# II. Developments in the advanced industrial economies

# Highlights

The advanced industrial economies experienced an unusually abrupt and simultaneous slowdown in the course of 2001, with the growth of global trade coming to a halt. The slowdown was driven by the corporate sector, where slumping profits and equity prices induced a sharp decline in fixed capital spending and inventories. Corporate financing conditions became more differentiated as companies with low credit ratings were forced to pay wider spreads. In contrast, household demand remained strong, particularly in the United States and other English-speaking countries. The strength of household spending was partly attributable to rising house prices and favourable borrowing conditions.

The performance of the global economy improved significantly in the early months of 2002, reflecting a slowing rate of inventory decumulation and strong policy responses. Business fixed investment has not yet recovered: profits are still weak and debt levels in some countries appear high for this stage of the business cycle. Inflation expectations seem to be well anchored at a low level despite higher oil prices, allowing policy rates to be kept low.

#### Slowdown in 2001

Aggregate output in the main industrial countries began to decelerate from the middle of 2000 and continued to slow significantly last year (Table II.1). The first signs of the slowdown had emerged in the United States, notably in the high-tech sector. The ensuing deceleration in global trade was particularly sharp (Graph II.1), underlining the unusually synchronised nature of the downturn. An important feature of the slowdown was that it did not appear to have been triggered by monetary policy tightening. Rather, a severe downward correction of business inventories and investment took place, preceded and partly induced by a substantial fall in corporate profits. In contrast, private consumption and residential construction remained much stronger than during previous downturns. The divergent trends in corporate and household spending resulted, in part, from different fundamentals. Excess capacity and falling profits in the corporate sector contrasted sharply with increasing property prices and continued strong real household income. The relatively easy credit conditions for households favoured consumption and residential construction.

Sharp deceleration in global trade

Growth and inflation									
		Real GDP		Consumer prices <sup>1</sup>					
	1991–2000	2001	20022	1991–2000	2001	20022			
	annual percentage changes								
United States	3.2	1.2	2.8	2.8	2.8	1.6			
Euro area	2.0	1.5	1.3	2.6	2.5	2.0			
Japan	1.4	-0.4	-1.0	0.8	-0.7	-1.0			
United Kingdom	2.3	2.2	1.8	3.2	2.1	2.2			
Advanced industrial economies	2.5	1.1	1.7	2.4	2.1	1.4			

<sup>&</sup>lt;sup>1</sup> For the United Kingdom, retail prices excluding mortgage interest payments. <sup>2</sup> Consensus forecast published in May.

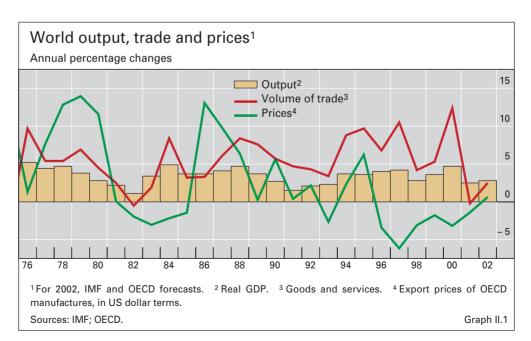
Table II.1

#### International linkages

An important element in the most recent slowdown is the appearance of greater synchronisation than during the recession in the early 1990s (Graph II.2). This might suggest that business cycles have become more closely correlated as economic globalisation has deepened, although other explanations are also plausible.

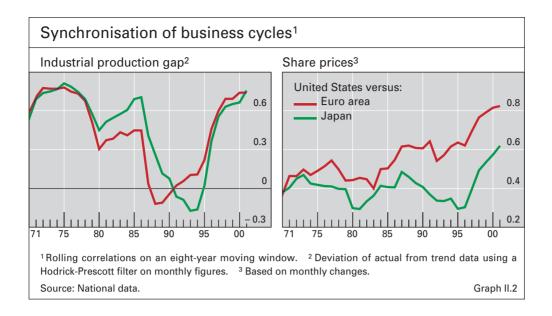
Trade linkages

The most obvious way in which a shock in one country is transmitted to others is through trade. With greater specialisation in the various stages of production, trade flows represent an increased proportion of output in today's economies (Table II.2). Moreover, vertical integration implies that sector-specific shocks have similar effects in terms of aggregate output fluctuations across national borders. As reflected in growing flows of foreign direct investment throughout the 1990s, a second, and related, feature of globalisation is that companies have established themselves more firmly in foreign markets. This implies that disturbances in one major economy would



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Sources: © Consensus Economics; national data.



depress aggregate profits of multinationals and lead to a global adjustment in their spending. In addition, a disturbance in one country could affect business expectations in its trading partners, triggering a quicker correction in inventories, investment plans and employment.

Financial channels may also have become more powerful. Long-term interest rates tend to move closely in step. Moreover, the correlation between equity prices in major industrial countries has risen over time. This may have increased the synchronisation of business cycles in two ways. As financial market prices react quickly to changes in macroeconomic conditions, they speed up the transmission of country-specific disturbances to other countries. Furthermore, recent decades have seen an increase in capital market financing. It is true that financial structures and balance sheets still vary greatly across countries and the influence of capital markets is typically higher in the English-speaking countries than in the euro area or Japan. Nonetheless, changes in increasingly correlated financial conditions are likely to have stronger and more synchronous effects on domestic demand than previously.

Foreign trade shares<sup>1</sup> 1981-90 1991-2000 2000 2001 as a percentage of GDP **United States** 9.3 11.4 13.0 11.9 Euro area<sup>2</sup> 14.8 15.0 19.3 19.3 Japan 11.3 9.1 10.0 10.1 United Kingdom 27.1 29.0 26.1 28.2 Canada 26.0 35.1 42.9 40.7 Australia 22.2 16.5 19.6 22.4 Sweden 32.2 35.7 44.5 43.5 Switzerland 35.8 36.1 44.0 44.2 Financial channels

<sup>&</sup>lt;sup>1</sup> Average of exports and imports in goods and services. <sup>2</sup> Excluding internal cross-border trade. Sources: ECB; OECD; national data. Table II.2

Temporary, and possibly reversible, common shocks were in play in 2001 Despite these secular trends, the underlying degree of economic synchronisation may be less than is suggested by developments in 2001. First, various temporary, and possibly reversible, common factors were in play during the recent slowdown. The increase in oil prices in 1999 and 2000 (Table II.3) raised import prices and depressed corporate profits, dampening both private consumption and business spending. Monetary policies were also tightened in most countries during 1999–2000. But perhaps the most important event was the bursting of the high-tech equity bubble, which led to a dramatic and synchronised deterioration in global capital markets. The resulting sharp decline in business fixed investment and inventories (demand components with a relatively high trade intensity) amplified the importance of the trade channel. Finally, the terrorist attacks of 11 September 2001 hurt confidence in all countries.

A return to the situation prevailing during the 1970s and 1980s?

Second, the recent downturn appears more synchronised by comparison with the recession of the early 1990s. Developments then, however, were rather unusual. Output fell in the United States and the other major English-speaking countries in 1991, but not until two years later in continental Europe and Japan. The absence of synchronisation in the early 1990s was mainly attributable to country-specific disturbances and events, notably German reunification and the end of the asset price bubble in Japan. The latter also led to protracted balance sheet problems which weighed on activity throughout the 1990s. The resulting decoupling of Japan from the business cycle in other industrial countries was reinforced by the Asian crisis in 1997–98. From this perspective, the synchronisation observed last year might simply reflect a return closer to the situation prevailing during the 1970s and 1980s.

Synchronisation in 2001 should not be overstated

Third, the synchronisation of business cycles in 2001 should not be overstated. Although growth everywhere was hit, macroeconomic developments in the major economies followed different patterns reflecting the influence of country-specific factors. The picture outside the United States was most favourable among other English-speaking countries, even those

World trade and prices <sup>1</sup>								
	1991–2000	1999	2000	2001	20022			
	annual percentage changes							
Trade volumes	7.3	5.6	12.8	-0.7	2.6			
Trade prices (in US dollars)	-0.8	-2.0	0.3	-3.5	-1.5			
Manufactures	-0.9	-1.9	-5.1	-2.4	-0.5			
Oil	2.1	37.5	57.0	-14.0	-5.3			
Other commodities	-0.9	-7.0	1.8	-5.5	-0.1			
Terms of trade								
Advanced economies <sup>3</sup>	0.2	0.1	-2.5	0.4	0.6			
Developing countries	-0.0	4.5	7.4	-3.0	-1.6			

<sup>&</sup>lt;sup>1</sup> Goods only. <sup>2</sup> IMF forecast. <sup>3</sup> Advanced industrial economies plus newly industrialised Asian economies (Hong Kong SAR, Korea, Singapore and Taiwan, China).

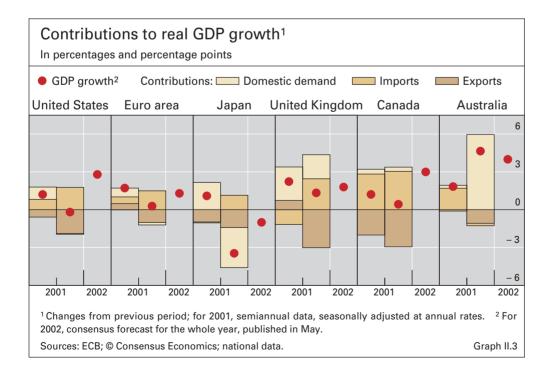
Source: IMF, World Economic Outlook.

Table II.3

closely linked to the US economy (in particular Canada). The United Kingdom grew faster than any other G7 country in 2001, although output weakened towards the end of the year. This performance mainly reflected a mixture of buoyant consumption and strong growth of public investment. The Australian economy, despite its trade linkages with Japan and East Asia, expanded by 21/2% last year, thanks to strong domestic demand, a competitive exchange rate and favourable supply side effects stemming from many years of economic deregulation (Graph II.3).

Other regions were more affected by the global slowdown than initially expected. Japan, already stagnating when the US economy was growing strongly, was the only advanced industrial country where GDP actually declined in 2001. A slump in exports aggravated the recession in the domestic economy, already hampered by difficulties in the banking sector, fragile corporate balance sheets and deflationary expectations. In the euro area, activity slowed substantially in the course of the year. In Germany, GDP actually declined during the second half of 2001, with domestic demand held back by a heavy correction of inventories and falling investment. Activity also slowed noticeably in Italy, reflecting sluggish domestic demand. Elsewhere in Europe, output decelerated markedly in Sweden, as consumption stalled in 2001, and in Switzerland, as export demand was hit by low global growth as well as by the appreciation of the Swiss franc.

On balance, it seems that the synchronised downturn in 2001 mainly represented the effects of common shocks, reinforced by the high trade intensity of the demand components most severely affected. To that extent, it was similar to the recessions of the early 1970s and 1980s. The principal implication is that the same degree of synchronisation might not be observed in the global recovery that appears to have been under way since the beginning of 2002 (see below).

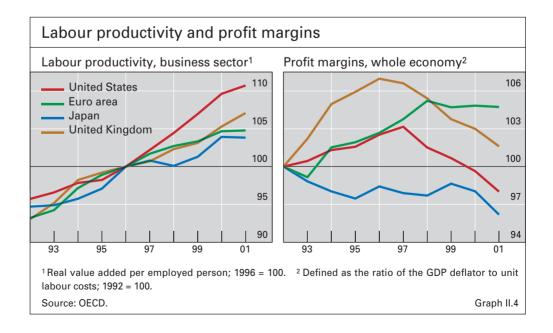


The role of the corporate and manufacturing sectors in the downturn

Contrasting developments in the corporate and household sectors Besides its high degree of global synchronisation, a second feature of the downturn last year was the contrasting developments in the corporate and household sectors. This led to significant differences in performance between domestically and externally oriented sectors, particularly in those countries which had experienced marked currency appreciation in recent years. For instance, output in the manufacturing sector fell sharply in the United States and the United Kingdom, while activity in residential and public construction as well as in the service sector weathered the downturn relatively well.

The global slowdown was led by a steep decline in manufacturing output, notably of high-tech products. A key element was a substantial and rapid downward correction of business investment in response to declining profits. While most firms benefited from low interest rates and strong output growth in the 1990s, their profits have come under increasing pressure in recent years. The profit margins of US corporations have narrowed since 1997, as almost all productivity gains have been absorbed by labour compensation. Squeezed by the rise in oil prices and an earlier tightening of borrowing conditions in some sectors, margins fell further in the period just before the recent slowdown (Graph II.4). This deterioration, also evident in some other major industrial countries, was compounded by the build-up of excess capacity in several sectors, feeding deflationary pressures and constraining firms' pricing power.

Industrial production also fell because of a significant inventory correction (particularly pronounced in the United States). In Japan, by contrast, the ratio of inventories to shipments remained at a high level despite industrial production falling to a 14-year low by the end of last year. As mentioned earlier, the terrorist attacks of 11 September were another important global element. They not only disrupted output at the factory level but also shook business confidence worldwide and exacerbated the deceleration in international trade.



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Firms had to reduce their financing gap

Corporate spending was further dampened by asset price developments and changing financial conditions, with firms trying to rebuild cash flows and reduce their financing requirement through spending cuts. First, corporate reported earnings were affected by sizeable write-offs following expensive acquisitions. Second, as expectations of near-term profits were revised sharply downwards, many companies also faced unexpected shortages of liquidity in a context of slow activity and restricted access to some credit markets. Third, while currency strength aggravated the problems faced by US and UK manufacturers, corporate spending in the euro area was particularly affected by excess capacity and a significant correction of equity prices in the telecoms industry.

More difficult access to credit for firms except for investment grade borrowers

The past 18 months have also seen a marked shift of financing within the corporate sector. Investment grade corporate borrowers benefited from the easing of monetary policy as well as from a shift to bond financing. Their issuance of debt securities remained at high levels, especially in the United States and the United Kingdom. As the slowdown deepened, investors became even more discriminating and spreads on non-investment grade corporate paper widened, counteracting the stimulatory effect of lower short-term interest rates. As discussed in Chapter VI, the creditworthiness of several classes of corporate borrowers deteriorated as the slowdown depressed earnings and led to more bankruptcies. Sector-specific risks played a particular role, notably after the September events, and some industries and firms faced a severe squeeze in their access to credit. These credit concerns were also reflected in a tightening of bank lending attitudes and the drying-up of the commercial paper market in the United States. In Japan, most of the decline in credit can be attributed to weak demand. At the same time, the rising stock of non-performing loans in a period of deflation and the growing number of bankruptcies reduced the ability and willingness of financial institutions to provide credit, especially to small and medium-sized enterprises.

#### Borrowing conditions, wealth effects and household spending

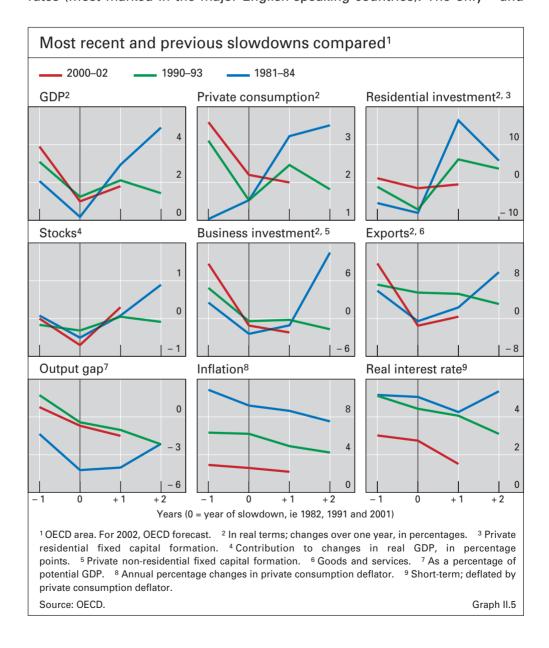
In sharp contrast to developments in the corporate sector, household spending was well sustained in most countries, despite high debt levels, declining equity prices and growing concerns about job prospects. Private consumption remained buoyant in the United Kingdom, and even strengthened in Australia. In the United States, increasing layoffs weighed on household income, but retail sales held up remarkably well. While household spending softened in the euro area overall, it remained strong in several countries, especially in Spain and France. In Japan, private consumption actually grew slightly in 2001.

Construction activity also followed an unusual pattern. In contrast to Germany (where it has continued to fall after the post-unification boom) and Japan (where public works spending has recently been reduced), construction was underpinned by public expenditures, particularly in the United States, Canada and the United Kingdom. In addition, residential investment was sustained by rising house prices in many countries. This strength was

unusual, since residential investment in previous downturns had tended to fall sharply in response to higher interest rates (Graph II.5).

Resilience of household spending

One reason for the resilience of household spending was lower long-term rates and buoyant mortgage markets. The average household borrowing rate fell by 2 percentage points in the United States in the course of last year. These effects were amplified by low-cost financing available from US car manufacturers, which helped to sustain private consumption towards the end of 2001. Households in the other English-speaking countries also benefited from strong growth in mortgage financing. The lingering effects of earlier asset price increases may have been another supportive factor. The ratio of household net worth to income had risen steeply over the 1990s, by more than 100 percentage points in the United States, the United Kingdom and Italy. Most of this improvement was the result of rising prices of financial assets. The resultant "wealth effects" seem to have supported consumer spending during the 1990s, inducing an almost universal decline in household saving rates (most marked in the major English-speaking countries). The only – and



important – exception is Japan, where household net worth has actually declined since 1990 as both equity and land prices have fallen sharply from highly inflated levels.

Although equity prices began to fall in early 2000 and the decline continued in 2001, private consumption remained unexpectedly strong in the OECD area. It actually rose by more than 2% in 2001, while output growth was a meagre 1%. More puzzlingly, household spending was even resilient in countries where the dampening effects of lower equity prices might have been expected to be the strongest: for example, in the United States, Canada and the United Kingdom. One possible explanation could be the marked increase in real estate values since the mid-1990s, which showed no sign of moderating in 2001. Indeed, over the last five years, residential property prices have been rising at an annual rate of around 10% in real terms in the United Kingdom, Ireland, the Netherlands and some Nordic countries, and at almost 5% per year in most other industrial countries (see Chapter VII). The main exceptions have been Japan and Germany, where real residential prices have fallen, and Switzerland and Canada, where they have been broadly stable in recent years.

Lower equity prices ...

... but marked increase in real estate values

It is an open question how far consumer spending is likely to be supported by an increase in the nominal value of housing wealth given that the physical stock of houses changes only slowly. On the one hand, wealth effects are positive; on the other, housing rents tend to rise with house prices. While those owning a house may save less as prices rise, those living in rented dwellings must save more if they aspire to buy a house. Moreover, tangible assets are usually less liquid than financial wealth and capital gains are both more ambiguous (because information on housing prices is more scattered) and harder to realise. Whatever the impact on consumption of higher housing prices, it should differ according to the importance of housing wealth.

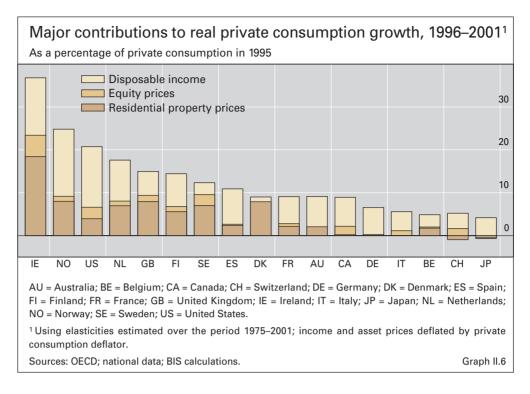
In theory, it is not clear that higher housing prices should affect consumption ...

Nevertheless, balance sheet effects might still provide an important transmission mechanism from house prices to consumption. An upswing in property prices raises the value of homeowners' fixed assets relative to their liabilities. Annual home sales were particularly high in the United States in 2001, allowing many households to realise capital gains from selling homes. But housing turnover is not the only way to take out equity in today's economies. As households can now borrow against unrealised capital gains – ie without selling their house – tangible assets have become much more liquid. Hence, intertemporal smoothing of consumption can be improved. The more efficient provision of mortgage credit over recent decades may well have accentuated this channel.

... but balance sheet effects could be important ...

At the empirical level, there is clear evidence that an increase in both financial and non-financial wealth has a positive and significant effect on consumer spending. The surge in house prices does appear to have strongly supported private consumption in the major English-speaking countries, the Netherlands and the Nordic countries (Graph II.6). Surprisingly, this seems more the case in countries where housing wealth is less important than financial wealth. One possible explanation is that the "financial deepening" of

... as borne out by empirical evidence



households' balance sheets (ie the ability to liquefy real estate wealth) has developed further in countries with market-based financial systems than in those primarily reliant on banks. The United States provided perhaps the most striking example in 2001: rapid home price inflation, allied with increased mortgage refinancing, significantly cushioned the negative effects of a declining stock market, the deterioration of the labour market and the shock to confidence following the 11 September attacks.

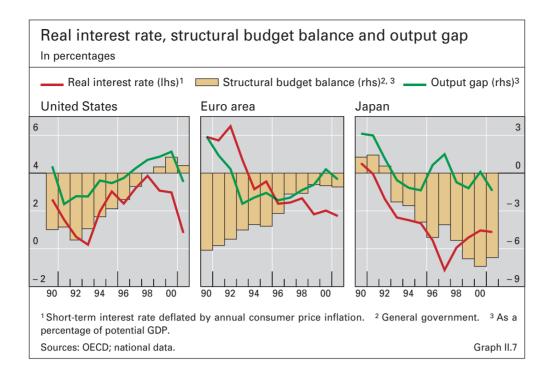
## Signs of improving economic prospects in 2002

The outlook for the global economy has improved since the end of 2001 and a revival in world trade appears to be under way. US output rebounded in the fourth quarter of last year, and gained strength impressively in the first quarter of 2002, even though some indicators suggest that activity slowed somewhat thereafter. In the euro area, business confidence picked up (suggesting that a recovery is taking hold), but private consumption was sluggish in the early months of 2002, constrained by a significant rise in prices and weak employment. The near-term outlook for Japan has remained poor, even though business surveys and the latest export and industrial output data give some indication that the downturn may be bottoming out. However, with nominal wages still falling, the outlook for private consumption remains bleak.

#### Factors supporting the current upturn

Supportive policies

Both monetary easing and a more expansionary fiscal stance have contributed to maintaining aggregate demand (Graph II.7). As the slowdown accelerated in the course of last year, short-term interest rates were eased considerably. This substantial easing has been particularly important in the United States,



where the Federal Reserve lowered policy rates rapidly, to levels last observed in the 1960s. In addition, the global fiscal stance has become more expansionary, with government expenditure especially buoyant in the United Kingdom. In the United States, sizeable tax cuts were implemented last summer and public expenditures have been rising strongly, particularly since the terrorist attacks. Although less extensive than previously envisaged, additional measures were adopted early this year. The easing of the US budgetary stance in 2002 is likely to amount to almost 1½% of GDP. Fiscal policy is also expected to significantly support demand in Canada, Norway and Sweden.

Besides temporary fiscal stimulus, other one-off factors have also underpinned the recovery. First, lower oil prices up to the end of 2001 reduced headline inflation and thus helped sustain real disposable income. Second, the inventory swing strongly supported global output at the beginning of 2002, notably in the automobile and IT sectors. Meanwhile, recent indicators suggest that the US-led recovery may be spreading across more sectors and regions. Residential construction strengthened notably in early 2002 in the United States, as well as in other major English-speaking countries. Moreover, since high-tech products are estimated to have a relatively short economic life, existing capacity could rapidly become obsolete and raise the need for new equipment. US investment in information processing equipment and software rose in the first quarter of 2002.

One-off factors have underpinned the recovery

#### Factors that might dampen the recovery

Nevertheless, financial market conditions may moderate the recovery. Government bond yields did not follow the monetary easing last year and have been quite sensitive to changes in investors' perception of the recovery since October 2001. Rates increased late last year amid greater

Potential constraints include financial market conditions ...

optimism about general macroeconomic prospects, heightened concerns about fiscal positions in some countries and expectations of an early monetary tightening (see Chapter IV). However, as investors became concerned about the strength of the recovery, bond rates fell again in April and May this year and corporate spreads narrowed slightly. Although this should help recovery, corporations' ability to borrow remains limited given greater investor caution after a series of high-profile bankruptcies in several countries.

... and corporate balance sheets

On the corporate side, an important question is how quickly profits can be restored. The ratio of profits to GDP has held up relatively well in the euro area. In Japan, the latest Tankan survey shows that Japanese firms expect profits to recover quite briskly in 2002. In the United States, a marked decline in unit labour costs has helped profits rebound strongly in the last few quarters, creating hopes that the dramatic decline in the profit share in 2001 could soon be reversed. However, any move to more usual interest rate levels would increase the cost of debt servicing and put further pressure on profit margins, possibly forcing firms to continue to correct their balance sheets before investment can pick up. Excess capacity could also undermine business investment over a prolonged period. Indeed, the current weakness in semiconductor prices suggests that excess capacity in the IT sector is still sizeable. Furthermore, the average rate of capacity utilisation in the whole manufacturing sector among OECD countries remains well below its 1990s level. An important exception is the euro area, where, outside the telecoms sector, the capacity overhang looks more limited.

#### Recovery may differ across countries

The strength of the apparent recovery in early 2002 has differed markedly across countries, perhaps because most of the forces responsible for the high degree of synchronisation during the downturn are absent.

Different speeds of recovery

First, the policy stance differs significantly across countries. One obvious factor is varying degrees of monetary ease. Given different inflation and output outcomes (see Chapter IV), short-term interest rates have fallen less in Europe than in the United States and have hardly changed in Japan as they were already close to zero. There are also striking disparities as regards fiscal policy. While the budgetary stance has turned clearly expansionary in the major English-speaking countries, public demand in the euro area has been more constrained by existing deficit and debt levels. Although automatic stabilisers were allowed to operate in 2001, cushioning the impact of the downturn, the fiscal stance may become slightly more restrictive in 2002. In Japan, a strict ceiling has been imposed on bond financing and the budget adopted for the fiscal year 2002 foresees a sizeable decline in government expenditure, in particular on public works.

Different underlying economic strengths Second, and perhaps most importantly, the potential rate of growth seems to differ widely among the major industrial countries. This could imply a sharper cyclical rebound in the United States given the relative size of the current output gaps. Labour productivity in the non-farm business sector in the United States remained strong during the slowdown, growing by 2% per annum from 1996 to 2001 (Graph II.4). Combined with a faster rate of

potential employment growth than in other industrial countries, this implies a relatively high rate of potential output growth, which would help sustain some combination of corporate profits and real wage gains. The performance of the other main industrial countries has been weaker. In Japan, the average rate of output growth recorded over the past decade has been very low and labour productivity has grown by only 3/4% per annum over the last five years. In the European Union, the growth of labour productivity has averaged 11/4% per annum for the last five years, and potential growth remains further constrained by stagnant labour force growth and structural rigidities in both product and labour markets. Nevertheless, structural unemployment has been reduced in some countries through incentives to hire young or unskilled workers. For example, France has cut social security taxes for low-skilled workers, while other European countries have encouraged their recruitment through increased labour market flexibility. Such measures might be expected to adversely affect labour productivity for a time, even as they increase potential growth in the longer run.

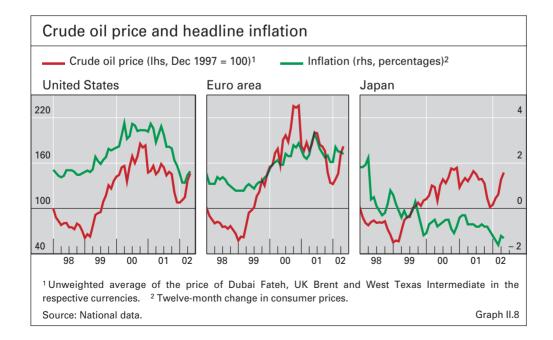
### Medium-term prospects

Looking beyond the next few quarters, the strength of the current global recovery is likely to depend mainly on the prospects for inflation, as well as on domestic and external financial balances.

#### Outlook for inflation

As the global downturn intensified in the course of 2001, inflationary pressures eased in most countries. However, most of the deceleration in headline inflation was due to lower commodity prices (Graph II.8). Underlying inflation – that is, excluding food and energy prices – has been comparatively stable and in the euro area has actually increased to over 2%.

Global inflation is expected to remain low ...



Headline inflation declined markedly in the United States, from almost 4% at the beginning of 2001 to just 1% a year later. Consumer prices continued to fall in Japan, at a somewhat faster pace in the second half of 2001. In the United Kingdom, headline inflation went down rapidly, mainly due to lower mortgage rates; excluding this effect, inflation dropped less markedly and was just below the Bank of England's target. In Switzerland, currency appreciation pushed headline inflation close to zero by the end of 2001. By contrast, consumer prices rose sharply in the euro area in the first half of 2001, reflecting a combination of higher indirect taxes (in Germany and the Netherlands), temporary increases in food prices, and the lagged impact of higher oil prices and a lower exchange rate. However, inflation declined during the second half, although it remained slightly above the Eurosystem's announced target.

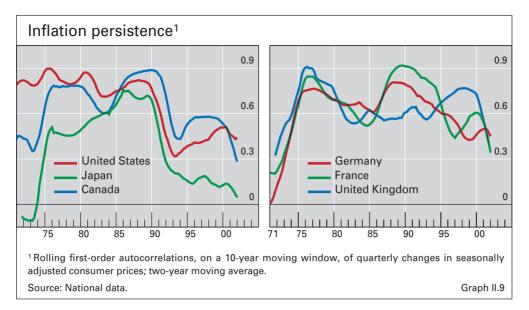
... in response to secular forces, despite short-term risks

Global inflation is expected to remain low during 2002, particularly given the current softness of labour markets. The pricing power of firms everywhere remains constrained by the still high level of excess capacity and increasingly competitive international markets. Nevertheless, some inflation risks remain. In those European countries with rigid labour markets, employees might react to improving growth prospects by seeking higher wages. The potential impact would be greater were unions also to seek compensation for past real wage losses. In addition, energy prices have risen recently and could rise further in an unstable political climate. Major oil producers have committed themselves to adjusting supply to maintain stable prices, but whether this will be sufficient to prevent a significant upward move in energy prices remains to be seen. Other potential inflationary pressures may exist in countries where there is a danger of a sharp fall in the exchange rate or where house prices have surged.

Main features of inflation in advanced industrial economies <sup>1</sup>							
	Period	Mean	Disper- sion <sup>2</sup>	Varia- bility³	Persist- ence <sup>4</sup>		
United States	1970–1989	6.3	3.2	0.5	0.8		
	1990–2001	3.0	1.0	0.4	0.6		
European countries <sup>5</sup>	1970–1989	8.3	4.1	0.5	0.8		
	1990–2001	3.1	1.6	0.5	0.6		
Japan	1970–1989	5.8	5.4	0.9	0.7		
	1990–2001	0.9	1.4	1.6	0.3		
Canada	1970–1989	6.9	3.1	0.4	0.8		
	1990–2001	2.3	1.6	0.7	0.4		
Australia	1970–1989	9.1	3.4	0.4	0.5		
	1990–2001	2.8	2.2	8.0	0.2		
Advanced industrial	1970–1989	7.1	3.9	0.6	0.8		
economies <sup>5</sup>	1990–2001	2.7	1.4	0.6	0.5		

<sup>&</sup>lt;sup>1</sup> Calculations based on annual percentage changes of quarterly seasonally adjusted consumer price indices (for short-term persistence, changes over one quarter). <sup>2</sup> Measured by standard deviation. <sup>3</sup> Ratio of standard deviation to arithmetic mean. <sup>4</sup> First-order autocorrelation coefficient of quarterly changes; lower values in the 1990s indicate that short-term persistence has decreased. <sup>5</sup> Weighted average based on 1995 GDP and PPP exchange rates.

Source: National data. Table II.4



Fortunately, the risk that such inflationary pressures might endanger price stability over the medium term seems to have been reduced by recent changes in the behaviour of inflation. There is some evidence that, following the impressive decline in both the level and volatility of inflation in the 1990s (Table II.4), inflation expectations seem to be better anchored. More specifically, in the new environment of low and stable inflation, economic agents appear to have become more forward-looking and seem to be gearing their expectations of inflation more to monetary policy than to past rates of inflation (see Chapter IV). In particular, short-term persistence of changes in inflation has noticeably diminished during the last decade (Graph II.9). This change, which has been particularly evident in many countries with inflation targeting regimes, implies that past inflation has become less important in explaining today's inflation.

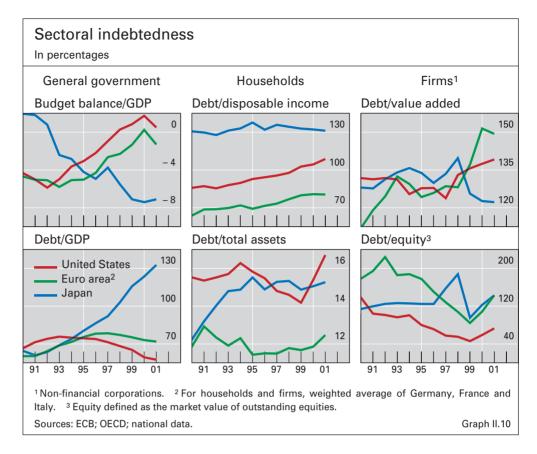
Better anchored inflation expectations

#### Domestic imbalances

The level of indebtedness is a second factor that could influence the medium-term sustainability of the recovery. Private sector debt rose sharply during the 1990s, and corporate and household balance sheets did not improve during 2001 as much as in previous downturns. This issue has attracted a great deal of attention. Will high debt levels require a deeper correction of balance sheets and, at some point, entail sharp cuts in spending? This is not easy to answer, not least because different indicators point to different conclusions (Graph II.10).

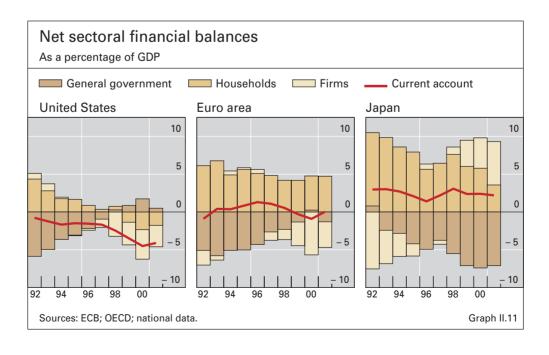
Looking first at the development of net saving (ie the difference between saving and investment), households in most countries saw a significant decline during the 1990s (Graph II.11). Surpluses were sharply reduced in Japan and turned into deficits in the United States. In the latter case, one contributing factor was that lower nominal interest rates and strong wealth gains induced households to finance increased spending by taking on more debt. Developments in mortgage markets have been particularly important in this respect. They not only reduced liquidity constraints but also allowed households to limit the rise in debt servicing costs. In 2001, for instance,

Significant fall in household net saving



households actually improved their financial balance and reduced interest payments by substituting mortgages for other sources of debt.

Non-financial firms in Japan have cut back on investment spending and used an increasing saving surplus to unwind substantially their large debt built up in the past. In contrast, a widening saving deficit has emerged for firms in the euro area, though partly as a result of tax incentives to reduce retained profits. The financial deficit of US corporations, which had increased during the 1990s, fell last year as firms cut investment expenditure and



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reduced inventories. Consequently, their ratio of interest cost to cash flow is now much lower than on the eve of the 1990–91 recession.

Turning to measures of debt, the ratios of both household and corporate gross debt have generally increased in the advanced industrial countries since the mid-1990s. Both ratios are now higher than is usual at the beginning of an upturn. Outstanding liabilities represent more than 100% of household disposable income in the G7 countries, an increase of more than 10 percentage points since the previous economic downturn. The ratio of the debt of non-financial corporates to GDP reached almost 90% in the G7 countries in 2001, against about 80% 10 years ago. A particular cause for concern is debt levels in the high-tech and telecoms equipment sectors, where companies face the challenge of improving their balance sheets in an environment of excess capacity and falling prices.

Private debt levels are high ...

Yet debt stocks still look relatively modest when asset values are taken into account. Indeed, rising asset prices throughout the 1990s have increased households' net wealth in most G7 countries. Debt is now equivalent to only 15% of household gross wealth, about the same percentage as at the beginning of the 1990s. In addition, corporate debt/equity ratios have declined over the past decade. However, Japanese corporate debt/equity ratios increased in 2001, as falling equity prices outweighed the effects of very sizeable debt repayments.

... but modest in relation to current asset price levels

The fact that there is no clear indicator that debts are "unsustainable" does not mean that financial considerations pose no risks to future growth prospects. First, a significant part of the improvement in corporate cash flow observed in 2001 reflected inventory adjustment and reductions in investment. Cash flow could deteriorate anew once the inventory adjustment ends or if investment picks up before profits. Second, there has been a widespread worsening in credit quality in many sectors. The heavily indebted borrowers in the European telecoms sector, obliged to borrow still more to put needed infrastructures in place, are facing higher risk premia. Third, current levels of certain asset prices – which make private debts look relatively modest – could be excessive.

Some commentators fear that house prices could fall back while others contend that the recent rise is not out of line with fundamentals. More importantly, price/earnings multiples for equity have remained relatively high through the downturn (see Chapter VI). Should the earnings assumptions priced into equity valuations be disappointed, some downward adjustments could be triggered. Particularly important in this latter respect are long-term prospects for productivity, which appear to have been improving mainly in the United States. Moreover, increasingly competitive product markets continue to squeeze profit margins and wage earners might also be expected to absorb some of the productivity gains. Consequently, even with continued high productivity growth and a strong recovery, it might be difficult for US companies to restore their share of national income to the level of its previous peak in 1996–97.

Recent developments in the public sector also give cause for concern. Despite improvements in the United States and Europe, ratios of public debt

Public sector issues

to GDP have remained high, suggesting that governments have not yet done enough to restore their room for manoeuvre after the excesses of the 1970s and 1980s. This failure is particularly serious in that ageing populations will raise debt ratios sharply over the medium term. Furthermore, fiscal policies were allowed to ease during the recent downturn, implying the need for some reversal in the future. The fiscal surplus in the United States quickly disappeared following the economic downturn and the implementation of sizeable tax cuts. Long-term budgetary prospects have also deteriorated and could worsen further in the light of the 11 September events. Military expenditures, whose decline was one of the main factors underpinning the strengthening of the US fiscal position over the past decade, are now budgeted to expand once again.

In the euro area, the aggregate government budget was in deficit in 2001, even though output was close to potential. In some of the countries, the deficit/GDP ratio approached the 3% ceiling, straining confidence in the Stability and Growth Pact. The fiscal situation in Japan is a matter of particularly serious concern. Given the high and rising public debt level, credit rating agencies have recently downgraded the country's long-term sovereign debt. Moreover, a significant further rise in non-performing loans could weaken the credibility of financial institutions and also necessitate an injection of public funds into the banks.

#### External imbalances remain

A final issue with potential implications for financial markets and future demand growth is the persistence of large external imbalances. The size of the global current account discrepancy and its recent widening create some uncertainty about precise magnitudes (Table II.5). Nevertheless, global imbalances have remained large and there are even some grounds for thinking that they pose a more serious problem than in the past.

The US current account deficit is around 4% of GDP

Attention has centred on the United States, which has acted as the locomotive of the world economy in recent years and is now running a current account deficit of more than \$400 billion. This is equivalent to around 4% of US GDP and close to 8% of total saving in the rest of the world. Moreover, the

Current account balances in major regions								
	1997	1998	1999	2000	2001	20021		
	in billions of US dollars							
United States	-140	-217	-324	-445	-417	-435		
European Union	107	62	5	-28	29	30		
Japan	97	119	115	119	89	110		
Other advanced								
industrial economies	9	-5	8	54	55	47		
Emerging Asia	20	115	107	92	99	78		
Rest of the world	-95	-164	-63	45	2	-43		
World <sup>2</sup>	-2	-90	-152	-163	-143	-213		

<sup>&</sup>lt;sup>1</sup> IMF forecast. <sup>2</sup> Reflects errors, omissions and asymmetries in balance of payments statistics.

Source: IMF, World Economic Outlook.

Table II.5

US net international investment position has steadily worsened in recent years, showing net liabilities equal to 22% of GDP in 2000 (at market values). This is roughly the same as in Canada, a traditional capital importer, but is well above the ratio in the United Kingdom (8%). Furthermore, it stands in sharp contrast to the net foreign assets recorded in Japan (24%) or in the main euro area countries (4% on average). This naturally raises the question of whether global investors wish to increase their holdings of US assets in line with the widening current account deficit. This could have implications for the dollar exchange rate (see Chapter V). The answer is uncertain as recent developments and longer-term assessments give conflicting signals.

The first positive point to note is that the US current account deficit declined last year. Compared to the recession of the early 1990s, the decline may seem disappointingly small. However, this comparison gives a false picture. Much of the change between 1990 and 1991 (1½% of GDP) can be attributed to special transfers related to the Gulf war. Moreover, in contrast to the early 1990s, the latest slowdown was global. This meant that exports and imports slowed at broadly similar rates and that the US trade deficit remained relatively high.

Second, prospects depend critically on relative productivity growth. Trend productivity in the United States has increased noticeably in recent years, and both potential growth and the rate of return on capital are projected to remain well above those of other countries. Even if US output growth may not be fast enough to prevent a further rise in the external debt/GDP ratio, the favourable productivity figures, if confirmed in the longer run, would suggest that the United States could remain attractive for foreign investors. Hence, long-term capital inflows could continue to finance a widening current account deficit without undue pressure on exchange rates and interest rates.

Third, recent capital movements can also be interpreted as relatively encouraging. Even though the United States was leading the downturn, and despite the turmoil after the 11 September events, long-term capital inflows to the United States continued to exceed the current account deficit. However,

Balance of payments in the three major economic areas										
	United States			E	Euro area			Japan		
	1999	2000	2001	1999	2000	2001	1999	2000	2001	
	in billions of US dollars									
Current account	-324	-445	-417	-28	-65	1	115	119	89	
Goods	-345	-452	-427	59	11	73	122	116	71	
Services	84	76	79	-4	-5	3	-54	-48	-43	
Income	-14	-15	-19	-39	-26	-32	58	61	69	
Current transfers	-49	-54	-50	-44	-45	-43	-11	-10	-8	
Net long-term capital	370	485	445	-228	-86	-33	-7	-35	-73	
Direct investment	146	135	2	-125	26	-93	-10	-23	-32	
Equities	-2	94	19	-71	-235	126	71	-21	28	
Bonds	226	256	424	-32	123	-66	-68	9	-69	
Sources: ECB; national data.  Table II.6										

net inflows of foreign direct investment and foreign purchases of US equities fell sharply, while foreign acquisitions of US bonds, notably agency and corporate bonds, rose (Table II.6). While the latter relieved pressure on US corporations to improve cash flow and contributed significantly to the resilience of the housing sector, the shift from equity to debt financing increases the future debt service burden.

Turning to more worrying features, the first point to note is the failure of US saving to pick up during the investment boom of the late 1990s. In fact, the ratio of national saving to GDP fell by nearly 3 percentage points from 1998 to 2001, as a steep decline in household saving more than offset the improvement in government saving. However, the fact that investment in other major regions has remained weak relative to saving may also have played a role. Hence, the US trade deficit has widened and is likely to widen further if growth in the United States continues to run well ahead of growth in Europe and Japan.

Trend decline in both the US trade and net investment income account The continued deterioration in the US net investment income account is a second worrying point. Even though the decline in global interest rates eased the debt servicing burden last year, the deficit on the income account widened as profits from US-owned foreign companies declined. In the past, net foreign direct investment income has provided a positive contribution to the US current account balance. However, a continuation of this trend looks uncertain. By the end of 2000, the stock of US-owned foreign direct investment at market values was already below the stock of foreign-owned US assets. Moreover, if the relative return to capital continues to change in favour of investment in the United States, it will be increasingly difficult for US-owned foreign firms to outperform foreign-owned US firms. The outlook for net interest payments is equally worrying. Because of the continued rise in net foreign liabilities, the United States is increasingly exposed to changes in global interest rates and financial market sentiment.

Will growing US liabilities be "matched" by current account surpluses in the rest of the world? In the longer run, it is also relevant to consider whether growing US external liabilities will be easily "matched" by the accumulation of current account surpluses in the rest of the world. Do the surpluses implied by the global accounting identity seem consistent with likely developments in saving and investment balances in other countries? From this perspective, the euro area is currently almost in balance, as a small private sector saving surplus more or less offsets public sector dissaving. According to current forecasts, this situation is likely to remain unchanged in the foreseeable future.

The Japanese current account surplus remains substantial, and Japan is the principal source of financing for the US current account deficit. This in large part reflects a sizeable financial surplus of the corporate sector, which has continued to grow as firms have increased saving and reduced investment in response to unsustainably high levels of debt and excess capacity (Graph II.11). Over the medium term, however, Japan, being at a relatively advanced stage in the global ageing process, may gradually become less attractive as a location for production and thus will be more reliant on repatriated income from Japanese-owned foreign enterprises and foreign financial assets held by Japanese institutions.

Among the emerging market regions currently recording a surplus, the transition economies are likely to attract increasing amounts of foreign investment as they establish better governance and continue to modernise their capital stock. They will then be more likely to require funding than to be a source of funds. In the Middle East, the main influence is oil prices, but the growing population of some major oil producers is likely to weigh on current account surpluses in the long run. A key region will be Asia, which has become a major source of funding for the US deficit in recent years. As discussed in the next chapter, investment rates fell sharply following the 1997 crisis, and, with saving rates remaining high, the region has accumulated very large current account surpluses. While there had probably been some excess capacity prior to the crisis, investment is more likely to recover than fall further over the medium term. Investment opportunities opened up by China's accession to the WTO can only accelerate that process. If saving rates remain high and Asian countries continue to promote exports as the main driver of growth, the region could conceivably remain an important source of financing for the US deficit.

However, greater emphasis on domestic demand in Asia could involve a shift from investment in foreign assets to investment in domestic assets, lifting potential rates of growth. Similarly, the reduction of structural rigidities in Europe could increase business investment spending as well as long-term growth. Faster growth of domestic demand and higher rates of investment outside the United States would both reduce net capital flows to the United States and allow a steady decrease in the current account deficit without putting global growth and financial stability at risk.