The international and European setting

Developments in the global economy

Improved underlying conditions

The major uncertainty in the global economy and on the international financial markets, which peaked in the first half of March as the Iraq war was approaching, has since receded. This is reflected mainly by the fact that the previously massively speculation-driven oil prices – in terms of the North Sea Brent blend – fell by one-quarter from their latest peak of early March to US$25½ as this report went to press. In addition, share prices, which for a long time had been bearish, tended to move back upwards, largely cancelling out their decline in the first few months of this year against the background of reports of improved earnings, particularly in the United States. In April-May the hitherto gloomy consumer sentiment improved as well. This means that important conditions for a global economic recovery have improved. However, there are still questions regarding the sustainability and the strength of economic recovery. Now that the geopolitical uncertainty has been reduced, fundamental factors such as the macroeconomic imbalances in the USA, the chronic weakness of the Japanese banking system and the protracted structural problems in Europe are increasingly coming to the fore. This already long list of potential negative factors has recently been joined by fears of a further spread of the SARS disease which has broken out in east Asia.

Industrial output up in the first quarter

Real economic recovery in the industrial countries remained muted in the first quarter, too. The high market volatility, which is a function of the geopolitical tension, and the cellar-dwelling consumer sentiment were certainly key factors. In the first quarter of 2003, however, industrial output rose quite sharply, by ½% from the previous period, after having gone down by just as much in the last quarter of 2002. However, holidays and days taken off to create long weekends in December 2002, particularly in some European industrial countries, had a noticeably adverse effect on output. In the winter months of 2003 industrial output was up by 2¼% on the year.

Subsiding upward pressure on prices

The fact that the price climate was calm on the whole and that inflation in industrial countries recently receded under the spell of falling energy prices is also a welcome development. In April consumer price inflation on the year, at 1.8%, was 0.3 percentage points lower than the average of the first quarter of 2003 but visibly higher than the average for the year 2002. This was mainly due to increases in indirect taxes in some industrial countries at the beginning of the year and to slower deflation in Japan. Excluding Japan, the rate of price increase in April was 2.3%.

Monetary and fiscal policy in major economic areas

During the winter of 2002-03, the world economy fell far short of expectations held as recently as six months earlier. This was the background against which central bank interest rates were cut in the USA at the end of last year and in the UK in February 2003. The ECB cut its interest rates in early December and early March. Fiscal policy in the USA and the UK, too, continues to be on an expansionary path. In the euro area, the automatic stabilisers are still being given space to work.

IMF forecast for 2003 and 2004 *

Item	2001	2002	2003	2004
Real gross domestic product	Annual percentage change			
Advanced economies 1	+ 0.9	+ 1.8	+ 1.9	+ 2.9
of which				
United States	+ 0.3	+ 2.4	+ 2.2	+ 3.6
Japan	+ 0.4	+ 0.3	+ 0.8	+ 1.0
Euro area	+ 1.4	+ 0.8	+ 1.1	+ 2.3
Consumer prices 2				
Advanced economies 1	+ 2.2	+ 1.5	+ 1.9	+ 1.7
of which				
United States	+ 2.8	+ 1.6	+ 2.3	+ 2.3
Japan	− 0.7	− 0.9	− 0.7	− 0.6
Euro area	+ 2.6	+ 2.3	+ 2.0	+ 1.5
Unemployment	Number of unemployed persons as a percentage of the labour force			
Advanced economies 1	5.9	6.4	6.6	6.5
of which				
United States	4.8	5.8	6.2	5.9
Japan	5.0	5.4	5.5	5.4
Euro area	8.0	8.3	8.8	8.7

* Source: IMF, World Economic Outlook, April 2003. — 1 Including Taiwan, Hong Kong, South Korea and Singapore. — 2 Consumer price index; for the euro area, HICP.

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IMF forecast for the world economy...

The growth outlook for the year as a whole was perceptibly tempered by the world's economies having got off to a generally weak start in 2003 and by the extant economic strains. Thus the IMF, in its latest forecast of March, scaled back its September 2002 forecast for global economic growth by one-half percentage point to 3.2%, which would cause it to exceed its 2002 rate only slightly. The IMF also said that real world trade would grow by 4.3%, a much faster growth rate than in the two preceding years. This was predicated on a quick end to the Iraq war and an average oil price of US$31 to the barrel. Nearly all major economic areas were affected by the downward revisions. The IMF stated that the pace of global expansion would not accelerate perceptibly until 2004, when it would reach 4.1%.

... advanced economies and ...

According to the IMF, growth in the "advanced economies", at an average for 2003 of 1.9%, will be only a little higher than a year earlier. However, this conceals substantial differences among the individual industrial countries. Among the G-7 nations alone, the spectrum ranges from ½% for Germany, which is even behind Japan in this group, to 2.8% for Canada. As regards the young Asian industrial countries which are regarded as advanced economies (Korea, Taiwan, Singapore and the Hong Kong Special Administrative Region), their real GDP is forecast to rise by 4.1% (following growth of 4.6% the previous year).

... emerging market economies

The IMF expects a slight improvement for Latin America, with macroeconomic production going up by 1½% after having virtually stagnated the year before. This is based in particular on the improved outlook for Brazil and Mexico. In addition, output may have gone up in Argentina for the first time since 1998. The growth rate in the EU accession countries is predicted to remain high, at 3.4% on the year, even though the figure had to be revised downwards slightly from the autumn forecast. The 2003 forecast for Russia has been revised downwards substantially from 4.9% to 4.0%. The increasingly evident weaknesses in the economy apart from the prosperous oil industry are the main reason for this. The emerging market economies in south and east Asia (including China) will, according to the IMF's forecast, grow by 6.3% and therefore almost as strongly as a year earlier.

Economic consequences of SARS

The IMF's forecasts for the young Asian industrial countries and the emerging market economies of east Asia, however, are being increasingly called into question on account of the negative economic effects of the SARS disease which has been spreading throughout the region. The tourism industry has already been affected noticeably. Hong Kong and Singapore have been hit particularly hard, and to a lesser extent Malaysia, Thailand and Indonesia. What is also noticeable is that the residents of the affected areas are curbing their consumption. In China, where most cases of the disease have been registered, the macroeconomic effect of the losses sustained by the tourism industry has been minor. However, in some metropolitan areas consumer habits have likewise changed. Even if it is still impossible at present to gauge the adverse effect on GDP growth in the region to a reliable extent, it must be noted that east Asia can be expected to provide fewer expansionary stimuli to the world economy than had been forecast just a few months ago.[1]

USA

According to provisional calculations, real GDP in the United States went up by ½% in the first quarter after adjustment for seasonal and working-day variations, surpassing its autumn 2002 rate by very little. It was up by 2% on the year, as against 3% in the second half of 2002. Private final demand, which reflects underlying cyclical trends better than GDP, rose by only ¼% (after seasonal adjustment) in the winter months. Private consumption, by far the most important demand

1 According to the World Bank, growth losses in the affected region could amount to one-third of a percentage point in 2003. However, this is a very rough estimate.

component, was up by ¼%, therefore remaining on the flat growth path embarked upon in the preceding quarter. Once again less was spent on durables (at constant prices), particularly cars. Factors influencing households' reduced purchasing in the United States, which has persisted since autumn 2002, probably include uncertainty following the intensification of the Iraq conflict and the attendant increase in fears of new terrorist attacks. This is reflected by the private saving ratio, too: in the first quarter, it practically held firm at the previous quarter's high level.

Following the quick end to the war, however, the uncertainty and fears held by US consumers appear to be fading into the background. Consumer confidence has recently undergone a noticeable revival as of late. In addition, real purchasing power has been boosted by falling oil prices. This has been reflected by consumer price inflation, which went down from 3.0% in March to 2.2% in April. Households, however, still have considerable doubts regarding the stability of the status quo. They are based not least on the persistently unsatisfactory labour market. The number of non-farming jobs has continued to fall in the past few months; jobs were shed particularly in the manufacturing sector. The seasonally adjusted unemployment rate rose from 5.7% in January to 6.0% in April, returning to its December 2002 levels.

Not only inventory investment, which was only half its level of the previous period, but also, and in particular, commercial investment proved to be an impediment to growth. Commercial investment went down in the winter months – after reviving slightly in the fourth quarter of 2002 – by a seasonally adjusted 1%, falling below its summer 2000 peak of 12½%. This is not surprising since capacity utilisation in industry went down once again. It is now at low levels last reached in early 1983. What augurs well for the current quarter, though, is that orders for durable goods have perceptibly increased on average over the past few months.

Investment in new housing, by contrast, provided renewed expansionary stimuli for growth in the first quarter, going up by just under 3% after seasonal adjustment and by 6¼% on the year. This was caused mainly by the continued rise in prices for residential property and all-time low mortgage rates. GDP growth in the United States was also sustained in nominal terms by foreign trade in goods and services. Real net exports were up by one-quarter of a percentage point of GDP, with imports falling much more sharply than exports.

Japan

In Japan, real GDP in the last quarter of 2002 – with support from exports – was up by a seasonally adjusted 2¼% from the end of 2001. Because it started off at a low level, however, the average annual increase was only ¼%. In the first quarter of 2003, seasonally adjusted macroeconomic output held firm at the previous period's levels; however, it was as much as 2¾% higher compared with the previous year. Commercial investment once again provided expansionary stimuli. Starting from weak results for the preceding quarter, households' consumer demand likewise pointed upwards in the winter months. The underlying cyclical trend, however, has remained rather flat. This is indicated, above all, by the absence of a trend turnaround in labour income and the persistently worrisome state of the labour market. GDP growth in Japan was slowed down by the persistent trend decline in housing investment and in government investment. Inventory investment fell as well. In addition, real exports went down in the first quarter of 2003 after seasonal adjustment for the first time since the end of 2001. Consumer price deflation, already on the decline over the past few months, ground to a virtual halt in March-April – expressed as a year-on-year rate. Excluding energy and food, the year-on-year rate was down to -0.3%.

United Kingdom

In the first quarter of 2003, manufacturing production in the United Kingdom, according to initial calculations, was up by ¼% after adjustment for seasonal and calendar-day variations, compared with ½% and 1% in the two preceding quarters respectively. It rose by 2¼% on the year as of late. The subsiding momentum in the services sector, which has been the most important sector supporting the UK economy in the past few years, was the key factor in the slowing of growth. Industrial output continued to decline on a three-month average from January to March after seasonal adjustment, yet at a slightly slower pace than in autumn 2002.

The Retail Price Index of consumer prices excluding mortgage interest payments (RPIX), on the basis of which the UK government defines its inflation target (which the Bank of England then has to meet), rose in the first quarter of 2003 by 2.9% on the year. This was the highest rate of price increase since early 1988. This is accounted for by, above all, sharp rises in prices for housing, household services and energy. Inflation in April was 3%, once again missing the inflation target of 2.5%. At first glance this inflation target seems like a rather generous anti-inflationary requirement considering that the euro area defines price stability as inflation below 2%. In terms of the Harmonised Index of Consumer Prices (HICP), however, which the ECB uses as a reference, inflation in the UK in March, at 1.6%, was not only half a percentage point lower than the euro-area inflation rate but was also within the euro area's stability standard.[2]

Macroeconomic trends in the euro area

GDP growth in autumn 2002

Euro-area GDP, after having been up by just under ½% in each of the previous three quarters, hardly grew any further in the fourth quarter of 2002 after seasonal adjustment (+0.1%). On average for 2002, total output increased by 0.8%. The renewed slump in the euro-area economy as 2002 drew to a close was caused mainly by the fact that exports, which had given the economy a strong boost in the summer half of the year, were below their previous year's level after adjustment for seasonal effects. This braking effect was tempered somewhat, however, by the

2 An important methodological difference is that the HICP generally uses the geometric mean of aggregating prices at the most basic level, unlike the RPIX, which is an arithmetic average of price relatives or of individual retail prices. In addition, for conceptual reasons the two methods use different baskets of goods, particularly regarding the usage of dwellings.

slight acceleration in the growth of real domestic demand.

State of the economy after the turn of the year

The euro-area economy remained listless following the turn of 2002-03. According to Eurostat's "flash estimate", which has now been published for the first time, first-quarter macroeconomic output stagnated at its autumn 2002 level after seasonal adjustment and was thus 0.8% higher than a year earlier – information on the individual demand components is not yet available.[3] Average industrial output for the January-February period was just over ½% higher than that of the fourth quarter of 2002 after seasonal adjustment. However, "production shifts" owing to holidays and days taken off to create long weekends need to be taken into consideration. Output was up by 1½% on the year. Initial country results, however, appear to indicate a decline in output in March after seasonal adjustment. This is also indicated by the decline in capacity utilisation in the manufacturing sector between January and April to levels which were almost as low as in the first half of 1997.

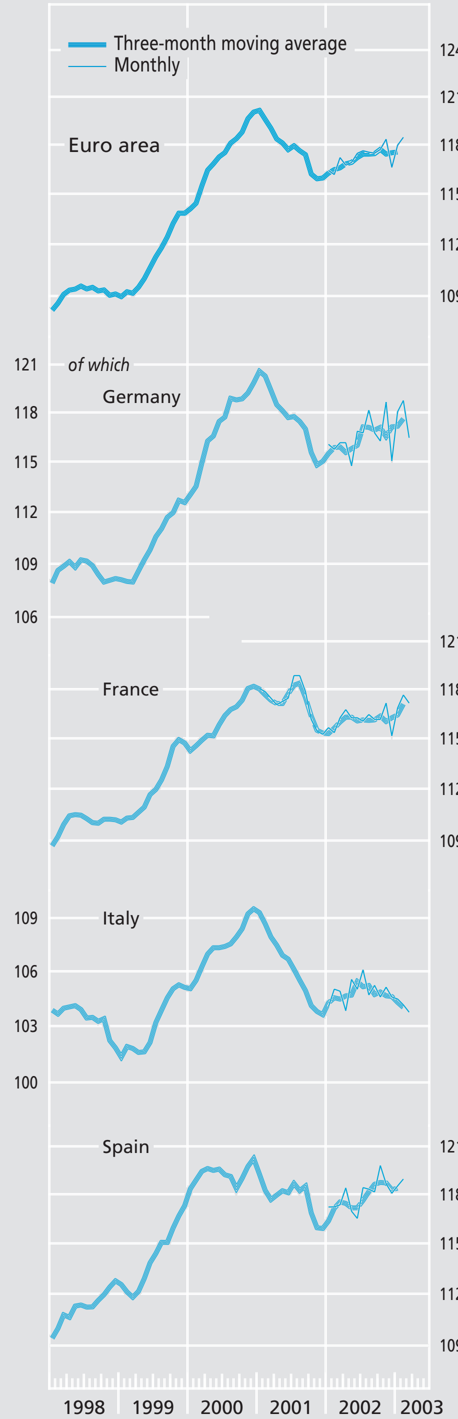
EU survey

The indicator of industrial confidence declined steadily between January and April.

3 According to statements issued by Eurostat, from now on the "flash estimate" of euro-area GDP growth is to be published between six and seven weeks after the end of the quarter under report. This "flash estimate" is based on GDP data for those member states for which such data are already available: in mid-May, when first-quarter figures were announced, these countries were Germany, Greece, Italy and the Netherlands. In addition, the calculations for Spain and France, for which no GDP data for the previous quarter were available during that period, were based on other relevant indicators such as the industrial production index. The first regular GDP estimate for the first quarter of 2003 has been announced for 5 June 2003.

Industrial output*
in the euro area

1995 = 100, seasonally adjusted; log scale



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

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Euro-area consumer prices

Annual percentage change

Item	2002 Q1	2002 Q2	2002 Q3	2002 Q4	2003 Q1	2003 April
Food, drink and tobacco	4.9	2.9	2.3	2.3	2.0	2.4
Energy	– 2.1	– 2.3	– 0.7	2.9	7.0	2.2
Industrial goods (excluding energy)	1.7	1.6	1.3	1.2	0.7	0.8
Services	3.1	3.1	3.3	3.1	2.7	2.9
Harmonised Index of Consumer Prices (HICP)	2.5	2.1	2.1	2.3	2.3	2.1
Memo item Excluding unprocessed food and energy	2.6	2.6	2.5	2.3	2.0	2.2

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The April decline is due mainly to the fact that the surveyed companies gave their order books a much gloomier assessment than in the past. This is consistent with the outcome of the quarterly survey, according to which negative assessments of export expectations in April outstripped positive assessments for the first time since early 2002. However, consumer confidence recovered quickly since the end of the Iraq war – much like in the United States. One of the key factors in this improvement in sentiment is a more favourable assessment of macroeconomic trends over the coming twelve months.

Unemployment

Unemployment rose distinctly faster in the first few months of 2003. The exceptionally long period of frost in the more northerly member states may have contributed to this development. In the first quarter an average of 12.1 million people were without work after seasonal adjustment, compared with 11.3 million a year earlier. The standardised unemployment rate was 8.6%, as against 8.1% in early 2002. Portugal was hit hardest by the deteriorating labour market situation, followed by the Netherlands. However, Germany likewise saw a relatively sharp increase in unemployment. It is worth noting that the four major euro-area countries of France, Germany, Italy and Spain all have unemployment rates above the euro-area average.

Consumer prices

Under the spell of the crisis-related increases in crude oil prices, consumer prices rose at an accelerated pace in the winter months of 2003. They were up by a seasonally adjusted and annualised rate of no less than 3.2%.

However, because inflation in the second half of 2002 had been rather muted, the cost of living in the first quarter of 2003 was up by "only" 2.3% on the year. A crucial reason for the stability benchmark being overshot once again was the visible rise in energy prices, which were up 7.0% on the year. By contrast, quarter-on-quarter inflation, excluding the volatile components of energy and unprocessed food, has held firm at a seasonally adjusted 0.5%. This extrapolates to an annual rate of 2.0%. Year-on-year core inflation, too, fell from 2.3% in the fourth quarter of 2002 to 2.0%. The differences among national inflation rates are still very great. Thus, consumer prices rose by 5.0% in Ireland and 4.0% in Portugal, whereas in Germany this figure was only 1.1%. The falling crude oil prices on international markets has led to a reduction in euro-area inflation as well. In April, consumer prices went down slightly after seasonal adjustment, and their annual rate of increase went down to 2.1%.

Current account and exchange rates

Foreign trade and current account

Since the world economy is still in the doldrums, euro-area exporters' business with non-euro-area countries gave them little or no stimuli at the turn of 2002-03. For example, between December 2002 and February 2003 (statistics are available throughout this period) exports of goods were down by 1% from their level of the preceding three-month period after seasonal adjustment. In the same period imports rose only slightly, ie by ½%, from the previous period. On balance, the euro area's trade surplus went back down to €30 billion in the December-February period after having been as high as €33 billion in the September-November 2002 period taken together.

By contrast, the euro area's (seasonally adjusted) deficit in "invisible" current transactions with non-euro-area partners increased considerably from the previous period's levels. The increase in net expenditure on factor income and the lower surplus on services played a major role in this development. By contrast, the deficit on current transfers was reduced slightly, not enough to offset the deterioration of the other two sub-accounts. On the whole, therefore, the euro area's seasonally adjusted current account closed with a surplus of €11½ billion between December and February, €7½ billion lower than its surplus in the preceding three-month period.

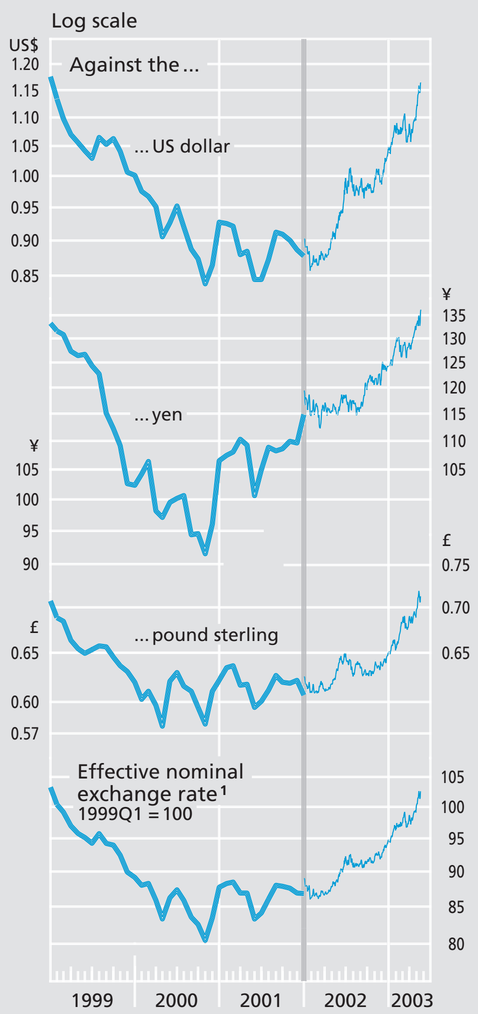
Exchange rate developments

The euro has posted sizeable gains since the beginning of the year. Events on foreign exchange markets were initially characterised above all by geopolitical tensions. The intensification of the Iraq conflict and the beginning of the war heightened market participants' uncertainty regarding further global economic developments; this was reflected, above all, by the uneven movement of the US dollar. The end of armed conflict, though, has caused attention on foreign exchange markets to shift back to the fundamentals. On balance, this has strengthened the euro's position further; in mid-May it reached new all-time highs against various other currencies.

US dollar

After stabilising at around US$1.08 in February 2003, the euro continued to rise in

Exchange rate of the euro*



* End-of-month levels; from 2002 daily data. — 1 According to ECB calculations, against the currencies of 12 countries (before 2001, 13 countries).

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the first half of March, hitting a four-year high of US$1.11. The renewed strengthening of the euro against the US dollar was triggered by the publication of unexpectedly unfavourable US business indicators and negative reports on the US job market situation. Political factors may have also put a strain on the US dollar. By contrast, the interest rate cut by the European Central Bank in early March had no detectable impact on further movements in the exchange rate. In mid-March the euro was forced to surrender its previous gains against the US dollar temporarily once the US ultimatum against the Iraqi leadership made it clear that a war against Iraq was just around the corner.

The beginning of the Iraq war eliminated one of the reasons for the existing uncertainty on foreign exchange markets and the US dollar was initially able to appreciate distinctly against all major currencies. Subsequently it was mostly breaking news about the war that defined exchange rate movements. Greater attention was paid to economic factors such as the large US current account deficit, uncertainty surrounding the further development of the US budget deficit and negative reports about the state of the US economy only once the armed conflict had ended. These factors, along with the positive interest differential of euro-denominated assets, ultimately caused the euro's external value to increase. As this report went to press, the euro was trading at just under US$1.17, and thus 1.2% lower than its highest level reached at the beginning of monetary union.

Yen

After having fallen temporarily, the euro went back up distinctly against the Japanese yen, too. In the first half of February the euro continued to rise against the yen before subsequently having to surrender some of its previous gains. The repatriation of funds from abroad by Japanese financial institutions shortly before the end of the Japanese fiscal year is likely to have played a decisive role in the temporary appreciation of the yen (which also took place against the US dollar). The frequent changes in the direction of the euro-yen rate which subsequently occurred were marked by new information on the Iraq situation. Once the end of the Iraq war had become foreseeable, however, the euro's driving forces regained the upper hand against the yen, too. In mid-May the euro repeatedly overshot its peak levels of February 1999. As this report went to press, the euro traded at ¥136 and thus 1.6% above its debut level.

Pound sterling

The euro rose steadily without interruption against the pound sterling in February, unlike against the US dollar and the yen; its exchange rate subsequently fluctuated within a rather tight band of between £ 0.68 and £ 0.70. The pound sterling also fell somewhat against the US dollar during the period under review. It encountered strains caused by mounting signs of a weakening of the UK economy. As it did against the yen, the euro peaked against the pound sterling in mid-May, too, reaching levels as high as £ 0.72. As this report went to press, the euro was trading just below this peak, at £ 0.71.

Effective exchange rate of the euro

As a weighted average against the currencies of the euro area's 12 most important trading partners, the euro's exchange rate has, on balance, continued to rise amid relatively sharp fluctuations. As this report went to press, it was only 1% lower than its level when monetary union was launched. The quick and forceful recovery of the euro over the past few months has undoubtedly damaged euro-area suppliers' competitive position. At the same time, the euro's appreciation – viewed in isolation – led to lower import prices. Future economic developments in the euro area will depend, above all, on strengthening companies' competitive position by providing cost relief.

Monetary policy and financial markets in the euro area

Interest rate cut in March

After the Eurosystem initially left its interest rates in the first two months of 2003 at the level which had prevailed since early December 2002, the Governing Council of the ECB decided on 6 March 2003 to reduce its rates by one-quarter percentage point each. Since then, the interest rates on the marginal lending facility and the deposit facility have been 3.50% and 1.50% respectively; since 12 March 2003, all main refinancing operations have been conducted as variable rate tenders with a minimum bid rate of 2.50%. By cutting interest rates, the Governing Council was making use of the room for manoeuvre afforded by the further reduction of inflationary risks. The sluggish economic growth and the rise in the euro's exchange rate, in particular, improved the medium-term outlook for price stability. In the spring, money holdings grew even more rapidly, causing the supply of liquidity to continue to rise distinctly. However, the fact that credit growth in the euro area remained moderate and that the propensity to form long-term bank deposits was muted indicated that the strong monetary growth was mostly a reflection of investors' pronounced preference for safe and liquid assets, which rose even further in connection with the Iraq crisis and the concomitant high level of uncertainty on financial markets. The ample supply of liquid-

Review of the ECB's monetary policy strategy

The Governing Council of the ECB conducted a comprehensive review of the ECB's monetary policy strategy and took the following decisions at its meeting on 8 May 2003.

Price stability is still defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. The Governing Council has now clarified that it will aim to maintain inflation rates close to 2% over the medium term. This will provide a sufficient safety margin to guard against the risks of deflation, take account of the possible presence of a measurement bias in the HICP and address the implications of inflation differentials within the euro area.

To facilitate the communication process, the "Introductory Statement" made by the President of the ECB at the press conference after the Governing Council's first meeting in each month will henceforth follow a new structure. It will start with the economic analysis to identify short to medium-term risks to price stability. This will be followed by the monetary analysis in order to assess medium to long-term trends in inflation. As in the past, it will take into account developments in a wide range of monetary indicators including M3, its components and counterparts, notably credit, and various measures of excess liquidity. The monetary analysis will mainly serve as a means of cross-checking, from a medium to long-term perspective, the short to medium-term risks to price stability as indicated by the economic analysis.

To underscore the longer-term nature of the reference value for monetary growth as a benchmark for the assessment of monetary developments, the Governing Council also decided to no longer conduct a review of the reference value on an annual basis. However, it will continue to assess the underlying conditions and assumptions and, if necessary, adjust the reference value.

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ity at present is therefore unlikely to generate any immediate inflationary risks in the foreseeable future.

Money market characterised by rate cut expectations

Money market developments were characterised in the first quarter of 2003 by persistent rate cut expectations which, particularly at the longer maturities, led to at times noticeable discounts on forward rates relative to short-term money market rates. All the same, the overnight interest rate (Eonia) was for the most part held rather close to the minimum bid rate on main refinancing operations, with the result that major deviations were generally restricted to the end of the maintenance period or the end of the month. However, the main refinancing operation prior to the Governing Council meeting on 6 March saw distinct underbidding, with the resultant tight liquidity conditions leading to a perceptible rise in money market rates. It was only on 12 March, when the next regular main refinancing operation was settled (along with an additional main refinancing operation with a shorter maturity in order to ameliorate the tight liquidity situation, a procedure known as tender-splitting), that the Eonia recognisably began to reconverge towards the marginal allotment rate. Even after this interest rate move the yield curve remained inverted since market participants are apparently expecting a further rate cut in the coming weeks.

Money stock M3 up sharply

In the first quarter of 2003, there was a renewed sharp increase in euro-area M3. Seasonally adjusted and annualised M3 growth in the period under review was 7½% following just over 7% in the fourth quarter of

Money market management and liquidity needs

Main refinancing operations were the sole method of ongoing money market management in the Eurosystem during the spring months. Pronounced expectations of interest rate cuts in the run-up to the most recent cut in the central rates by the Governing Council of the ECB in early March led to distinct underbidding in the main refinancing operation allotted on 4 March, which in turn led to a temporary sharp decrease in credit institutions' central bank balances and in their ongoing compliance with minimum reserve requirements. To offset the liquidity dislocation and to re-establish relatively even tender volumes, in the following week the Eurosystem conducted a seven-day main refinancing operation alongside its regular two-week operations. (A similar tender-splitting operation was also conducted in early May after the volumes of the main refinancing operations in the second half of April had diverged markedly.) During the period under review the Eurosystem, when gauging its open-market operations, made sure that the liquidity effects resulting from the fluctuations in general government deposits with the Eurosystem – particularly at the end of the reserve maintenance periods and at the turn of each month – were offset as soon as possible. Moreover, it was necessary to neutralise the inflows of funds resulting from the distribution on 26 March of the Bundesbank's profit for the 2002 financial year amounting to €5.4 billion. As usual, credit institutions took recourse to standing facilities primarily as part of their end-of-period reserve management operations. It was only at the beginning of March, following the underbidding, and at the end of the reserve management periods that the overnight money rate (Eonia) varied relatively sharply from the main refinancing rate.

Between January and April, funds in the amount of €3.7 billion net were withdrawn from credit institutions owing to the autonomous factors determining liquidity (see adjacent table). This was due to several factors: the increase in the demand for banknotes (because of the Easter holidays, amongst other things), the rise in general government deposits with the Eurosystem and the decline in the net foreign reserves. By contrast, the main liquidity-boosting factors were the distribution of the Bundesbank's profit, which is contained under "Other factors", and the increase in those financial assets of the Eurosystem which are not connected with monetary policy. The required level of minimum reserve fell by €0.9 billion during the period under review. The Eurosystem met the remaining additional liquidity needs by increasing the volume of its open market operations by €3.1 billion to an average of €224.4 billion.

Factors determining bank liquidity [1]

€ billion; calculated on the basis of daily averages of the maintenance periods

Item	24 Jan to 23 Feb	24 Feb to 23 Mar	24 Mar to 23 Apr
I Provision (+) or absorption (–) of central bank balances by			
1 Change in volume of banknotes in circulation (increase: –)	+ 13.2	– 7.1	– 10.7
2 Change in general government deposits with the Eurosystem (increase: –)	– 6.5	– 8.9	+ 7.0
3 Change in net foreign reserves [2]	– 4.5	– 3.9	– 15.1
4 Other factors [3]	+ 5.3	+ 7.4	+ 20.1
Total	+ 7.5	– 12.5	+ 1.3
II Monetary policy operations of the Eurosystem			
1 Open market operations			
(a) Main refinancing operations	– 7.7	+ 10.9	– 0.1
(b) Longer-term refinancing operations	± 0.0	± 0.0	– 0.0
(c) Other operations	–	–	–
2 Standing facilities			
(a) Marginal lending facility	– 0.2	– 0.1	– 0.1
(b) Deposit facility (increase: –)	+ 0.0	+ 0.2	– 0.1
Total	– 7.9	+ 11.0	– 0.3
III Change in credit institutions' credit balances (I + II)	– 0.5	– 1.5	+ 1.0
IV Change in the minimum reserve requirement (increase: –)	+ 0.4	+ 1.5	– 1.0

1 For longer-term trends and the contribution of the Deutsche Bundesbank, see pages 14* and 15* of the Statistical Section of the *Monthly Report*. — 2 Including end of quarter valuation adjustments with no impact on liquidity. — 3 Including monetary policy operations concluded in stage two and still outstanding in stage three (outright transactions and the issuance of debt securities).

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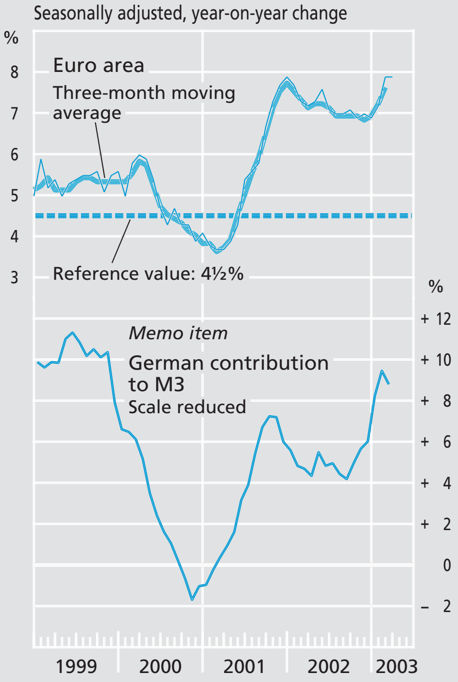
Growth of the money stock M3 in the euro area



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2002. At the same time, the three-month moving average of annual rates of change rose from 6.9% for the period between October and December 2002 to 7.7% for the period between January and March 2003. On account of the pronounced uncertainty on financial markets, investors continued to prefer safe and liquid assets held with banks, which are included in M3. M3 picked up sharply in the months of January and February, particularly prior to the outbreak of the Iraq war, when share prices continued their downward slide. In March, when the hope of a quick end to the fighting temporarily lent momentum to the equity markets, M3 grew at a more moderate pace than in the preceding months.

Components of the money stock

Of the individual components of M3, currency in circulation and overnight deposits both went up during the quarter under review. The renewed sharp rise in the volume of banknotes and coins in circulation seems to be a continued reflection of, above all, the replenishment of cash hoards within and outside of the euro area, which had been depleted sharply prior to the introduction of euro coins and notes. The continued dynamism of the growth of overnight deposits was probably fuelled not only by the low rates of interest on alternative assets with longer maturities but also by portfolio shifts. This is probably also true of other short-term bank deposits, which likewise grew strongly during the period under review. Interest was focused, however, exclusively on deposits redeemable at notice of up to three months, which are currently considered to be an attractive form of investment not only in Germany. Deposits with an agreed maturity of more than two years, by contrast, were reduced in the first quarter. Negotiable financial instruments likewise went down during the quarter under review after adjustment for seasonal variations after having risen in the summer and autumn months, in some cases distinctly. As of late, it was not only the growth of repo transactions which was weaker than in the same time in previous years. Holdings of money market paper and bank debt securities were even reduced slightly, in a move atypical of the season, whereas money market fund shares/units continued to be purchased in large volumes.

Balance sheet counterparts

The relative weakness of demand for credit in the euro area, which has been visible for some time, stands in a certain contrast to the strong monetary growth. Credit expansion picked up slightly in the first quarter of 2003, yet at a seasonally adjusted and annualised rate of just under 4½% (following 3½% in the fourth quarter of 2002), loans to the domestic private sector grew much more slowly than money holdings. Not even the inclusion of bank money advanced to the private sector through the purchase of securities perceptibly changes this picture. By contrast, MFIs' holdings of securities issued by the public sector in the euro area rose sharply in the first quarter. As opposed to the overall weakness of private credit demand, at the same time total euro-area MFI lending to domestic general government rose noticeably in the first quarter.

During the period under review, monetary growth was given a major boost above all by inflows of funds from non-euro-area countries to domestic non-banks, a phenomenon which is reflected in the euro-area banking system's consolidated balance sheet by a corresponding rise in MFIs' net external assets. In addition, the sluggish formation of monetary capital at euro-area MFIs promoted monetary growth. Sales of longer-term bank debt securities were relatively sluggish, in particular, and the net depletion of savings deposits with an agreed maturity of over three months continued.

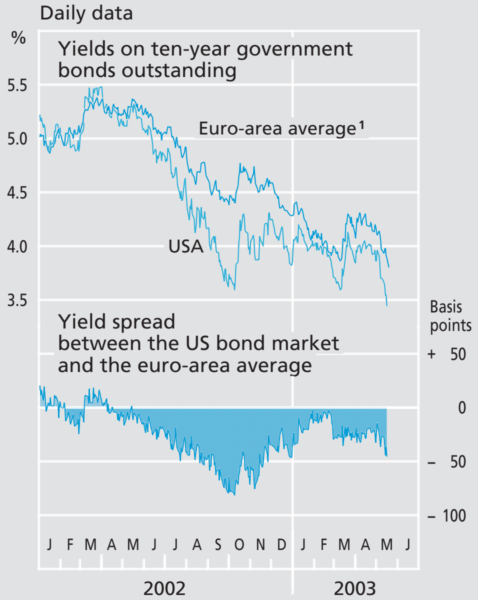
Capital market under the spell of the Iraq crisis

Developments on capital markets were marked in large part by the Iraq crisis in the winter months. In this regard the oil price played a prominent role, rising by over US$10 to around US$33 per barrel between November 2002 and mid-March 2003. This trend strained the further prospects for the already reeling economy and encouraged investors to continue their pullout from equity markets and to shift their portfolios to bond markets as "safe havens". This way the downward trend of long-term interest rates was initially perpetuated, whereas equity market prices continued to slide. In mid-March the yield on ten-year euro-area government bonds outstanding hit new lows, falling well below the 4% mark. In the United States the yields on "Treasuries" with the same maturity fell to their lowest levels since the 1950s.

Only when market participants saw an improvement in the likelihood of a quick end to a conflict that had been simmering for a long time did the trend reverse itself. Initial signs were already recognisable before the outbreak of the war following the failure of UN Security Council negotiations in mid-March. Market agents apparently interpreted the refusal of the British and US draft resolution as a harbinger of an imminent and brief war which could soon put an end to the widespread uncertainty. They accordingly divested themselves of part of their bond positions and invested the funds in more risky instruments, such as equities. Even before the war broke out, yields on the European bond market consequently rose by just under one-fifth of a percentage point within days and by as much as one-third of a percentage point in the United States.

After coalition forces made quick initial territorial gains, hopes of a brief war became en-

Bond market yields in the euro area



1 Weighted average yield on ten-year government bonds issued by all euro-area countries; weighted by GDP.

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trenched. It also became apparent that fears of negative impacts on the supply of oil to western industrial countries were unfounded. This was reflected in a distinct decline in oil prices to "peacetime levels" and in a further rise in capital market rates. Improved growth expectations, expressed by a rise in real interest rates, were the main factor behind the rise in capital market rates. Thus, the real yield on French indexed bonds, which are pegged to the euro-area HICP, rose from under 2% to around 2¼%. The improvement in growth expectations also caused share prices to recover. All the same, price uncertainty on bond markets, measured as the implied volatility of the Bund future, remained at a high level and only came back down slightly once hostilities actually ended in April. Yet even as this report was going to press in mid-May the implied volatility was still well above the average of the preceding years. It is therefore still too early to speak of a sustained easing of the situation on the capital markets.

Favourable terms of finance

Despite the pronounced price uncertainty on bond markets, the terms of finance in the euro area do not stand in the way of an upswing. After the war the long-term interest rates dropped to around 4%, just over one percentage point lower than a year earlier. By historical standards, real interest rates remain exceptionally low.

The interest rate premiums on European corporate bonds likewise went down visibly. The decline was particularly pronounced in the case of risk premiums on BBB-rated bonds, which in May were about 1⅓ percentage points higher than those on government bonds. This figure was still over 2½ percentage points in October 2002. However, this decline overstates the calming of the market for corporate bonds since it is partly due to delays in downgrading by rating agencies.[4] In the fourth quarter of 2002, nearly six times as many companies were downgraded as upgraded. In the first quarter of this year the ratio of downgrades to upgrades even rose to 13:1. This also explains how the trend in the yield spreads of corporate bonds sometimes seemed to be completely decoupled from those of the equity markets. It was only from

4 Rating agencies sometimes react to news with a certain time-lag. In the case of a general increase in risks, this initially leads to an expansion in risk premiums within a rating category. Once companies with sub-par creditworthiness have been downgraded, the interest rate premium then goes back down.

mid-March on that the decline in risk premiums on corporate bonds was joined by rising share prices.

Yield curve mirrors growth expectations

Owing to the rise in medium and long-term interest rates and the persistently low money market rates, the slope of the yield curve grew clearly steeper in the winter months. Market participants were apparently expecting the economy to recover over the longer term and that interest rates would accordingly go back up. Lately, the yield curve has flattened again, however; this probably reflects fears that the upswing might end up not being as pronounced as had been expected in early April. At the same time, the inverted slope at the short end, which has recently been becoming weaker, indicates that, even though interest rates are still expected to be cut within the year, this is expected to be followed by a rise in interest rates.

Fall in earnings forecast and valuation level

Lately, enterprises' earnings prospects have still been assessed slightly more cautiously than at the beginning of the year. At all events, equity market analysts are assuming slightly lower earnings per share for this financial year and the next. However, since European equity markets have not returned to their January levels despite the latest rise in share prices, the price-earnings ratio of EuroStoxx shares went down once again between January and April. This means that the valuation level is currently quite clearly below its long-term average. This is even more the case for US shares, however, whose price-earnings ratio, given share price movements similar to those in Europe, have fallen well below the beginning-of-year levels owing to improved earnings expectations for shares listed in the S&P 500.

European enterprises' stock and bond market valuation

End-of-month levels

1 End of 1991 = 100. Source: Deutsche Börse AG. — 2 Risk differential between seven to ten-year European corporate bonds rated BBB and government bonds with similar maturities. Source: Merrill Lynch indices. — 3 Balance of downgrades and upgrades. Source: Moody's Investor Service.

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