The international and European setting

Developments in the global economy

Moderate recovery of the global economy continued during the second quarter...

Although the recovery of the global economy continued at a moderate pace in the second quarter, the outlook for the coming months has recently clouded over upon the news of developments in the financial markets. In the April-June period, industrial production in the G-7 countries and the smaller west European countries was up by a seasonally adjusted 1½%, on average, on the first quarter. This represents a slowdown in the year-on-year fall to 1½% compared with a slide of 5½% in the first three months of 2002. (Information on second-quarter GDP growth is available for only a few countries thus far.) Economic recovery in western Europe and North America was supported by the brightening of the price climate and its effect of diminishing the loss of consumer purchasing power. The year-on-year increase in consumer prices averaged only 1.4% in June compared with 1.7% in January 2002 and 2.7% a year earlier. Contributing factors included decreasing prices for refined petroleum products and food. US fiscal policy maintained the expansionary path on to which it had embarked in mid-2001; in the euro area government deficits remained high because, among other things, automatic stabilisers were allowed to work. In the major economic regions monetary policy makers left central bank lending rates unchanged at low levels.

The east Asian emerging-market economies, which are geared heavily towards information and communications technology goods and had therefore been hit particularly hard by the global downturn, likewise benefited from the cyclical recovery in the industrial countries in the first half of 2002. Strong growth in domestic final demand in most of the central and east European transition countries cushioned the negative effects of the 2001 global economic downturn. The pace of growth in Russia and most of the other CIS countries, which was still quite rapid in 2001, seems to be abating this year.

... yet setbacks in Latin America

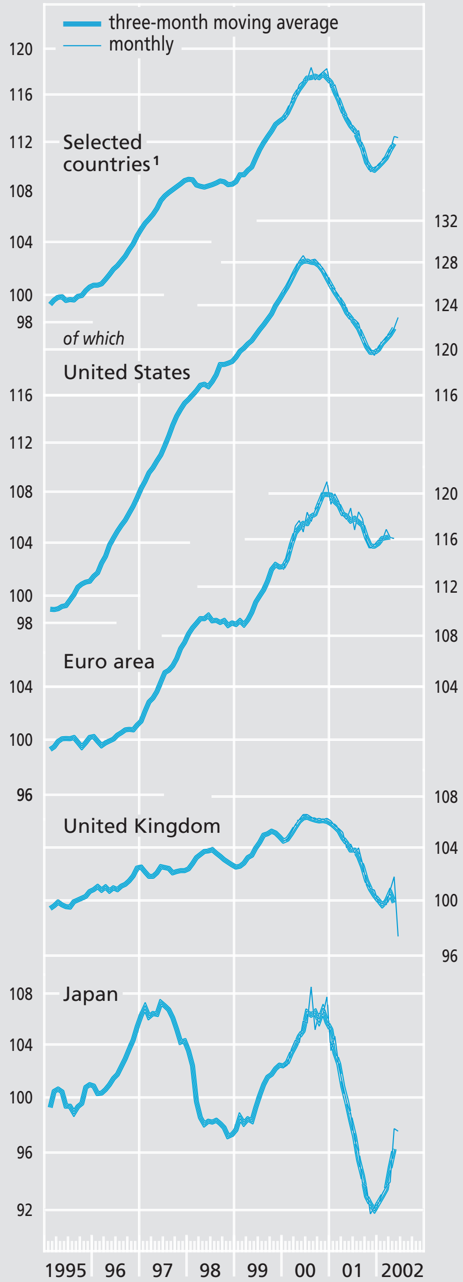
In the past few months some South American economies have increasingly been sucked into the undertow created by the Argentine crisis. Notable examples are Uruguay, Venezuela and Brazil, whose bonds now carry extraordinarily high risk premia. The considerable uncertainty gripping investors in Brazil is probably also related to the forthcoming presidential elections. Brazil's real economy, however, appears to be in better shape than Argentina's had been before the outbreak of the crisis. In early August the IMF, in order to reduce financial-market turbulence, approved a loan of US$ 30 billion to Brazil. The World Bank and the Inter-American Development Bank have also announced that they are prepared to grant additional loans.

Stock-market slump dampens outlook

Another factor which depressed the global business outlook in the period under review was the massive losses sustained by the international stock markets. Sliding stock prices, which are rather atypical at the beginning of a global upturn, contributed to a renewed worsening of consumer and investor sentiment in North America, in particular, and also western Europe up to the time this report went to press. If it keeps up, the stock-market slump could be detrimental to the global

Industrial production* in selected countries

1995=100, seasonally adjusted, log scale



Source: national statistics, Eurostat and the Bundesbank's own calculations. — * Including mining and energy, excluding construction. — **1** In addition to euro-area countries and countries shown, the list includes Denmark, Norway, Sweden, Switzerland and Canada; weighted with the respective share in gross value added of industry in those countries in 1995.

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growth process. Since shareholding is a relatively important element of US household saving and the stock market is a major source of funding for many companies, the US business cycle seems to be more vulnerable to stock-market developments than, for instance, that of continental Europe.

The running debate on deflation risks

Deflationary risks have been increasingly the subject of discussion in North America and western Europe recently. Reference has been made to the danger of both regions heading for a crisis similar to the one experienced since the early 1990s in Japan when the real-estate and stock-market speculation bubbles burst. Two years after their high in the spring of 2000, stock prices in the euro area actually fell much more sharply than they had done in Japan in 1990 and 1991. US share prices did not drop as sharply despite the recent accounting scandals. However, this is tempered by the fact that private consumption is more dependent on wealth than in Europe. In both regions investment activity was even more muted than had been the case in Japan in 1990 and 1991.

However, it is important to remain focused on important differences which justify the thesis that the risk of deflation in both the United States and the euro area should be assessed as relatively low. The real-estate markets harbour one of the most important differences. In the early 1990s the Japanese real-estate markets overheated considerably, culminating in dramatic price increases. By contrast, no even remotely similar real-estate bubble has developed in western Europe or North America over the past few years. Consequently, it is relatively unlikely that property and building prices will plummet as precipitously as they subsequently did in Japan, causing the volume of bad loans held by Japanese banks to rise considerably at the beginning of the 1990s and thereby contributing in large measure to the financial-sector crisis which has persisted to this day. In addition, Japan's structural problems at the beginning of the 1990s were distinctly greater than those of the USA and western Europe at present. The most notable example is the weak level of competitiveness in the domestic market, which is also reflected in the relative lack of openness of the Japanese economy.

The current discussion of deflationary risks also pays insufficient attention to the background behind the perceptible price decline in the United States and western Europe. There is currently no sign of the downward price pressure caused by general weakness of demand, which is typical of deflation. Instead, prices are heavily characterised by special factors, including falling year-on-year prices for refined oil products and food. In the United States, core inflation, which excludes these two product categories, was, at 2.4%, at the same level in the spring of 2002 as two years earlier after being somewhat higher in the intervening period. The euro-area year-on-year inflation rate excluding energy and unprocessed food, at 2.6% as this report went to press, was more than twice as high as two years earlier.

Revised US national accounts data

As a result of a revision of US national accounts data going back to 1999, GDP growth rates for 2000 and 2001 and for the first

Price developments in selected industrial countries

Percentage change from previous year

Country/region	2001 Year	2001 Q4	2002 Q1	2002 Q2	2002 June	2002 July
	Consumer prices, total					
United States	2.8	1.9	1.3	1.3	1.1	...
Euro area [1]	2.4	2.2	2.6	2.1	1.8	[2] 1.9
of which						
Germany [1]	2.4	1.7	2.0	1.1	0.7	1.0
Japan	– 0.7	– 1.0	– 1.4	– 0.9	– 0.7	– 0.6
OECD area [3]	2.3	1.6	1.3	1.3	1.1	...
	Consumer prices excluding energy and foods					
United States	2.6	2.7	2.5	2.4	2.3	...
Euro area [4]	2.1	2.4	2.6	2.6	2.6	...
of which						
Germany [4]	1.5	1.7	2.0	1.8	1.6	1.6
Japan	– 0.9	– 1.0	– 1.0	– 0.9	– 0.8	...
OECD area [3]	2.1	2.1	2.0	2.0	1.9	...

Sources: national statistics and Eurostat. — **1** HICP. — **2** Eurostat estimate. — **3** Excluding the high-inflation countries of Hungary, Mexico, Poland and Turkey. — **4** HICP excluding energy and unprocessed foods.

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quarter of 2002 have been revised downwards, in some cases by a wide margin. Reported 2001 growth is now down to only 0.3% compared with a pre-revision level of 1.2%. All major components of private final domestic demand were scaled back. The pattern of US GDP for 2001 likewise changed. According to the new calculations, total economic output contracted in the first three quarters of 2001, a development which is widely interpreted, especially in the United States, as a technical recession. Prior to the revision a decline in real GDP had been diagnosed only for the third quarter. The new national accounts data are much more consistent with the findings reached in November 2001 by the US Business Cycle Dating Committee, which had held that the recession in the USA had already begun in March 2001. The correction in real GDP also implies that average non-farm productivity in 2000 and 2001 grew just over ½ percentage point more slowly, at 2%, than the old calculation had shown. Corporate profits were reduced throughout the revision period, but particularly large reductions were made for 2000, with the result that non-financial corporations' profitability was clearly worse than had been previously assumed. However, household saving was raised for 2000 by 1.8 percentage points to 2.8% of disposable income and for 2001 by 0.7 percentage point to 2.3%.

US GDP grows in second quarter

In the second quarter of 2002 the US economy was unable to sustain the growth rate which it had achieved in the first quarter and which (at 1¼% after adjustment for seasonal and working-day variations) had been high even after revision. According to preliminary estimates, real GDP in the April-June period grew by only ¼% from the preceding period; yet it was still up by just over 2% on the (revision-reduced) level of the previous year. Growth had generally been expected to slow down in the second quarter, notably because the strong upturn in the inventory cycle, which in the winter months had contributed ¾ percentage point to growth, had not been expected to continue. The real surprise, however, was the extent of the slowdown. The main factor was the marked deterioration in real net exports, which was linked especially to the seasonally adjusted 5½% rise in imports. In addition, government consumption no longer expanded as sharply as in the previous quarter. Private final domestic demand, by contrast, grew by a seasonally adjusted ½% in the second quarter, matching its previous period's growth. A noteworthy aspect of this development was that commercial investment shrank for the seventh consecutive period. Households' seasonally-adjusted saving ratio, at 4.0%, was as high as in the summer of 2001.

Gloomy outlook for third quarter

For the reasons mentioned at the beginning, the cyclical outlook has recently grown considerably gloomier for the months to come. Incoming orders for capital goods declined visibly in June, and the July Purchasing Managers' Index for the manufacturing industry slid back almost to its level of January 2002. Consumer confidence also sank further. However, the stock markets' negative influence on private consumption was offset by a real-estate market which was continuing to flourish. In addition, price increases did not have much of an impact on consumers' purchasing power. Consumer price inflation in June, at 1.1%, was as low as its level in January-February. All in all, total economic growth is likely to continue at a muted pace in the third quarter.

Japan

The Japanese economy bottomed out in the first half of 2002. Between January and March 2002 seasonally adjusted real GDP rose for the first time since early 2001, even if the increase overstates the underlying trend by a wide margin (1½%). In the second quarter the upward trend, where recognisable, continued. Industrial production rose by 3½% after seasonal adjustment, closing a large portion of the year-on-year gap. Strong external stimuli played a major role in this development. Real exports, especially those of IT goods, rose once again in the second quarter. The reduction of warehouse stocks apparently ground to a halt, thus providing a further stabilising effect. However, final domestic demand continued to weaken. Industrial investment, though, seems to be headed for improvement in that domestic orders of machinery rose perceptibly in the second quarter. The fall in prices decelerated up to the end of the period under review. The year-on-year rate was -0.6% in July, as against -1.6% in February 2002. Core inflation (excluding energy and food prices) rose 0.3 percentage point until June from its low point in February but remained negative.

United Kingdom

According to preliminary calculations, total output in the United Kingdom, after adjustment for seasonal and working-day variations, rose by just under 1% in the second quarter after virtually stagnating in the two preceding periods. It rose by 1½% on the year. Following the unexpectedly sharp decline in industrial output in June compared with May, a distinct downward revision of growth rates is in the offing. This decline had not been known when GDP was estimated the first time. On a monthly average of the second quarter, UK industrial output increased slightly in seasonally adjusted terms, thus halting the downturn which had begun in the fourth quarter of 2000. In addition, the services sector grew more strongly. However, the United Kingdom, like other industrial countries, has also recently seen key indicators of sentiment either decline or at least stagnate in the light of the worldwide slump in the stock markets. Retail sales went down in June for the second consecutive period after seasonal adjustment. All of this could mean that the economic recovery will lose steam in the third quarter. On the whole, the mid-2002 UK economy is still in better shape than that of the other major industrial countries. For example, employment rose again in the second quarter, and the standardised unemployment rate, at 5.1% in May, was only slightly above its cyclical low point. Consumer price inflation (excluding mortgage lending rates) again fell slightly in July from the previous month's level, but on the year – owing to a base effect, among other things – it rose considerably more strongly, at 2.0%, than in June (1.5%).

Macroeconomic trends in the euro area

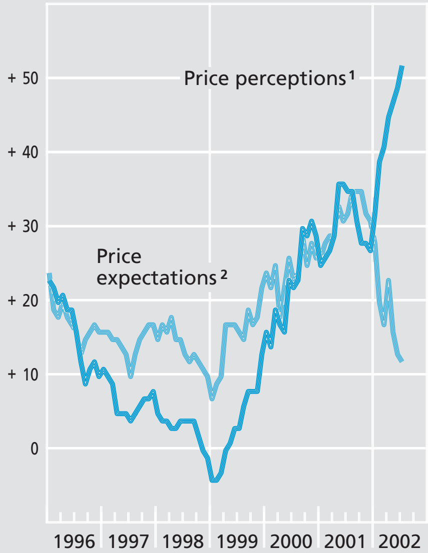
Slight GDP growth in first quarter and moderate upward trend in second quarter

Following a slight decline in the final quarter of 2001 total output in the euro area grew again in the first quarter of 2002, rising by a seasonally adjusted ¼%. Year-on-year growth was likewise ¼%. The cyclical recovery was not broad-based, though; it was sustained for the most part by exports whereas real domestic demand continued to decline. The cyclical recovery in the euro area remained restrained in the second quarter of the year, too. In the April-May period seasonally adjusted industrial production did not exceed its level of the winter months and was actually 1% lower on the year. However, various special factors contributed to this weak result. In April there were strike-related production shortfalls in Italy and a "technical reversal" following a very sharp rise in the preceding month in Ireland. In May strikes in Germany and the very large number of public holidays and *Brückentage,* ie extra days' holiday taken between a public holiday and a weekend, had a negative impact. Initial country results for June, though, seem to indicate that at least part of the preceding month's output losses were made good. Euro-area capacity utilisation remained virtually unchanged in the second quarter.

EU survey results mixed

According to the latest survey of the EU Commission, industrial confidence stagnated in July at the depressed level of the preceding month. It is worth noting, however, that in July assessments of incoming orders in the quarterly survey improved distinctly compared with April levels. This was due mainly to more favourable results from Germany, Price perceptions and price expectations

Balances of responses, seasonally adjusted, monthly



Source: European Commission consumer surveys. — 1 Price developments over the past 12 months. — 2 Price developments over the coming 12 months.

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Italy, Austria and Finland. Euro-area consumer sentiment again deteriorated. The general economic and labour-market trends over the next 12 months were given a more negative assessment than in the past. The results of the European Commission's March-April investment survey are consistent with the generally mixed cyclical picture. According to this survey, industrial enterprises in the euro area are planning to cut their real investment spending by 6% in 2002 after predicting a cut of 4% in the final quarter of 2001. If Germany, where at the time of the survey industrial enterprises had made only relatively small cuts in their budgets for new plant and equipment, is included, investment plans have actually been reduced by nearly one-tenth.

Rise in unemployment

The situation on the labour market worsened further in the second quarter. The standardised unemployment rate rose in seasonally adjusted terms from 8.2% in March to 8.4% in June after being as low as 8.0% in mid-2001. Most euro-area countries were affected by the rise in unemployment.

Overall price trends

The price climate in the second quarter became somewhat less tense. Year-on-year HICP inflation fell from 2.7% at the beginning of the year to 2.4% in April and 1.8% in June. According to Eurostat estimates, it went back up slightly to 1.9% in July. Two factors were behind this declining trend: respite from short-term price pressure and, above all, the fact that very rapid price surges from the preceding year, when the prices of energy and unprocessed food rose sharply, "fell out of the annual rate". Energy sources have recently become less expensive, their year-on-year rate of increase having been 3.6% lower in June. (No further information for HICP components is available thus far.) Unprocessed food prices continued to return to normal following the weather-related shock at the beginning of the year. However, in mid-year they were still 1.1% more expensive than 12 months earlier.

Core inflation

Year-on-year core inflation, ie excluding the volatile components of energy and unprocessed food, has held firm at 2.6% since the beginning of the year. Sharp rises in the prices of services are one of the main reasons for the sharp rises in the prices of the more sluggish HICP components. The rate of increase in the prices of industrial goods, too, was distinctly higher than the average of the past few years. Price pressure in this segment, however, receded over the course of the second quarter.

Price perceptions and price expectations

According to European Commission surveys, consumers expect relatively favourable price developments in the near future. The indicator of expected inflation in the next 12 months has, with a short interruption, been on the decline for nine months running. At the same time, though, consumers, from month to month, have been giving a less favourable assessment of price developments for each respective past 12-month period. The gulf between price perceptions and price expectations has never been so great since the surveys were first commissioned in 1985. Price perceptions used to be closely linked to the actual rate of inflation. In July, after all, year-on-year HICP inflation was 0.8 percentage point lower than in January 2002; yet the price perception indicator rose visibly during that period. The persistently gloomy price perception is probably associated with the sharp price increases at the beginning of the year. However, these increases do not appear to have affected price expectations.

Inflation differential remain substantial

Seen by region, price developments in the second quarter were not very uniform. In five countries the year-on-year inflation rates were at times well under 2%; two countries had rates between 2% and 3%, and five countries were actually over 3%. These inflation differentials are the result of shorter-term cyclical differences and medium-term growth divergences; also, changes in tax law or market supervision and regulation played a role. In terms of the weighted standard deviation which is used to take account of countries' share in private consumer expenditure in the euro area, the spread of inflation rates (if the volatile components of energy and unprocessed food are excluded) has remained virtually unchanged since the beginning of 2000.

Current account and exchange rates

Foreign trade and current account

In the spring foreign trade exerted a positive influence on euro-area economic developments. After turnover from euro-area companies' exports had bottomed out around the turn of the year, exports rose by a seasonally adjusted 2% in the last three-month period for which figures are available (March-May 2002) from the preceding period (December 2001-February 2002). At the same time, imports also recovered somewhat; however, their growth, at 1½%, lagged behind export growth, causing the euro-area trade surplus to increase to €30½ billion (following €28½ billion in the preceding three-month period).

Seasonally adjusted invisible cross-border current transactions with non-euro-area partners, however, closed with a higher deficit, a development which was attributable to a strong rise in net payments by the euro area in factor income and current transfers. The euro-area current account surplus in March-May 2002 therefore fell to a seasonally adjusted €1½ billion compared with €7 billion in the preceding period, despite the increase in net revenue from exports.

Exchange rate of the euro

Log scale

1 Real effective exchange rate of the euro against the currencies of a small group of countries based on consumer prices; according to ECB calculations; before 1999: "theoretical" euro. See ECB, *Monthly Bulletin,* October 1999, April 2000 and March 2001. Real appreciation of the euro: +. — 2 Latest position: 15 August 2002.

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The euro's exchange rate ...

During the second quarter the euro posted significant gains on the foreign-exchange markets. The single European currency, after moving fairly erratically for the most part in the first few months of this year, gained sharply against other currencies, especially against the US dollar, from the middle of April. Against other currencies such as the Japanese yen or the Swiss franc, by contrast, the euro's movements were more restrained; in some cases the euro actually gave some ground.

... against the US dollar ...

Events on the foreign-exchange markets were marked by the euro's movements against the US dollar, however. The markets apparently became very wary of investment denominated in US dollars following increasing doubts about the very optimistic expectations of US economic growth and the spreading belief throughout the market that recovery would be much slower in coming than had been anticipated at the beginning of the year. From mid-April to mid-July the euro rose from US\$0.88 to over US\$1.01, exceeding parity to the US dollar for the first time since February 2000. Since then, though, the euro has lost some of its gains. In mid-August it was quoted at US\$0.98.

The reasons for the US dollar's slide against the euro were not only cyclical, however. General disappointment and uncertainty among market participants as a result of major US firms' accounting scandals considerably damaged the US economy. At the same time, this gave rise to a correction on the stock markets which many observers considered to be overdue. It consisted not least in declining inflows of capital from foreign direct investment and portfolio investment. Given the large US current account deficit, which has recently grown even further, and the deteriorating budget situation in the United States following the 11 September terrorist attacks, greater importance is being attached to the external adjustment channel.

... Japanese yen ...

The euro changed relatively little against other currencies during the period under review compared with its movements against the US dollar. The euro did at times stabilise against the Japanese yen, too, during the second quarter. However, countermovements were generated, in particular, by the slight improvement in the Japanese economy which was caused by increased exports and which was reflected in further increases in the Japanese trade and current account surpluses, and by the relatively robust state of the Japanese stock market; that all caused exchange-rate movements, on balance, to remain tightly limited. Several instances of intervention by the Bank of Japan to the detriment of the yen may have played a role as well. As this report was going to press, the euro was trading at ¥115, around 2% lower than at the beginning of April.

... and pound sterling

Up until June the euro was likewise able to gain slightly against the pound sterling, following a first quarter in which UK economic growth had nearly ground to a halt. Speculation that a referendum on joining the euro area would soon be held may also have had a deleterious effect on the pound sterling since market watchers consider the pound's current rate against the euro to be fairly high. However, the pound sterling has temporarily regained some of its value against the euro. At mid-August the euro was being quoted at just under £0.64, 4½% higher than at the beginning of April.

Effective exchange rate of the euro

During the period under review the euro therefore appreciated less strongly against the weighted average of the currencies of the euro area's 12 most important trading partners than against the US dollar alone. From early April until this report went to press, the euro's effective exchange rate rose by 4½% compared with 11% against the US dollar alone. A similar picture arises even if the inflation differential between the euro area and its most important non-euro-area partners is taken into consideration. After adjustment of the exchange rates, too, the euro's real effective exchange rate is still far below longer-term comparable pre-monetary-union values. It therefore cannot be said under any circumstances that the corresponding comparative advantages enjoyed by euro-area manufacturers in their non-euro-area export markets have been eroded or even reversed by recent developments. Moreover, a comprehensive evaluation of recent exchange-rate developments must take account of real income gains arising from the appreciation-related improvement in the euro area's terms of trade for consumers and investors. The immediate result, ie expansionary impact on domestic demand in the euro area, is to be welcomed in the current situation, as is the relief that this appreciation represents for monetary policy on the price side. Experience of German monetary and foreign-exchange policy has shown that the positive effects of a strengthened domestic currency ultimately enhance the economy's competitiveness, too.

Monetary policy and financial markets in the euro area

The Governing Council of the ECB left the Eurosystem's key interest rates unchanged in

Money market management and liquidity needs

Main refinancing operations were the sole method of ongoing money market management during the summer. When gauging the volumes of these operations, the Eurosystem had to take particular account of the volatility of general government deposits with the Eurosystem – most notably in the second half of June. In that connection, it is worth mentioning that since July tax payments to the public sector have been systematically reducing the hitherto normally high burden on liquidity on the last day of the reserve maintenance period (the 23rd of every month), making it much easier for credit institutions to manage their end-of-period operations, which are normally difficult anyway. In Italy most of these tax payments are made as early as two business days prior to the last day of the reserve maintenance period (more information is available on the ECB's website at http://www.ecb.int). In addition, the reduction in the volume of the longer-term refinancing operations had to be offset. The decrease in the amount allocated per transaction from €20 billion to €15 billion beginning at the end of July is a consequence of the reduction in the banking system's estimated liquidity needs in the second half of 2002. That reflects the relatively muted renewed rise in banknotes in circulation following the cash changeover at the beginning of the year. On the whole, the Eurosystem offset the liquidity effects of the autonomous market factors in a relatively timely fashion, enabling credit institutions to meet their reserve requirements relatively steadily.

Between April and July the autonomous factors determining bank liquidity withdrew €17.3 billion net from credit institutions (see adjacent table), which is mainly a reflection of the rise in banknotes in circulation. Whereas in the first few months of the year return flows of legacy banknotes far outweighed the build-up of stocks of euro banknotes, the trend reversed itself in the second quarter. The major changes in net foreign reserves and other factors during the June-July reserve maintenance period can be explained mostly by the revaluation of foreign currency positions at the end of the quarter. The changes mostly cancel each other out since the revaluation has no impact on liquidity. To match the increased liquidity needs the Eurosystem increased the volume of its main refinancing operations by €17.7 billion to an average of €130.4 billion. On the whole, recourse to the standing facilities remained slight.

Factors determining bank liquidity [1]

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

Item	2002: 24 Apr to 23 May	24 May to 23 June	24 June to 23 July
I Provision (+) or absorption (–) of central bank balances by			
1 Change in banknotes in circulation (increase: –)	– 7.8	– 7.1	– 12.6
2 Change in general government deposits with the Eurosystem (increase: –)	+ 6.7	+ 4.1	– 9.3
3. Change in net foreign reserves [2]	+ 2.3	– 1.5	– 27.1
4. Other factors [3]	+ 1.8	+ 2.3	+ 30.9
Total	+ 3.0	– 2.2	– 18.1
II. Monetary policy operations of the Eurosystem			
1. Open market operations			
a) Main refinancing operations	– 2.1	+ 2.0	+ 17.8
b) Longer-term refinancing operations	– 0.0	+ 0.0	– 0.0
c) Other operations	–	–	–
2. Standing facilities			
a) Marginal lending facility	– 0.3	+ 0.4	– 0.3
b) Deposit facility (increase: –)	– 0.1	– 0.1	+ 0.2
Total	– 2.5	+ 2.3	+ 17.7
III. Change in credit institutions' current accounts (I + II)	+ 0.5	+ 0.1	– 0.4
IV. Change in the minimum reserve requirement (increase: –)	– 0.4	– 0.0	+ 0.3

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 certificates).

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Eurosystem interest rates unchanged

recent months. All main refinancing operations were conducted as variable-rate tenders with a minimum bid rate of 3.25%, and the interest rates on the marginal refinancing facility and the deposit facility were left unchanged at 4.25% and 2.25% respectively. The mixed picture presented by the individual early indicators on the stability outlook spoke in favour of continuing the "steady-as-she-goes" interest-rate policy. Monetary expansion picked up again in the second quarter. The primary reason for this, though, was renewed portfolio shifts caused by increasing uncertainty on financial markets. At the same time, the euro appreciated sharply on foreign-exchange markets, notably against the US dollar, a development which is likely to slow down inflation. With the appreciation, the drop in stock prices and the highly volatile movements on stock markets, uncertainty regarding further cyclical developments increased.

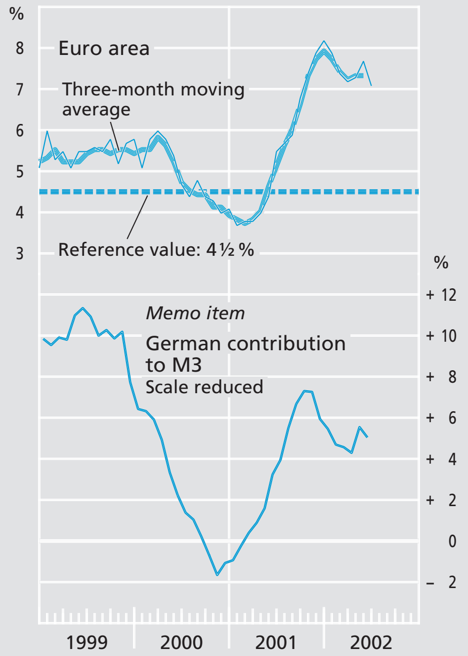
Yield curve on the money market flat

Given the stable minimum bid rates on main refinancing operations, the very short-term money market rates – with the exception of fluctuations in the overnight interest rate (Eonia) at the end of the May-June reserve maintenance period and at the end of the first half of the year – changed only little in recent months. The longer-term forward rates, having risen in May amid expectations of rising interest rates, dropped even more sharply thereafter. The yield curve on the money market has therefore flattened out completely.

Following a return to normality in the first quarter of 2002, euro-area M3 growth picked

Growth of the money stock M3 in the euro area

Change from previous year, seasonally adjusted



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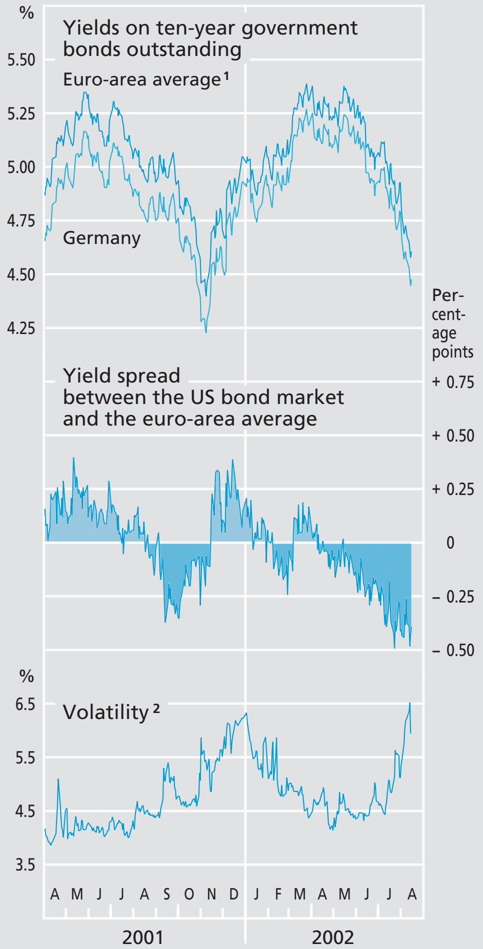
Monetary expansion accelerated

up once again in the second quarter. The pace was rapid in April and May but slackened perceptibly in June. Throughout the second quarter M3 expanded at a seasonally adjusted annual rate of just under 8% compared with just under 2½% in the first quarter. On an average of the April-June period M3 was 7.4% greater than a year earlier. The primary reason for the acceleration in monetary growth was the visible rise in uncertainty on financial markets regarding future movements of interest rates and the stock markets, which revived investors' interest in temporarily "parking" liquidity in M3 components. To that extent, monetary developments continue to be distorted by portfolio shifts.

Of the individual components of M3, overnight deposits, having declined in the first

Bond-market yields in the euro area

Daily data



1 Weighted average yield on ten-year government bonds issued by all euro-area countries; weighted by GDP. — 2 Implied volatility of Bund futures.

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Components of the money stock

quarter, grew markedly during the period under review. The increase in euro cash holdings outside the MFI sector picked up further. A rising acceptance of the single currency outside the euro area may have played a part. On balance, M1 rose between April and June at a seasonally adjusted annual rate of 13%. Deposits redeemable with an agreed notice of up to three months were likewise sharply increased during the period under review. By contrast, the growth of deposits with an agreed maturity of up to two years was subdued, remaining nearly unchanged at an annual rate of just over 2%. Marketable financial instruments picked up again, too, after declining in the preceding quarter.

Balance-sheet counterparts

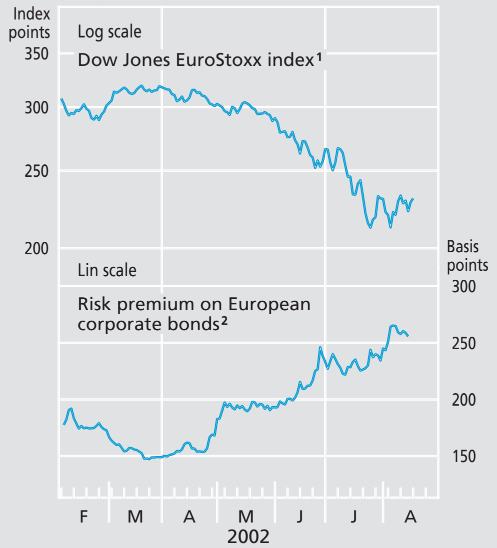
Following a revival over the course of the first quarter, lending to the private sector remained unchanged in the second quarter. Loans to enterprises and individuals grew at a seasonally adjusted annual rate of 6% and thus faster than in the second half of 2001 but still much slower than in 2000. Between April and June securitised lending by MFIs to enterprises increased only slightly (at €2.2 billion). For that reason, their total year-on-year increase in lending to the private sector in the euro area had slackened to 5.4% by the end of June. In the second quarter of the year lending to the euro-area public sector was reduced. This reduction exclusively affected loans and advances while MFIs purchased public sector securities. Monetary capital formation at euro-area MFIs remained subdued in the second quarter. In payment transactions with non-euro-area countries the situation reversed itself from net outflows of funds to substantial net inflows, through which monetary growth also benefited. This reversal in payment flows probably reflects a reorientation on the part of purchasers of securities. Euro-area residents' demand for foreign securities was relatively slight while non-euro-area residents increased their purchases of euro-area securities.

Capital market rates decline

Long-term capital market rates in the euro area went down in recent months. The average yield on ten-year government bonds in the euro area declined by around ¾ percentage point to just over 4½% compared with the beginning of April. They followed, albeit in reduced form, the movements of interest on US government bonds. One factor affecting yield movements was that investor confidence in the cyclical outlook, particularly in the United States, was on the wane. Against that background, ten-year European bonds, whose yields were still 11 basis points below those of comparable US Treasury bonds at the beginning of the second quarter, moved ahead of the latter, and the lead has now grown to nearly ½ percentage point. Also, the decline in capital market rates was driven by the crisis of confidence on the stock markets, with investors increasingly shifting their portfolios to crisis-proof bonds.

European enterprises' stock and bond market valuation

Daily data



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.

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Increased uncertainty surrounding bond prices

The increased risks regarding the extent and the durability of the economic upswing, however, have also caused debt securities prices to fluctuate more sharply. Market participants' uncertainty about the future movements of bond prices, which may be measured by the implied volatility of options on forward contracts for long-term Federal bonds, rose noticeably. The expected real interest on ten-year bonds went down somewhat, on balance, to around 3% per annum in July.

Yield curve pushed downwards

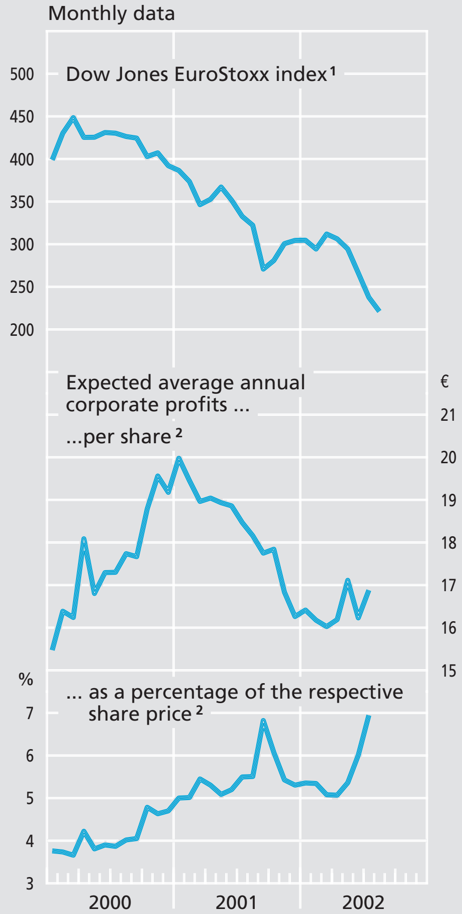
The yield curve of German Federal securities, the benchmark for the euro area, was pushed downwards across all maturities by just over ¾ percentage point between early April and the time this report went to press. Given a slightly lower three-month EURIBOR rate, the gap to yields on short-term Federal securities was reduced to just a very few basis points. This development indicates that market participants' expectations for the business cycle had become somewhat gloomier. As a consequence, the spread between money market rates and long-term capital market rates in the euro area was reduced from 193 basis points in early April to 127 basis points at the time this report went to press.

Risk premia on non-top-rated corporate bonds rise

Euro-area enterprises with a poor credit rating were confronted with rising long-term capital market rates during the second quarter of the year, bucking the general trend. The average risk premium on non-top-rated corporate bonds increased during the reporting period from 151 basis points to 257 basis points. The rise in these risk premia took place in a

Share price developments and profit estimates for European public limited companies

Monthly data



1 End of 1991 = 100; source: Deutsche Börse AG. — **2** Based on I/B/E/S analyst estimates for the Dow Jones EuroStoxx index. Source: Thomson Financial.

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global environment of dampened optimism regarding growth and confidence losses primarily caused by accounting scandals until mid-June; afterwards these premia mostly moved sideways despite the further drop in stock-market prices. Stock markets were apparently adversely affected by factors which did not have an immediate impact on bond markets.

Sharp drop in stock prices

Euro-area stock markets suffered considerable losses across the board in the second quarter. As this report went to press, the Dow Jones EuroStoxx index was down by just over one-quarter from its early-April level. The stock-price slump was triggered and visibly accelerated when market participants were confronted with unexpectedly uninspiring cyclical early indicators. In July the bottom fell out of stock prices, and the EuroStoxx broad index for the euro area slumped to its lowest level since the end of 1997. Since then stock prices have recovered slightly; when this report went to press, European companies' stock prices were around 25% lower than at the beginning of the year and about half the level of their all-time highs in March 2000.

Major anxiety on stock exchanges

As stock prices plummeted, uncertainty about further price movements, which is reflected in the implied volatility of index options, rose to heights not seen since the financial-market turbulence in the autumn of 1998. The shares of telecoms and high-tech companies, facing a mountain of debt and a relatively shaky business outlook, moved particularly unfavourably. The general decline in stock prices has also brought the stocks of banks and insurance companies, many of which divested themselves of large volumes of shares, under heavy pressure.

Deep crisis of confidence after years of euphoria

Stock-price movements on European exchanges were largely influenced by events in the United States. Equities on Wall Street had long been regarded as overvalued. From mid-April stock prices increasingly headed downwards following reports of falsified balance sheets which shattered investors' confidence.

Structural flaws in US stock markets were increasingly exposed. As has been noted by the Bank for International Settlements, enterprises, auditors and securities firms, acting in concert, had been showing a tendency to overstate current profits, insufficiently monitor reported profits, and optimistically forecast future profits. Now, many experts consider quality control of corporate information to be a core prerequisite for a sustained recovery of the stock markets. The impact of the current crisis of confidence has not remained regionally limited given the largely globalised stock exchanges, even if there have been no reports so far of comparable problems besetting European enterprises' accounting practices. In Europe, suspicion has tended to be focused on an increasingly critical stance towards business practices seen as risky or opaque.

Profit estimates hardly changed

Developments on euro-area stock markets during the period under review were also substantially determined by investors' assessments of the appropriateness of the valuation level. On average, analysts have hardly changed their medium-term forecasts of corporate profits since April. The price-earnings ratios are currently below comparable average values for the past ten years because of the sharp fall in stock prices although profits are expected to recover vigorously. The relatively broad dispersion of analysts' estimates – even if the extent of this dispersion has been in decline recently – shows that market assessments are still marked by considerable uncertainty regarding further developments in the profitability of listed enterprises.