Global and European setting

World economic activity

Global economy regained momentum after turn of year

Global economic growth rebounded following the turn of 2005-06 after slumping slightly in the previous quarter. This is attributable primarily to the more accelerated pace of economic activity in the industrial countries along with the continued buoyancy of activity in the South and East Asian emerging market economies. The main reason was the dissipation of the negative special factors that had curbed fourth-quarter 2005 economic activity, especially in the United States and the euro area. While these two economic zones' economies were picking up again, the Japanese economy was experiencing a slowdown in growth following an extraordinarily strong expansion in the fourth quarter of 2005. On the whole, first-quarter 2006 real gross domestic product (GDP) in the major industrial areas, according to provisional calculations, was a seasonally adjusted ¾% up on the previous period, in which it had risen by only ½%. Year-on-year growth stood at 2¾%. The labour markets also benefited from these developments. All in all, the global growth process is becoming increasingly self-propelled and less dependent on macropolitical impulses. The available indicators are pointing to a continuation of the buoyant economic activity in the industrial countries in the spring months.

Oil prices at new all-time high

The robustness of the current upturn in the industrial countries is also apparent in the light of the strains being caused by stubbornly high oil prices, which went up even further at the end of the reporting period (see the box on pages 12-13). Following a fourth quarter in which the situation on the crude oil markets had eased distinctly, prices went back up by nearly US$10 to US$66 (Brent North Sea Oil) between the end of December and the end of January. Although they then eased somewhat up until mid-February, their trend then reversed itself sharply. Oil prices peaked anew at between US$70 and US$75 in the second half of April and the beginning of May. Prices per barrel were slightly below US$70 at the end of the reporting period. However, taking into account the rise in consumer prices, the real crude oil prices in the industrial countries calculated in this manner still remained well below the levels seen in the late 1970s and early 1980s.

Political disputes with Iran, which have led to fears of reduced oil supplies, have been the main reason for the new oil price spike. Oil production in Nigeria has also been hit hard by political unrest. Such disruptions are currently having a particularly pronounced impact on crude oil prices because global production is running at a very high level of capacity utilisation and the global demand for oil – driven by strong economic growth, especially in the emerging market economies – is continuing to grow. If forward quotations for crude oil are any guide, no sustained relief is in store for the markets in the medium term, either.

Crude oil prices since the beginning of the 1970s

Annual averages

Sources: IMF, Thomson Financial and national data. — 1 Spot price for a barrel of Brent North Sea Oil. — 2 2005 = 100; deflated using the relevant consumer price indices.

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Rising prices in industrial countries owing to oil price movements

Oil market activity had a distinct impact on industrial countries' price developments in the first few months of this year. For instance, higher oil prices in January caused consumer price inflation, which had stood at 2.4% in December, to rise to 2.7%. Price inflation then eased somewhat, going down to 2.4% up until March. In April, oil market price impulses caused consumer price inflation to go back up to 2.5%. Core inflation (excluding energy and food), by contrast, held firm at 1½% in the first three months of the year and was thus equal to its level for the fourth quarter of 2005. It is noteworthy that core inflation has remained within a quite narrow band of between 1.4% and 1.6% since mid-

Level and volatility of oil prices

The spot quotations for crude oil have increased in several thrusts since late 2001. Whereas a barrel of Brent North Sea Oil was trading at US$20 in the final quarter of 2001, the average price in the first quarter of 2006 was US$63 per barrel.[1] In April, there was another price surge on the oil markets, which culminated in record price quotations of between US$70 and US$75 per barrel in the second half of the month. Oil prices were somewhat below the US$70 mark again at the end of the period under review.

The sharp rise in crude oil prices since 2001 can be attributed to rapid growth in the demand for energy caused by the global recovery. Furthermore, ongoing geopolitical tensions in the Middle East as well as, more recently, unrest in Nigeria have also played a part. In addition, there were temporary price spikes owing, for instance, to production shortfalls triggered by natural disasters, as occurred in the USA in the second half of 2005. In recent years, political disruptive factors have had a particularly marked effect on crude oil prices above all because only minimal reserves of production capacity are available worldwide. Thus, it is scarcely possible to offset supply shortages in individual countries by increasing production elsewhere.

Owing to the increased prominence of geopolitical risks and the fact that the market is already tight given favourable expectations for the world economy, it seems reasonable to assume that, as the price of oil has increased, so has its volatility. It is certainly possible to gain this impression looking at the dispersion of daily oil price quotations around their respective monthly mean. For instance, in the first quarter of 2006, the average standard deviation of the spot rates was around US$1¾, almost US$1 above the relevant figure for the final quarter of 2001. Compared with the first quarter average, it rose perceptibly once again to US$2½ in April 2006. As illustrated in the adjacent chart, there was a slight upward trend between 1998 and 2006, the period under review. (1998 was chosen as the base year since crude oil prices had bottomed out at that time. From there, they rose sharply in subsequent years.)

However, in connection with higher price levels, stronger price fluctuations in absolute terms do not necessarily indicate increased variability. They may also be the direct result of a shift in the level. In order to exclude this effect, it is possible to normalise the price distribution by introducing a coefficient of variation which expresses the ratio of the standard deviation to the respective monthly mean. Measured in this way, the variability of the oil price in 2004 was no higher than in preceding years. Last year, it actually declined. Compared with the average of the first quarter, however, the coefficient of variation rose again slightly in April 2006.

However, the coefficient of variation is also flawed as a measure of volatility given that the variability calculation takes equal account of random fluctuations and trend changes in the oil price. To illustrate this, let us assume that the oil price increases at a given rate each day following a period of constant quotations. As the absolute price changes then grow over time in line with expectations, the standard deviation of daily oil prices also increases. The coefficient of variation would

1 This analysis is based on the daily spot quotations (closing prices in US dollars) for a barrel of Brent crude oil on the International Petroleum Exchange. Source: Thomson Financial. — **2** This analysis is based on the actual percentage change in the oil price observed ex post. Hence, its standard deviation is only a measure of historical volatility. A distinction needs to be drawn between this and market expectations of future volatility. For instance, it is possible to calculate volatility from the market price of an at-the-money option using a valuation model. This volatility is priced into the market value of the option or is what the market expects to maturity. It is also known as implied volatility. Moreover, special time series models have been developed to estimate volatility (in advance). The observation of “volatility clusters” provides

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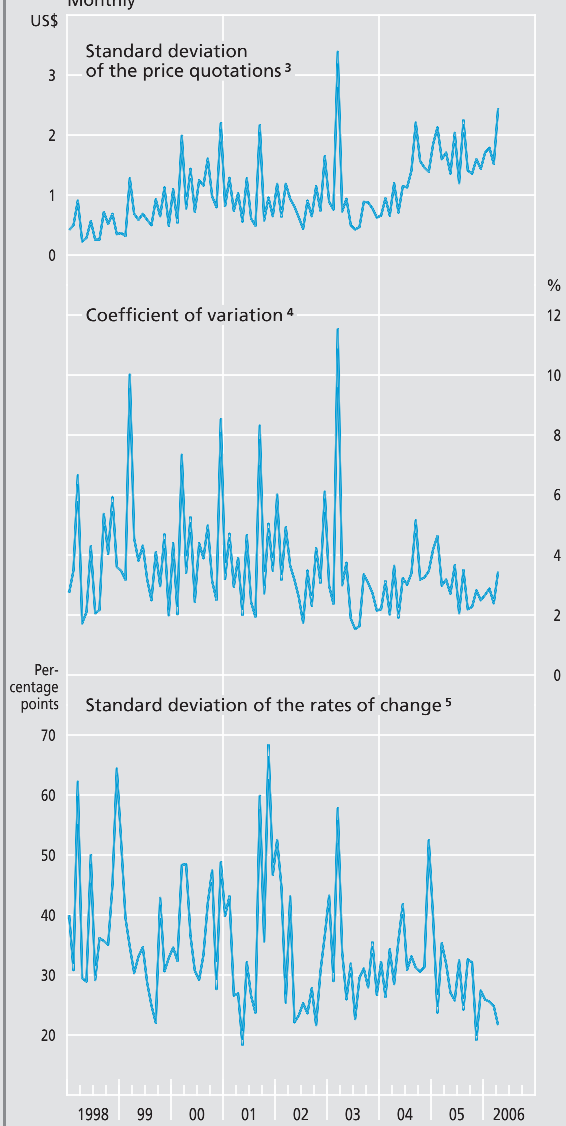
also have a positive value, though it would remain unchanged in all subsequent periods as the upward shift in the mean is taken into account. Strictly speaking, however, there is no volatility in the oil price here given that the path is completely smooth and simply follows the trend. This problem can be eliminated by measuring volatility using the standard deviation of the rates of price change. Since, in the hypothetical scenario described, the latter would always be identical, it would have a null distribution.

Looking at the standard deviation of the daily percentage change in the oil price in individual months, some clear volatility spikes are evident. Autumn 2001 stands out most clearly, when the oil market was affected by increased geopolitical uncertainties in the wake of the terrorist attacks on 11 September 2001. There were also sharp fluctuations in the first quarter of 2003 ahead of and following the start of military operations in Iraq. However, there is no evidence of an upward trend in volatility in recent years. If anything, oil price volatility actually appears to have eased since the end of 2004. It is notable that the standard deviation of the percentage change in the price fell slightly once again in April 2006 compared with the average of the preceding three months. It is likely to have increased again in May, however.[2]

This demonstrates that even where movements in the price level are considerable, volatility is often fairly low if the trend in oil prices is unidirectional.

Oil price volatility ratios

Monthly



the basis for the Generalised Autoregressive Conditional Heteroscedastic (GARCH) models. Distinct longer periods of strong and weak price fluctuations occur on the financial markets in particular, but also on the oil market. The GARCH approach models this phenomenon using the dependence of the conditional variance on past price changes and its own realisations in the previous periods. The conditional standard deviation estimated in a simple GARCH model essentially confirms the impression given by the analysis of historical volatility. — **3** Based on daily data in a month. — **4** Ratio of the standard deviation to the mean of the daily data in a month. — **5** Based on the daily percentage changes in prices (calculated from the difference of the logarithmic daily data) in a month and annualised.

IMF forecast for 2006 and 2007

Item	2004	2005	2006	2007
Real gross domestic product	Annual percentage change			
Advanced economies 1	+ 3.3	+ 2.7	+ 3.0	+ 2.8
of which:				
United States	+ 4.2	+ 3.5	+ 3.4	+ 3.3
Japan	+ 2.3	+ 2.7	+ 2.8	+ 2.1
Euro area	+ 2.1	+ 1.3	+ 2.0	+ 1.9
Consumer prices 2				
Advanced economies 1	+ 2.0	+ 2.3	+ 2.3	+ 2.1
of which:				
United States	+ 2.7	+ 3.4	+ 3.2	+ 2.5
Japan	0.0	− 0.3	+ 0.3	+ 0.6
Euro area	+ 2.1	+ 2.2	+ 2.1	+ 2.2
Unemployment	Number of unemployed persons as a percentage of the labour force			
Advanced economies 1	6.3	6.0	5.8	5.8
of which:				
United States	5.5	5.1	4.9	5.1
Japan	4.7	4.4	4.1	4.0
Euro area	8.9	8.6	8.3	8.1

Source: IMF, World Economic Outlook, April 2006. — **1** Including Taiwan, Hong Kong, South Korea and Singapore. — **2** Consumer price index; for the euro area, HICP.

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2004. Previously, it had been somewhat lower. Excluding Japan, which recently saw prices rise slightly after the period of deflation ended, inflation in the industrial countries stood at 2.9% in April.

April 2006 IMF forecast

For 2006 as a whole, the IMF, in the April issue of its World Economic Outlook, has predicted that economic growth in the advanced economies – which particularly include the industrial countries – will increase to 3.0% from 2.7% in 2005. This represents an upward revision of the September 2005 forecast by ¼ percentage point closer to the good result of 3.3% achieved in 2004. At the same time, the long-term price outlook has now received a somewhat less favourable assessment. Consumer price inflation is now expected to average 2.3% in 2006, compared with a September forecast figure of 2.0%. Inflation is expected to weaken slightly to 2.1% only in 2007. The IMF's new growth and price forecasts, however, are based on the assumption that the average spot prices for Brent, Dubai and West Texas Intermediate crude oil will stand at US$61¼ in 2006 and US$63 in 2007. However, if oil prices remain higher than that – as is currently the case – industrial countries (but also other oil-consuming countries) will have trouble achieving the predicted GDP growth, and the price forecasts could therefore turn out to be too low.

For the global economy as a whole, the IMF expects GDP (measured in terms of purchasing power parities) to go up by 4.9% this year, as against 4.8% in 2005. In September, global GDP forecasts had still stood at 4.3% for each of the two years. More favourable assessments of growth in the South and East Asian emerging economies, the oil-producing countries in the Middle East, the Commonwealth of Independent States (CIS) and the new EU member states were the main factors contributing to the forecast revision. The new method of calculating Chinese GDP implemented in early 2006 was also a special contributing factor, as it led to an improvement in the capturing of activities in the fast-growing commercial services sector. The preliminary projection for the rise in real global trade was likewise revised upwards at the end of the reporting period (by ½ percentage point to 8.0% for 2006).

Not only the faster pace of economic activity in the industrial countries but also the increase in the speed of growth in China led to

China and other South and East Asian emerging economies

a revival of global growth in the first quarter of 2006; real GDP in China was 10¼% up on the year, compared with just under 10% at the end of 2005. In the other South and East Asian emerging market economies, which are being swept along by the Chinese boom, output growth was probably strong as well.

Latin America, CIS and Middle East

Economic activity in parts of Latin America and the CIS as well as in the oil-producing countries of the Middle East is still being driven by rising revenues from commodity exports. The Brazilian economy, following relatively sluggish growth in 2005, picked up steam again early in 2006. This was considerably aided by the overall distinct reduction in central bank lending rates implemented in several steps since the summer of 2005. Mexico is also seeing signs of a pickup in growth following a visible easing of monetary policy. In the CIS, Russia is still acting as the engine of growth on account of its sharply rising revenues from commodity exports (including oil and gas). Especially private consumer demand rose visibly throughout the reporting period, owing particularly to real wage increases and higher social transfer payments. Consumer price inflation stood at 10¾% in the first quarter of 2006; its average for 2005, however, had still been perceptibly higher. Middle Eastern oil-producing countries are facing increasing price stability problems. The IMF forecasts that consumer prices in this group of countries will rise by nearly 10% in 2006, as against 8% last year. In addition, the strong rise in asset prices over the past few years harbours the potential hazard of setbacks.

USA

After its dip in growth in the fourth quarter of 2005, the US economy rebounded strongly. In the first quarter, seasonally and working-day-adjusted real GDP – according to still-provisional information – was up by 1¼% on the quarter and by 3½% on the year.[1] The strongest stimuli came from private consumption (which picked up by 1¼% after seasonal adjustment and contributed just under 1 percentage point to growth), followed by commercial investment, government consumption and private housing investment. Total economic growth was held back somewhat by a distinct decline in inventory investment. Although the deficit in real net exports grew again in the winter months, the rise, and its retarding impact on GDP growth, were not as strong as at the end of 2005. The main reason was that real exports grew nearly as quickly as imports (albeit from a much lower level), which were up by around 3% after having grown considerably more slowly in the fourth quarter.

According to the available business indicators, the favourable economic developments in the United States continued at the beginning of the second quarter. For instance, the Purchasing Managers' Index (PMI) for the manufacturing sector in the United States picked up distinctly in April, returning to its November 2005 level. In addition, the number of persons in (non-farm) employment also continued to rise, though not as sharply as in the preceding months; it was 1½% up on the

1 First-quarter GDP growth could still be revised upwards a notch or two because the March foreign trade figures exceeded the first-quarter figures estimated by the US Bureau of Economic Analysis, which is responsible for the US national accounts.

year. Unemployment remained unchanged at 4.7% in April. The continuing growth in employment is likely to continue to support consumption along with the recent, somewhat stronger rise in wages and, in this manner, to offset, at least partly, the more sluggish stimuli from the impending settling down of the property market. Under the influence of crude oil price movements, consumer price inflation receded from 4.0% in January to 3.4% in March; however, it went back up to 3.5% in April. Excluding energy and food, price inflation accelerated from 2.1% in January to 2.3% in April. The core consumer price deflator stood at 2.0% in March.

Japan

In the January-March period, Japanese economic growth, at a seasonally adjusted ½%, was calmer than in the fourth quarter of 2005; however, it was 3% up on the year. Private domestic demand provided the key stimuli; after the elimination of seasonal influences, it was ¾% higher than in the last quarter of 2005. Private consumption was up by ½%. Real housing expenditure went up by 1% and commercial capital goods saw a 1½% increase. By contrast, government investment declined once again. Real exports saw renewed very strong growth, increasing by 2¾% on the period and 13¾% on the year. However, imports grew even more strongly over the reporting period, causing real net exports to remain virtually unchanged. With the entrenchment of the upswing in business activity in Japan, the deflationary trends, which have been defining price developments since the late 1990s, also seem to be coming to a gradual end. Consumer prices rose by 0.4% in the first quarter of 2006 after having still fallen by 0.5% in the fourth quarter of 2005. Excluding fresh food and petroleum products, however, inflation was only 0.1%.

United Kingdom

The UK economy grew strongly once again in the first quarter. According to initial calculations, overall output rose by just over ½% after seasonal and working-day adjustment – as in the preceding quarter already – thereby surpassing the previous year's level by 2¼%. Unlike in the fourth quarter of 2005, the manufacturing industry – the real gross value added of which was up by ½% on the period – resumed its contribution to overall economic growth. Construction output grew by ¾%. The growth rate in the services sector, however, slowed down from 1% at the end of 2005 to just over ½%. According to initial, incomplete information, private consumption is hardly likely to have stimulated growth in the first quarter. At any rate, real retail sales were down by ½% on the fourth-quarter 2005 figures. Consumer price inflation stood at 1.9% in the first quarter of 2006, compared with 2.1% in the fourth quarter of 2005 and 2.4% in the third quarter of that year. In April, the inflation rate went back up to 2.0%, meeting the UK government's medium-term inflation target.

New EU member states

Economic activity in the new EU member states remained lively after the turn of 2005-06. Between January and March, industrial output was 1¼% higher than in the preceding three-month period and thus 10¾% up on the year. Real GDP therefore also probably continued to rise sharply in the winter months. The persistently rapid pace of output growth also coincided with a further improvement in the labour market situation in the new EU member states. In March, the number of unemployed persons, at 4.26 million, was nearly 400,000 lower than a year earlier and 800,000 less than when it last peaked early in 2002. Overall consumer price inflation in this group of countries has been somewhat lower than in the euro area for quite some time; in April, the figure was 2.2%. However, the relatively low rate of inflation in Poland (+1.2%) played a key part in this outcome; in the other countries of this group, upward price pressures were much stronger at the end of the reporting period.

Macroeconomic trends in the euro area

Stronger economic growth in the first quarter

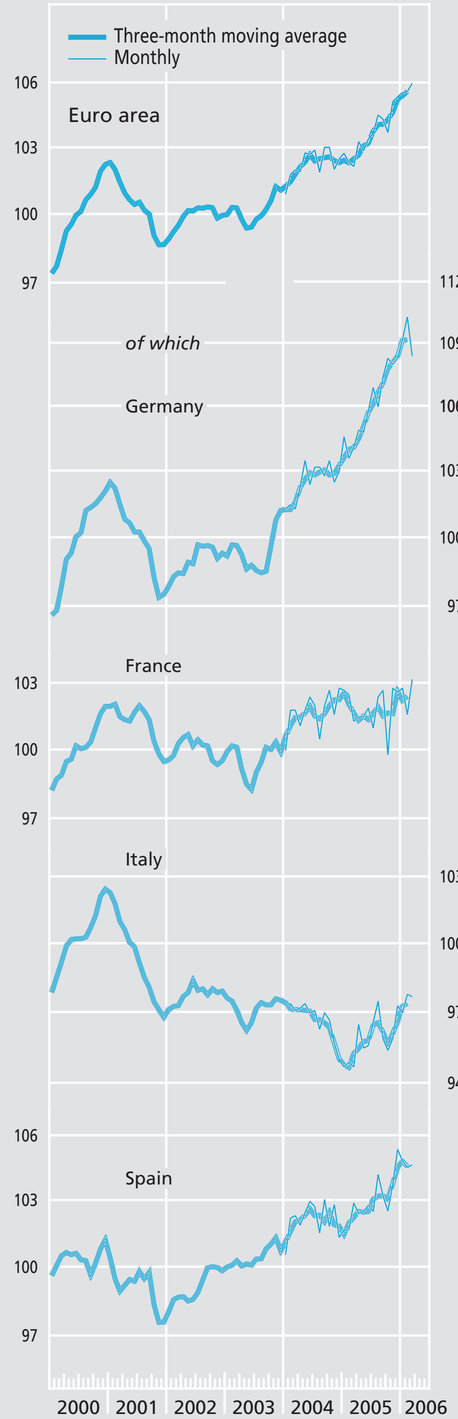
According to initial Eurostat estimates, real GDP in the euro area was just over ½% higher in seasonally adjusted terms between January and March than in the preceding three-month period, a much stronger rise than in the past. It was 2% up on the year. The European Commission's short-run projection forecasts period-on-period GDP growth of between 0.3% and 0.8% in the second quarter. All in all, the chances are quite good that average growth for 2006 will be much stronger than in 2005. The latest IMF forecast predicts that GDP growth of 2% is possible. This would cause total economic capacity utilisation to go back up over the course of the year.

Vigorous industrial activity

Increasingly vigorous industrial output was also a factor contributing to stronger GDP growth in the winter months. In the first

Industrial output*
in the euro area

2000 = 100, seasonally adjusted, log scale



Sources: Eurostat and national statistics. — * Excluding construction.

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Consumer prices in the euro-area countries

Annual percentage change

Country/region	2005 Q2	2005 Q3	2005 Q4	2006 Q1
	Change of less than 2%			
Finland	0.9	1.0	0.9	1.2
Austria	2.1	2.2	1.8	1.5
Netherlands	1.3	1.6	1.7	1.6
	Change of between 2% and 3%			
France	1.8	2.1	1.8	2.0
Germany	1.6	2.1	2.2	2.1
Italy	2.2	2.2	2.4	2.2
Ireland	2.1	2.4	2.3	2.7
Belgium	2.5	2.8	2.5	2.6
Portugal	1.5	2.4	2.6	2.9
	Change of more than 3%			
Greece	3.3	3.8	3.5	3.2
Luxembourg	3.5	4.3	4.0	3.9
Spain	3.2	3.5	3.5	4.1
Memo item				
Euro area	2.0	2.3	2.3	2.3

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quarter, it was up by just under 1% after seasonal adjustment from its level of the fourth quarter of 2005, in which it had grown at a visibly more sluggish pace. Industrial output was up by 3¼% on the year. The further increase in seasonally adjusted capacity utilisation is consistent with this development. It was therefore further from its long-term average than in January, when the gap had still been very slight. This was the largest degree of capacity utilisation since mid-2001.

The increase in incoming orders in January-February by a seasonally adjusted ½% on the last quarter of 2005 fell off noticeably from the high growth rates of the three preceding quarters. However, the extensive volume of large orders received at the end of 2005, most of which went to the aircraft industry, need to be taken into account. Excluding the manufacture of other transport equipment, which is where such large orders are mainly reflected, new industrial orders received in the euro area, on an average of the first two months of the year, were up by 2¼% on the fourth quarter of 2005. This reflects a year-on-year rise of 10½%; if the manufacture of other transport equipment is included, the figure even increases to 11¾%. These statistics do not lend themselves to a distinction between domestic and foreign orders. However, one factor indicating especially strong stimuli from foreign business is that, according to the latest EU survey, export expectations have once again risen distinctly since the beginning of the year. Against this background, it comes as no surprise that industrial confidence continued to improve in April.

Favourable demand trend

In the first two months of the year, exports to non-euro-area countries were up by 4¾% from fourth-quarter levels in terms of value after seasonal and working-day adjustment. At the same time, however, import figures rose somewhat more strongly – not least owing to higher energy bills – causing the seasonally adjusted trade balance to be halved to €½ billion on a monthly average compared with the fourth quarter of 2005. The more vigorous growth in total economic output has also been supported by domestic demand, however. Real retail sales – which do not contain motor vehicles – were barely higher in the first quarter after seasonal adjustment than in the preceding period. However, new passenger car registrations rose by a seasonally and working-day-adjusted 1¼% from the last quarter of 2005. At the same time, consumer sentiment has brightened considerably since the fourth quarter of 2005 according to the EU survey. No further information about the individual expenditure components of GDP, especially investment demand, is available yet.

Labour market showing upward momentum

The number of unemployed persons in the euro area has continued to fall since the turn of 2005-06. The declining trend, which was halted briefly in the fourth quarter of 2005, thus continued. According to provisional Eurostat figures, the average number of persons without work in the first quarter stood at a seasonally adjusted 11.95 million, compared with 12.85 million a year earlier. The standardised unemployment rate fell to 8.2%, having been 8.8% in the winter months. In the euro area, with the exception of Luxembourg and Portugal – no up-to-date information is available for Italy and Greece – the year-on-year unemployment rates were either better or at least unchanged. Spain and the Netherlands saw particularly large year-on-year reductions, from 9.9% to 8.7% and 4.9% to 4.2% respectively.

Inflation in 2006 Q1 still heavily affected by energy prices

In the first quarter of 2006, the period-on-period rise in consumer prices was rather moderate at a seasonally adjusted 0.4%. This corresponds to an annualised rate of 1.6%. The energy component, which was 1.3% higher than in the last quarter of 2005, had a particularly pronounced impact on inflation. The prolonged period of cold winter weather caused the prices of unprocessed food to increase by 0.6%. Excluding energy and unprocessed food, quarter-on-quarter inflation fell slightly to 0.3%. The corresponding year-on-year rate, at 1.4%, was marginally lower than in the last quarter of 2005. Total year-on-year HICP inflation stood at 2.3% – as in the two preceding quarters.

Considerable differences between member states still persist

High inflation rates in excess of 3% were observed once again in Greece, Luxembourg and Spain. By contrast, prices rose by less than 2% in Austria, Finland and the Netherlands. On the whole, the ranking of countries regarding price stability hardly changed. Germany, at 2.1%, was in the lower third. The weighted standard deviation of inflation rates rose marginally to 0.7 percentage point; however, it remained below its average of the years 2000 to 2003.

Price developments in April 2006

Euro-area inflation picked up distinctly in April 2006. The annual HICP inflation rate, at 2.4%, was 0.2 percentage point up on the month. This was due mostly to the sharp rise in crude oil prices. All other components likewise became more expensive, if only slightly. The year-on-year HICP inflation rate excluding energy and food rose moderately to 1.6%.