the Supervisory Board of Merck KGaA, the Board of Management and the Board of Partners of E. Merck KG as well as close members of their families are also related parties.

As of December 31, 2008, there were liabilities by Merck KGaA and Merck & Cie KG, Altdorf, to E. Merck KG in the amount of € 332.8 million (2007: € 626.6 million). In addition, Merck KGaA was owed receivables in the amount of € 18.0 million (2007: € 20.8 million) by E. Merck KG as of December 31, 2008. The balances result mainly from the profit transfers by Merck & Cie to E. Merck KG, the reciprocal profit transfers between Merck KGaA and E. Merck KG, as well as the extension of loans by E. Merck KG to Merck KGaA as well as the extension of loans by Merck KGaA to E. Merck KG. These financial payables of € 98.2 million (2007: € 93.5 million) are subject to standard market interest rates. From January to December 2008, Merck KGaA performed services for E. Merck KG with a value of € 1.2 million (2007: € 1.1 million). In exchange, E. Merck KG performed services for Merck KGaA with a value of € 0.5 million (2007: € 0.5 million). As of December 31, 2008, Merck KGaA had receivables from E. Merck Beteiligungen KG in the amount of € 4.5 million (2007: € 5.8 million). From January to December 2008, Merck KGaA and Merck Shared Services Europe GmbH performed services for E. Merck Beteiligungen KG with a value of € 0.5 million (2007: € 0.3 million). In addition, Merck KGaA performed services for Emanuel Merck Vermögens KG with a value of € 0.1 million (2007: € 0.1 million).

Business transactions with major subsidiaries have been eliminated during consolidation and are not disclosed further in the Notes. Information on pension funds that are classified as funded defined-benefit plans in accordance with IAS 19 can be found under Provisions for pensions and other post-employment benefits of the Notes. There were no further material transactions with these pension funds.

From January to December 2008, companies of the Merck Group supplied goods with a value of € 0.3 million (2007: € 3.9 million) to associates. During the same period, associates provided no services to companies of the Merck Group (2007: € 5.2 million). There were no further material transactions with associates.

The remuneration of the Executive Board of Merck KGaA is largely paid by the general partner, E. Merck KG, and recorded as an expense in its income statement. For January to December 2008, fixed salaries of € 2.4 million (2007: € 3.0 million) and variable compensation of € 9.9 million (2007: € 21.9 million) were recorded for Members of the Executive Board of Merck KGaA. Variable compensation is in principle based on the three-year rolling average of profit after tax of the E. Merck Group. Furthermore, additions to pension provisions of E. Merck KG include current service costs of € 2.0 million (2007: € 2.0 million) for members of the Executive Board of Merck KGaA.

Subject to the approval of the Annual General Meeting on the proposed distribution of a € 1.50 dividend per share, the remuneration of the Supervisory Board amounting to € 586 thousand (2007: € 964 thousand) consists of a fixed portion of € 116 thousand (2007: € 95 thousand) and a variable portion of € 470 thousand (2007: € 869 thousand).

Further material transactions, for example the provision of services or the extension of loans, between companies of the Merck Group and members of the Executive Board and the Supervisory Board of Merck KGaA, the Executive Board and the Board of Partners of E. Merck KG or close members of their families did not take place in 2008.

### [49] Information on preparation and approval

The Executive Board of Merck KGaA prepared the consolidated financial statements on February 5, 2009 and approved them for forwarding to the Supervisory Board. The Supervisory Board has the responsibility to examine the consolidated financial statements and to declare whether it approves them.

# Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements of the Merck Group give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal opportunities and risks associated with the expected development of the Group.

Darmstadt, February 5, 2009

Karl-Ludwig Kley

Michael Becker

Bernd Reckmann

Elmar Schnee

# Auditor's Report

"We have audited the consolidated financial statements prepared by Merck Kommanditgesellschaft auf Aktien, Darmstadt, comprising the balance sheet, the income statement, statement of recognized income and expense, the cash flow statement and the notes to the consolidated financial statements together with the group management report, for the Merck Group for the business year from January 1 to December 31, 2008. The preparation of the consolidated financial statements and the group management report in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and the additional requirements of German commercial law pursuant to § 315a Abs. 1 HGB are the responsibility of the parent company's management. Our responsibility is to express an opinion on the consolidated financial statements and the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with § 317 of the German Commercial Code (HGB) and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRSs, as adopted by the EU, the additional requirements of German commercial law pursuant to § 315a Abs. 1 HGB and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development."

Mannheim, February 6, 2009

KPMG AG
Wirtschaftsprüfungsgesellschaft

(formerly KPMG Deutsche Treuhand-Gesellschaft
Aktiengesellschaft
Wirtschaftsprüfungsgesellschaft)

Dr. Bernd Erle
Wirtschaftsprüfer

Manfred Jenal
Wirtschaftsprüfer

# Glossary

**Aromatase inhibitors**
Aromatase inhibitors block estrogen formation in muscle and fatty tissue and are used to treat hormone-sensitive breast cancer.

**ASCO**
American Society of Clinical Oncology – the world's most important professional organization of physicians who treat cancer patients. Each year, an Annual Meeting of all members is held.

**Beta-blockers**
A collective term for similarly acting drug substances which act as inverse agonists on the body's beta receptors and so inhibit the action of stress hormones (notably, norepinephrine and epinephrine). They lower the heart rate and blood pressure, make the heart beat less strongly, and reduce the heart's excitability.

**BH4**
BH4 is a co-enzyme (tetrahydrobiopterin). The effects of BH4 deficiency include reduced levels of dopamine and serotonin.

**Biomarkers**
The term refers both to substances in the body and cell properties. Biomarkers help doctors to identify a patient's disease. Certain genes tend to play a role in the treatment of cancers, in terms of whether they are "normal" (wild type) or have undergone transformation (mutant). A relatively simple test is usually done.

**CEFIC**
European Chemical Industry Council.

**Credit facility**
The financial scope up to which a bank has agreed to grant a loan to a borrower is referred to as a credit line or credit facility. A credit line is a revolving credit, meaning that the borrower can continuously draw funds and make payments until the term expires or the credit line is terminated.

**DAX®**
Abbreviation for Deutscher Aktienindex (German Stock Index). Its value is based on the stock prices of the 30 largest German companies by market capitalization.

**EBIT**
Earnings before interest and taxes. Equals the operating result plus exceptional items.

**EBITDA**
Earnings before interest, taxes, depreciation and amortization. Equals the earnings before interest and taxes (EBIT) minus write-downs for depreciation and amortization.

**EGFR**
Abbreviation for Epidermal Growth Factor Receptor. It is upregulated in various tumor types and/or present in mutated form, resulting in uncontrolled growth and replication of tumor cells. Novel cancer therapies are aimed at blocking EGFR's oncogenic signal and hence stopping tumor growth.

**Equity ratio**
Indicator that shows equity capital in proportion to total capital. It serves to evaluate the financial stability and independence of a company.

**FDA**
Food and Drug Administration: U.S. government agency responsible for protecting and advancing public health, especially as concerns food and drugs.

**First, second and third line therapy**
First and second line therapies are curative in nature. First and second line treatments take precedence for that reason. Some patients derive little or no benefit from first and second line treatment. Patients who have not responded to the first two lines move on to a third line of treatment, which is palliative (i.e. it aims to relieve suffering).

**Free cash flow**
Free cash flow is defined as the net cash flows from operating activities minus investments in intangible assets, property, plant and equipment, acquisitions as well as investments in other financial assets, plus proceeds from the disposal of assets and changes in securities.

**GDP**
Gross domestic product – total value of all goods (products and services) intended for final consumption that are produced within a country's borders in a given year

**Gearing**
Ratio of net debt including pension provisions to net equity.

**GHS**
Globally Harmonized System of Classification and Labelling of Chemicals. An international standard system to classify chemicals, including labels and safety data sheets.

**GPHF**
The Global Pharma Health Fund e.V. (GPHF) is a non-profit initiative created by Merck. The objective of the organization is to promote health care within the scope of development assistance, especially with respect to the fight against counterfeit drugs through the use of the GPHF-Minilab®.

**GPHF-Minilab®**
With the GPHF-Minilab®, the Global Pharma Health Fund e.V. (GPHF) offers a unique mobile compact laboratory that is capable of testing the quality of drugs.

**Greenhouse Gas Protocol**
The most widely used accounting and reporting system for greenhouse gas emissions.

**ICCA**
International Council of Chemical Associations.

**IMF**
The International Monetary Fund, with headquarters in Washington, D.C., is a United Nations organization.

**Investment ratio**
Investments as a proportion of total revenues.

**Irinotecan**
An antineoplastic (chemotherapy) drug used to treat cancer.

**ISO 14001**
This international environmental management standard specifies globally recognized requirements for an environmental management system.

**KRAS**
A recently identified biomarker that can show whether a patient with metastatic colorectal carcinoma is likely to respond to EGFR antibody therapy. This is done by testing the status of the KRAS gene in the tumor to see if it is normal (wild type) or abnormal (mutant). The KRAS acronym stands for Kirsten Rat Sarcoma.

**Liquid Crystals (LC)**
These specialty chemicals are used in LC displays (LCD), for example, in flat-panel televisions, notebooks, mobile telephones and cameras. This is also the name of the Merck division that researches and markets liquid crystals.

**Lupus erythematosus (LE)**
An autoimmune disease linked to inflammatory rheumatic disease and classified as a collagen disease. There are two main types: lupus of the skin, and systemic lupus erythematosus (SLE). It may affect other organ systems apart from the skin and joints.

**Marketing and selling ratio**
Marketing and selling expenses as a percentage of total revenues.

**Metafolin®**
Biologically active form of folate occurs naturally in the human body and is utilized better by the body than folic acid. Folic acid and Metafolin® are important for cell division and blood formation and therefore the development and growth of new life.

**Monoclonal antibodies**
Highly specialized targeted antibodies synthesized using biotechnological methods. What makes them special is their ability to activate the body's natural mechanisms to fight disease. Monoclonal antibodies have mainly been used for cancer treatment and to suppress adverse immune responses.

**MUC1**
Also known as PEM (polymorphic epithelial mucin), MUC1 is a glycoprotein group mucin embedded in cell membranes and occurring in all human organs. The MUC1 mucin is an established tumor marker.

**OECD**
The Organization for Economic Co-operation and Development, with headquarters in Paris, is a forum of 30 countries, almost all of them industrialized.

**OLED**
Organic Light-Emitting Diodes. New technology for displays and lighting used, for example, in mobile telephones, MP3 players, and recently also in televisions for the first time. A further possible use is in lamps.

**OTC**
Over-the-counter drugs is the term used for drugs that are available at stores and pharmacies without a prescription.

**Praziquantel**
A vermifuge used to fight flatworms, tapeworms and distoma including the schistosoma, the pathogen that causes the tropical disease schistosomiasis.

**Rating**
Rating is an assessment of a borrower's ability to pay. Borrowers are classified according to a bank's own criteria (internal rating) or the criteria of international rating agencies such as Moody's or Standard & Poor's (external rating).

**REACH**
REACH stands for the Registration, Evaluation, Authorization and Restriction of Chemicals. This is an EU regulation that entered into force in mid 2007.

**Research ratio**
Research spending as a proportion of the total revenues of the company or division.

**Return on sales (ROS)**
Ratio of operating result to total revenues.

**Schistosomiasis**
Schistosomiasis, also known as bilharziosis, is a parasitic disease that is spread in warm lakes and ponds by snails that serve as intermediate hosts.

**Somatotropin**
A proteohormone occurring as a growth hormone in the human and animal organism. Somatotropin is essential to the achievement of normal height.

**Total revenues**
Sum of sales and royalties. Royalties are earned primarily through patents held by the Pharmaceuticals business sector.

**Touch panels**
Screens that are sensitive to touch, allowing users to perform operations at the touch of a finger, such as at kiosks

**VCI**
The Verband der Chemischen Industrie (German Chemical Industry Association) represents the economic-political interests of 1,600 German chemical companies.

# Financial calendar for 2009

Annual press conference
Wednesday, February 18

Annual General Meeting
Friday, April 3

Interim report 1st quarter
Monday, April 27

Interim report 2nd quarter
Friday, July 24

Autumn press conference
Interim report 3rd quarter
Monday, October 26

# More information

The Merck Annual Report for 2008 is available in German and English. An abridged version is also available in German and English. Both reports are available as navigable online versions on the Web at www.merck.de/annualreport2008.

More information about Merck can be found on the Web at www.merck.de and in the following publications, which you may read or order (in German and English) at www.publications.merck.de:

Responsibility for Employees, the Environment and the Community ____ 2007 Report

Merck – Facts & Figures _____ (also available in French and Spanish)

A Strong Site _____ A Global Player Rooted in Darmstadt

You can order these publications from Corporate Communications, Merck KGaA, 64271 Darmstadt, Germany, or via the following e-mail address: corpcom@merck.de.

More information inside the cover:
Business Development 1999 – 2008

# Publication contributors

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# Business Development 1999 – 2008

| € million | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|
| Total revenues[3] | 5,433 | 6,896 | 7,697 | 7,497 |
| Pharmaceuticals[3] | 2,924 | 3,035 | 3,469 | 3,244 |
| Merck Serono | 1,675 | 1,929 | 2,215 | 1,833 |
| Generics | 657 | 790 | 935 | 1,096 |
| Consumer Health Care | 263 | 299 | 319 | 315 |
| Imaging[4] | 329 | 17 | – | – |
| Chemicals | 1,398 | 1,677 | 1,720 | 1,788 |
| Liquid Crystals | 174 | 312 | 297 | 383 |
| Performance & Life Science Chemicals | 1,089 | 1,173 | 1,207 | 1,213 |
| Electronic Chemicals[4] | 135 | 192 | 216 | 192 |
| Laboratory Distribution[4] | 1,262 | 2,374 | 2,754 | 2,711 |
| Intragroup sales | –151 | –190 | –246 | –246 |
| Corporate and Other | – | – | – | – |
| Generics (Discontinued Operations)[3] | – | – | – | – |
| | | | | |
| Operating result[3] | 659 | 746 | 877 | 616 |
| Pharmaceuticals[3] | 498 | 455 | 581 | 272 |
| Chemicals | 114 | 247 | 204 | 260 |
| Laboratory Distribution[4] | 47 | 44 | 92 | 84 |
| Corporate and Other | 0 | 0 | 0 | 0 |
| Generics (Discontinued Operations)[3] | – | – | – | – |
| | | | | |
| Earnings before interest and tax (EBIT)[3] | 581 | 747 | 1,286 | 559 |
| EBIT before depreciation and amortization (EBITDA)[3] | 900 | 1,184 | 1,694 | 985 |
| Profit before tax[3] | 440 | 524 | 1,078 | 412 |
| Profit after tax[5] | 235 | 262 | 655 | 215 |
| | | | | |
| Free cash flow[5] | –1,081 | 324 | 664 | 441 |
| Capital expenditure on property, plant and equipment[5] | 359 | 427 | 470 | 377 |
| Research and development[3] | 498 | 546 | 577 | 608 |
| | | | | |
| Total assets | 7,845 | 8,235 | 8,255 | 7,511 |
| Net equity | 1,870 | 1,947 | 2,336 | 2,054 |
| Employees (number as of December 31)[3] | 32,721 | 33,520 | 34,294 | 34,504 |
| | | | | |
| Return on sales[3] (ROS) in % (ROS: Operating result/Total revenues) | 12.3 | 11.1 | 11.6 | 8.3 |
| | | | | |
| Earnings per share in € | 1.32 | 1.44 | 3.66 | 1.18 |
| Dividend per share in € | 0.85 | 0.90 | 0.95 | 1.00 |
| One-time bonus per share in € | – | – | – | – |

[1] In order to harmonize accounting practices, as of 2006 the way in which certain customer rebates in the Pharmaceuticals business sector are reported has been changed.
[2] Following its acquisition, the Swiss biopharmaceutical company Serono was integrated with the Ethicals division into Merck Serono in 2007.
[3] The Generics division was sold in October 2007 and is thus reported as a Discontinued Operation. All revenue, profit and employee figures have been adjusted for 2006 and 2007.
[4] Business was divested.
[5] Still including Discontinued Operations (Generics) in 2006 and 2007.

| 2003 | 2004 | 2005 | 2006[1] | 2007[2] | 2008 | Change vs. 2007 in % |
|---|---|---|---|---|---|---|
| 7,343 | 5,994 | 5,865 | 4,460 | 7,057 | 7,558 | 7.1 |
| 3,438 | 3,579 | 3,885 | 2,314 | 4,877 | 5,428 | 11 |
| 1,528 | 1,597 | 1,797 | 1,914 | 4,458 | 4,987 | 12 |
| 1,584 | 1,625 | 1,712 | – | – | – | – |
| 327 | 357 | 376 | 400 | 420 | 442 | 5.2 |
| – | – | – | – | – | – | – |
| 1,705 | 1,694 | 1,905 | 2,112 | 2,150 | 2,123 | –1.3 |
| 443 | 589 | 741 | 895 | 916 | 877 | –4.2 |
| 1,082 | 1,105 | 1,163 | 1,217 | 1,235 | 1,246 | 0.9 |
| 181 | – | – | – | – | – | – |
| 2,427 | 582 | – | – | – | – | – |
| –228 | –62 | – | – | – | – | – |
| – | 200 | 76 | 34 | 29 | 7 | –77 |
| – | – | – | 1,824 | 1,395 | 0 | – |
| | | | | | | |
| 736 | 776 | 883 | 799 | 976 | 1,131 | 16 |
| 389 | 391 | 454 | 217 | 417 | 655 | 57 |
| 316 | 420 | 492 | 641 | 631 | 558 | –12 |
| 79 | 21 | – | – | – | – | – |
| –48 | –56 | –63 | –60 | –72 | –81 | 14 |
| – | – | – | 307 | 189 | 0 | – |
| | | | | | | |
| 538 | 1,044 | 956 | 1,031 | 200 | 731 | – |
| 1,008 | 1,419 | 1,245 | 1,334 | 1,858 | 1,947 | 4.8 |
| 423 | 961 | 893 | 982 | –111 | 575 | – |
| 218 | 672 | 673 | 1,001 | 3,520 | 379 | –89 |
| | | | | | | |
| 442 | 1,889 | 657 | –1,073 | –1,473 | 438 | – |
| 281 | 234 | 268 | 253 | 283 | 395 | 40 |
| 605 | 599 | 713 | 615 | 1,028 | 1,234 | 20 |
| | | | | | | |
| 6,982 | 5,754 | 7,281 | 8,102 | 14,922 | 15,645 | 4.8 |
| 2,363 | 2,800 | 3,329 | 3,807 | 8,688 | 9,563 | 10 |
| 34,206 | 28,877 | 29,133 | 25,531 | 30,968 | 32,800 | 5.9 |
| | | | | | | |
| 10.2 | 13.2 | 15.3 | 17.9 | 13.8 | 15.0 | |
| | | | | | | |
| 1.15 | 3.47 | 3.40 | 5.07 | 16.21 | 1.69 | – |
| 0.80 | 0.80 | 0.85 | 0.90 | 1.20 | 1.50 | – |
| – | 0.20 | – | 0.15 | 2.00 | – | – |

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