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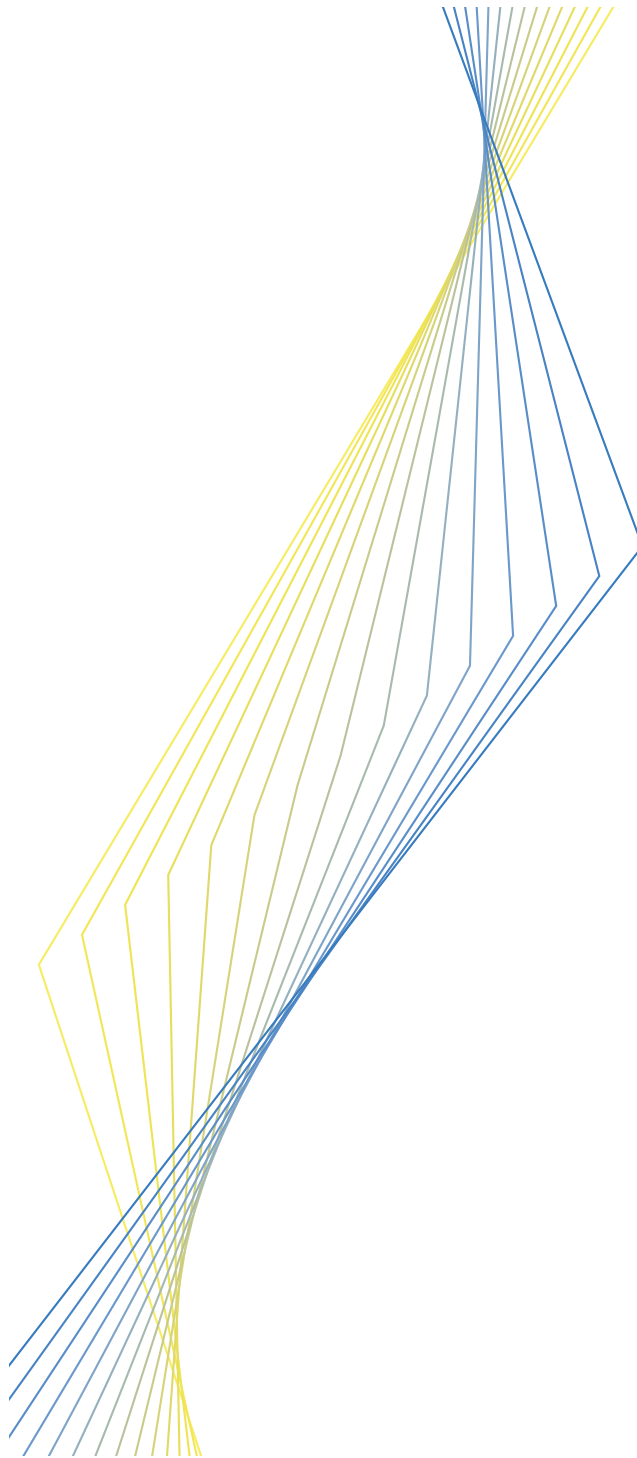
MONTHLY BULLETIN February 2002

**M O N T H L Y
B U L L E T I N**

February 2002



EUROPEAN CENTRAL BANK



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Abbreviations

Countries

BE	Belgium
DK	Denmark
DE	Germany
GR	Greece
ES	Spain
FR	France
IE	Ireland
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom
JP	Japan
US	United States

Others

BIS	Bank for International Settlements
BPM5	IMF Balance of Payments Manual (5th edition)
CDs	certificates of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
ECU	European Currency Unit
EER	effective exchange rate
EMI	European Monetary Institute
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
ILO	International Labour Organization
IMF	International Monetary Fund
MFIs	Monetary Financial Institutions
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCBs	national central banks
PPI	Producer Price Index
repos	repurchase agreements
SITC Rev. 3	Standard International Trade Classification (revision 3)
ULCM	Unit Labour Costs in Manufacturing

In accordance with Community practice, the EU countries are listed in this Bulletin using the alphabetical order of the country names in the national languages.

Editorial

At its meeting on 7 February 2002, the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem unchanged at 3.25%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged at 4.25% and 2.25% respectively.

This decision reflects the assessment that the outlook for price stability over the medium term has remained broadly unchanged over the past few weeks. The Governing Council considers the current level of key ECB interest rates as appropriate to maintain price stability over the medium term.

Starting with the analysis under the first pillar of the ECB's monetary policy strategy, the three-month average of the annual growth rates of M3 rose from 7.4% in the period from September to November 2001 to 7.8% in the period from October to December. The build-up of liquidity reflected in these data occurred in an economic and financial environment characterised by relatively high uncertainty and should therefore only be temporary. In this respect, the high growth in M3 should not be seen as signalling upward risks to price stability thus far. This assessment is supported by the declining trend in the growth rate of loans to the private sector. However, continued strong M3 growth could call for a reassessment of monetary developments, especially if there is further evidence of a recovery in the euro area economy.

Turning to the analysis under the second pillar, while euro area production growth in the fourth quarter of last year and early this year is likely to have remained subdued, recent information has confirmed the expectation of a gradual improvement in economic activity in the course of the year. Uncertainty as regards the global environment seems to be gradually decreasing. Recent survey data released in the euro area indicate that a firming of economic activity should take place. The expectation of a recovery is underpinned by

the current favourable financing conditions, by the economic fundamentals of the euro area, which remain sound, and by higher growth in real disposable income stemming from the past and expected future decline in inflation. Financial market developments also reflect expectations of a recovery in economic activity in the period ahead. Overall, although the timing and strength of the upturn remain uncertain, the available evidence points to a resumption of economic growth.

Regarding consumer price inflation, the current expectation is that medium-term inflationary pressures will remain contained. However, as indicated in the past, annual inflation rates at the beginning of this year will be somewhat erratic. A preliminary estimate provided by Eurostat points to an increase in annual HICP inflation to 2.5% in January 2002, from 2.1% in December 2001. The recent rise in inflation should not have medium-term consequences, as it was largely due to exceptional and short-lived factors, such as particularly adverse weather conditions in some parts of the euro area, which led to strong increases in unprocessed food prices. As anticipated, it also reflected some effects stemming from higher indirect taxes and unfavourable base effects resulting from falling energy prices in early 2001. There is no evidence thus far of a significant upward impact on the price level from the euro cash changeover. Rather, there is reason to believe that the introduction of the euro banknotes and coins will strengthen competition, thereby supporting the maintenance of price stability.

In the months to come, barring unforeseen developments, annual inflation rates should decline, due, inter alia, to the unwinding of past increases in energy and food prices. Developments in producer prices also point in this direction. Overall, the current expectation is that, in the course of 2002, HICP inflation will stabilise at levels safely below 2%, in line with the ECB's definition of price stability.

The expectation of continued wage moderation is an important element in the ECB's current assessment of the outlook for price stability. Continued wage moderation would not only facilitate the task of monetary policy, but also foster the creation of employment as well as growth in production and, ultimately, disposable income.

At its 7 February meeting, the Governing Council stressed the importance of the Stability and Growth Pact and of its diligent implementation through the appropriate procedures. It emphasised that the responsibility for the procedures to ensure compliance with the Pact lies with the European Commission and the EU ministers of finance. The Governing Council fully supports all steps to avoid excessive fiscal deficits and all efforts to reduce public debt-to-GDP ratios and bring the fiscal stance into line with the stability programmes in individual member countries, thereby also enhancing the credibility of the medium-term commitments made under the Stability and Growth Pact.

A medium-term orientation of fiscal policies consistent with the Stability and Growth Pact is a key factor in supporting long-term non-inflationary economic growth, as this will favourably affect the expectations of economic agents regarding the stability of future economic developments. In the same vein, all initiatives to further promote flexibility in labour and product markets in the euro area are to be supported. The focus placed on these issues in the context of the Barcelona Summit of the European Council in March 2002 should lead to determined efforts towards a swift delivery of essential structural reforms in labour and product markets, which would, in turn, enhance the euro area's growth potential.

This issue of the Monthly Bulletin contains two articles. The first discusses the role of stock markets in the economy and their relevance to monetary policy. The second highlights recent developments in international financial co-operation.

Economic developments in the euro area

I Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

At its meeting on 7 February 2002 the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, at 3.25%. The interest rates on the marginal lending facility and the deposit facility were also kept unchanged, at 4.25% and 2.25% respectively (see Chart 1).

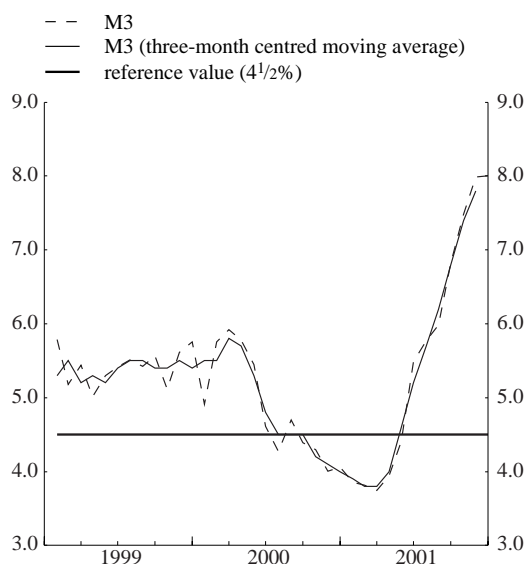
Moderation of short-run dynamics of M3 in December

The annual rate of growth of M3 in December 2001 was 8.0%, which was unchanged from November. Reflecting the continued high annual growth rate of M3, the three-month average of the annual growth rates of M3 increased to 7.8% in the period from October to December 2001, from 7.4% in

Chart 2

M3 growth and the reference value

(annual percentage changes; seasonally and calendar effect adjusted)



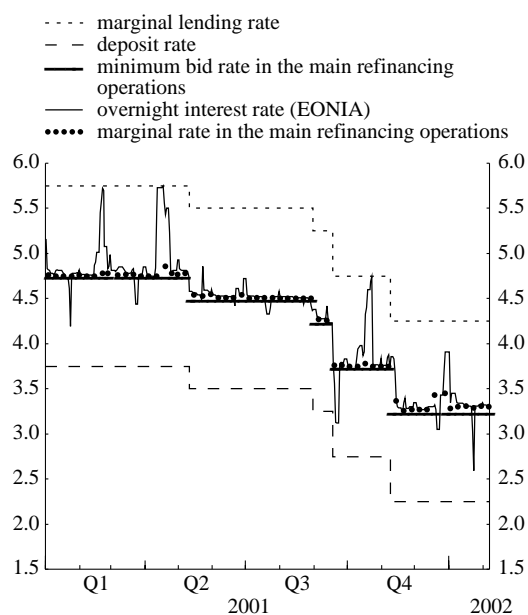
Source: ECB.

Note: Series adjusted for non-euro area resident holdings of all negotiable instruments.

Chart 1

ECB interest rates and money market rates

(percentages per annum; daily data)



Sources: ECB and Reuters.

the period from September to November (see Chart 2).

The high level of the annual growth rates is very much related to the strong dynamics of M3 in the months following the terrorist attacks in the United States, when uncertainty in the financial markets led to a marked rise in the demand for short-term liquid assets. In December, the month-on-month increase in M3 moderated significantly, to 0.3% (from an average of 0.8% over the preceding three months), which may be a first indication of a normalisation of monetary growth in the euro area, in line with the steepening of the yield curve and the reduction in uncertainty in international stock markets in late 2001.

However, monetary growth in December may have also been dampened by the euro cash changeover. The annual rate of change in currency in circulation dropped to -32.1% in December, from -19.4% in November.

Unlike in previous months, the reduction in currency holdings in December was not fully compensated by an increase in overnight deposits. Hence, the annual growth rate of the narrow monetary aggregate M1 declined to 5.0% in December, from 6.0% in the previous month (see Table I). There are indications that a flowback of banknotes from abroad may have contributed to this decrease. Moreover, there may have been a slight reduction in currency and short-term deposits as a result of the sale of the euro starter kits and, in a few cases, the immediate debiting of banknotes that were sub-frontloaded to enterprises. In the case of these latter two factors, the compensating increase in (euro) banknotes and coins will only be seen in January 2002.

Overall, there is no reason to change the assessment that the strong growth of M3 in late 2001 should not be seen so far as signalling risks to price stability. The build-up of liquidity occurred in a period characterised by high uncertainty worldwide and should therefore only be temporary. This assessment of low inflationary risks is also supported by the declining trend in the growth rate of loans to the private sector. However, a

continuation of strong M3 growth could call for a re-assessment of monetary developments in the coming months, especially if there is further evidence that the euro area economy is recovering.

Looking in more detail at the development of banknotes in circulation following the cash changeover, on 31 January 2002 the total value of euro banknotes issued by the Eurosystem amounted to €221.7 billion, whereas the value of the banknotes of the euro legacy currencies not yet redeemed by the national central banks was €92.4 billion. The total value of banknotes in circulation thus amounted to €314.1 billion. The euro progress ratio, i.e. the share of the euro banknotes in the total value of all banknotes outside the Eurosystem, was 70.6%, compared with 56.4% on 16 January 2002.

The development of banknotes over the past few months has been characterised by a pronounced decline ahead of the cash changeover and – as expected – a relatively substantial increase in January. This pattern suggests a fairly significant rise in currency in circulation (as defined in the consolidated

Table I
Summary table of monetary variables for the euro area

(annual percentage changes; quarterly averages)

	2001 Q2	2001 Q3	2001 Q4	2001 Sep.	2001 Oct.	2001 Nov.	2001 Dec.
<i>Seasonally and calendar effect adjusted</i>							
M1	2.4	3.9	5.4	5.0	5.2	6.0	5.0
<i>of which: currency in circulation</i>	-3.2	-7.5	-18.5	-11.0	-14.5	-19.4	-32.1
<i>of which: overnight deposits</i>	3.5	6.3	10.3	8.3	9.2	11.2	12.5
M2 - M1 (= other short-term deposits)	4.4	4.9	5.8	5.1	5.5	5.8	7.1
M2	3.4	4.5	5.6	5.0	5.4	5.9	6.1
M3 - M2 (= marketable instruments)	10.3	16.2	21.1	18.9	21.7	22.0	20.1
M3	4.3	6.0	7.6	6.8	7.5	8.0	8.0
<i>Unadjusted for seasonal and calendar effects</i>							
Longer-term financial liabilities (excluding capital and reserves)	3.1	2.2	2.8	2.3	2.3	3.2	3.4
Credit to euro area residents	5.4	5.6	5.2	5.2	5.1	5.4	5.3
Credit to general government	-5.3	-1.9	-0.6	-1.2	-1.1	-0.0	0.2
<i>of which: loans to general government</i>	-1.3	-1.4	-0.8	-0.6	-1.2	-0.3	-1.1
Credit to other euro area residents	8.8	7.8	6.9	7.1	6.9	6.9	6.7
<i>of which: loans to the private sector</i>	8.3	7.4	6.5	6.7	6.5	6.6	6.1

Source: ECB.

balance sheet of the MFI sector)¹ in January. However, the impact on M3 growth will probably be rather small, as currency in circulation accounts for only 6% of M3 (the average level for 2001). In addition, the increased holdings of banknotes in January are likely to have been financed largely by reductions in short-term deposits and thus compensated for inside M3.

Turning to the other components of M3, the annual rate of growth of short-term deposits other than overnight deposits rose from 5.8% in November to 7.1% in December. This mainly reflected the strong increase in the annual growth rate of short-term savings deposits (deposits redeemable at a period of notice of up to three months) to 7.5% in December, from 6.0% in November. This rise might be related to the reduction of currency holdings that were hoarded by households ahead of the euro cash changeover. Finally, the annual rate of growth of marketable instruments declined to 20.1% in December, from 22.0% in November.

Annual growth of loans to the private sector continued to moderate in December

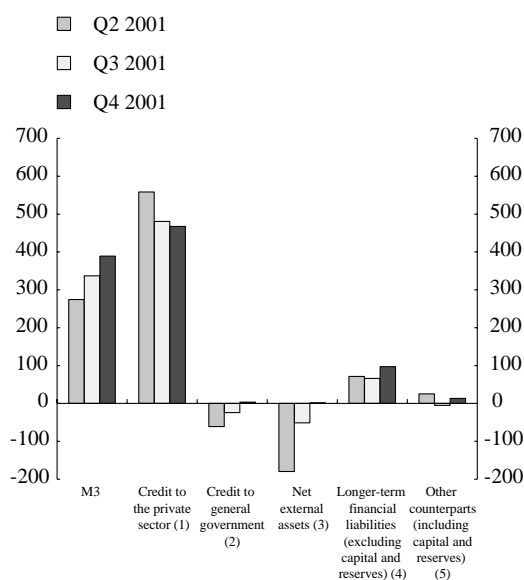
The annual rate of growth of credit to euro area residents stood at 5.3% in December and thus remained broadly stable. This stability concealed, however, divergent developments of the main components of credit. The annual growth rate of credit to general government increased slightly, to 0.2% in December, from 0.0% in November, and thereby became positive for the first time since February 2000. By contrast, the annual growth rate of credit to the private sector continued to decline, to 6.7% in December, from 6.9% in November (see Table 1). This decrease was mainly driven by the moderation in the annual growth rate of loans to the private sector, to 6.1% in December from 6.6% in November.

The annual rate of growth of MFIs' longer-term financial liabilities (excluding capital and

Chart 3

Movements in M3 and its counterparts

(annual flows, end of period; EUR billions; not adjusted for seasonal and calendar effects)



Source: ECB.

Note: Series adjusted for non-euro area residents' holdings of all negotiable instruments.

$M3 = 1 + 2 + 3 - 4 + 5$

reserves) increased further in December, to 3.4%, from 3.2% in November. The recent slight recovery in this item is probably related to the steepening of the yield curve, which increased the attractiveness of investment in longer-term assets. In December the average spread between the ten-year government bond yield and the three-month EURIBOR amounted to around 160 basis points, compared with an average of only 70 basis points in August.

Finally, the net external asset position of the euro area MFI sector decreased by €8.0 billion in December, after having increased for six consecutive months. Over the 12 months up to December, the net external assets of the euro area MFI sector were broadly unchanged.

¹ The definition of banknotes in circulation differs from that of currency in circulation in two respects: currency in circulation includes coins but excludes vault cash (i.e. cash held by MFIs). Typically the amount of outstanding banknotes exceeds the amount of currency in circulation by far.

Debt securities issuance increased in November

The annual growth of the amount outstanding of debt securities issued by euro area residents increased from 5.9% in October 2001 to 6.2% in November. Underlying this overall figure was an increase in the annual growth of the amount outstanding of long-term debt securities, from 5.8% in October to 6.1% in November, whereas that of short-term debt securities declined, from 7.4% to 7.1% (see Chart 4).

The currency breakdown shows that the annual growth of the amount outstanding of euro-denominated debt securities issued by euro area residents declined slightly, from 6.1% in October 2001 to 6.0% in November. At the same time, there was relatively pronounced issuance of debt securities in currencies other than the euro in November.

As regards the sectoral breakdown of euro-denominated debt securities issuance, the annual growth of the amount outstanding of

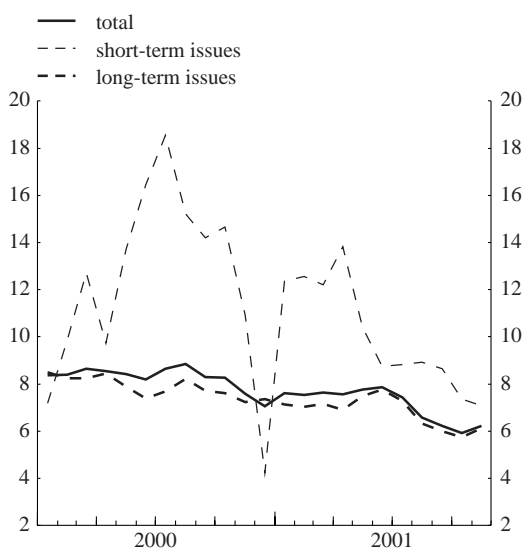
debt securities issued by MFIs declined from 5.7% in October 2001 to 5.5% in November. This reflected net redemptions of short-term debt securities by this sector. The annual growth of the amount outstanding of debt securities issued by non-financial corporations also fell slightly, from 18.2% in October to 17.9% in November. In this sector, a decline in the growth rate for short-term debt securities contrasted with an increase for long-term debt securities. Short-term debt securities issuance by this sector tends to be correlated with the business cycle. Unlike in other parts of the private sector, the annual growth of the amount outstanding of debt securities issued by non-monetary financial corporations rose overall, from 34.9% in October to 36.5% in November.

Turning to the general government sector, the annual growth of the amount outstanding of debt securities issued by central government was 2.3% in November 2001, down slightly from the previous month. The annual growth rate of the amount outstanding of debt securities issued by other general government also declined, from 22.8% in October 2001 to 22.5% in November.

Chart 4

Amounts outstanding of debt securities issued by euro area residents

(annual percentage changes)



Source: ECB.

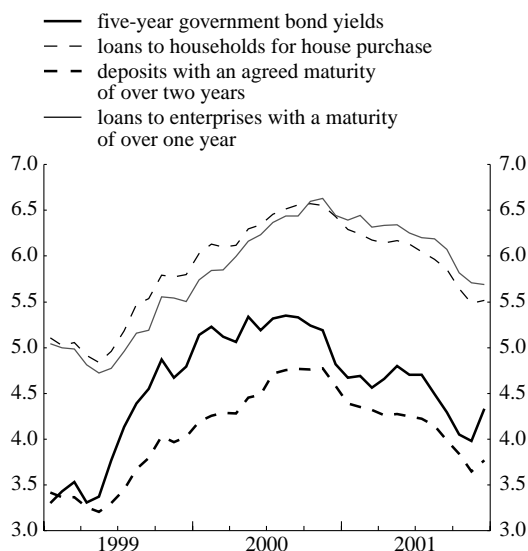
Note: From January 2001, euro area data include Greece. For reasons of comparability, annual growth rates before January 2001 use data for the euro area plus Greece.

Retail bank interest rates little changed overall in December

Short-term retail bank interest rates continued to decline slightly in December 2001, following the trend in short-term market interest rates in late 2001 (see Chart 5). The average interest rate on deposits with an agreed maturity of up to one year fell by 6 basis points in December compared with the previous month, while the average rate on deposits redeemable at a period of notice of up to three months and the average overnight deposit rate declined by 4 and 3 basis points respectively. The average interest rate on loans to enterprises with a maturity of up to one year fell by 15 basis points between November and December 2001, bringing the cumulative decline in this lending rate since the beginning of 2001 to around 100 basis points.

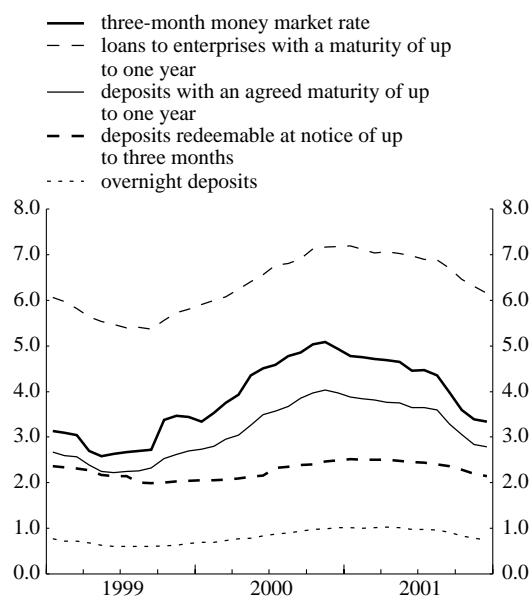
Long-term retail bank interest rates showed a slightly diverse pattern in December 2001. While deposit rates generally increased, in line with the rise in the average five-year government bond yield in December, some lending rates declined (see Chart 6). For deposits redeemable at a period of notice of over three months and deposits with an agreed maturity of over two years, interest rates increased by 4 and 12 basis points respectively. The average interest rate on loans to households for house purchase also increased by 4 basis points between November and December 2001. By contrast, the average rate on loans to enterprises with a maturity of over one year declined by 2 basis points. Compared with the lending rates prevailing at the beginning of 2001, the rates on loans to enterprises with a maturity of over one year and housing loans to households were, respectively, around 70 and 80 basis points lower.

Chart 6
Long-term retail bank interest rates and a comparable market rate
(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.
 Note: From 1 January 2001, data include Greece.

Chart 5
Short-term retail bank interest rates and a comparable market rate
(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.
 Note: From 1 January 2001, data include Greece.

Money market interest rates increased in January

Money market interest rates increased in January. The increase was most pronounced at the longer maturities. As a consequence, the positive slope of the money market yield curve steepened. Short-term interest rates implied in futures prices also increased significantly in this period.

The overnight interest rate, as measured by the EONIA, underwent some volatility at the turn of the year and was somewhat higher than the minimum bid rate in the Eurosystem's main refinancing operations in early January. This was mainly due to relatively tight liquidity conditions generated by the cash changeover, given the stronger than expected demand for euro banknotes and the slower than expected return of the former national banknotes (see Box 1). The EONIA subsequently stabilised gradually at levels slightly above the minimum bid rate, facilitated by two fine-tuning operations conducted by the Eurosystem to provide counterparties with liquidity.

Box I**Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 January 2002**

During the reserve maintenance period from 24 December 2001 to 23 January 2002, the Eurosystem settled five main refinancing operations (MROs), and two fine-tuning (FT) operations. Their outcomes are summarised in the table below.

Regular monetary policy operations

(EUR billions; interest rates in percentages per annum)

Operation	Date of settlement	Date of maturity	Bids (amount)	Allotment (amount)	Bid-cover ratio	Number of participants	Minimum bid rate	Marginal rate	Weighted average rate
MRO	28/12/2001	09/01/2002	105.6	85.0	1.2	331	3.25	3.45	3.52
MRO	02/01/2002	16/01/2002	88.7	31.0	2.9	241	3.25	3.28	3.29
MRO	09/01/2002	23/01/2002	155.9	83.0	1.9	360	3.25	3.30	3.32
MRO	16/01/2002	30/01/2002	116.8	22.0	5.3	329	3.25	3.31	3.32
MRO	23/01/2002	06/02/2002	146.3	103.0	1.4	382	3.25	3.29	3.30
FT	04/01/2002	07/01/2002	57.6	25.0	2.3	61	3.25	3.30	3.32
FT	10/01/2002	11/01/2002	59.4	40.0	1.5	63	3.25	3.28	3.30

Source: ECB.

As a result of the cash changeover, it was more difficult than usual to predict liquidity needs in the maintenance period under review. In the first two weeks of the new year, the demand for banknotes was higher than anticipated by the ECB, owing to both a stronger than expected demand for the new euro banknotes and a lower than forecast return of former national banknotes from the banking system to the Eurosystem. In order to meet the higher than expected demand for liquidity, the ECB conducted two liquidity-providing fine-tuning operations in the first half of January. The operations were carried out in the form of variable rate tenders with a minimum bid rate of 3.25% and overnight maturity. The ECB also provided several updates on the published estimates of the liquidity needs of the banking system, in addition to the standard procedure of publishing weekly estimates of these liquidity needs together with the regular main refinancing operations.

The EONIA rose to 3.91% on the last business day of 2001, Friday, 28 December, reflecting the usual high liquidity demand resulting from balance sheet considerations of financial institutions at year-end. The relatively tight liquidity conditions and general uncertainty regarding the individual liquidity needs of banks implied by the cash changeover led the EONIA to hover at around 3.35% in the first three weeks of January, i.e. somewhat above the minimum bid rate in the ECB's main refinancing operations (3.25%). Two days before the end of the maintenance period, the EONIA fell below the minimum bid rate, to 3.03%, and dropped further to 2.59% on 23 January, as liquidity conditions were by then perceived as ample.

Indeed, the maintenance period ended with a total net recourse to the deposit facility of €6.4 billion (€0.7 billion recourse to the marginal lending facility and €7.1 billion recourse to the deposit facility on 23 January). In addition, the so-called "excess reserves" – the difference between average current accounts with the Eurosystem (€130.4 billion) and minimum reserve requirements (€128.7 billion) – were much higher than usual, amounting to €1.7 billion. This indicates that some banks may have increased their liquidity buffers on account of difficulties in predicting their cash flows during the cash changeover. The resulting distribution of reserves led to an early fulfilment of the reserve requirements for a large number of credit institutions, implying a stronger than usual tendency for excess reserves to accumulate.

The net liquidity-absorbing impact of the autonomous factors, i.e. the factors not related to monetary policy (item (b) in the table below), on the banking system's liquidity was €51.6 billion on average. The estimates of

average liquidity needs stemming from autonomous factors, published together with the tender announcements, ranged between €33.1 billion and €73.2 billion. The large variation arose mainly from the debiting scheme for the frontloaded euro cash, in accordance with which a third of the total frontloaded amount of €133.5 billion was debited on each of 2 January, 23 January and 30 January. As mentioned above, during the first two weeks of the cash changeover, the actual figures turned out to be much higher than the estimates, by up to €15.4 billion. In the remainder of the maintenance period, by contrast, they were lower than estimated, by up to €7.1 billion. These larger than usual deviations of the published figures from the actual outcome reflected the difficulties in forecasting banknote circulation during the cash changeover.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 December 2001 to 23 January 2002

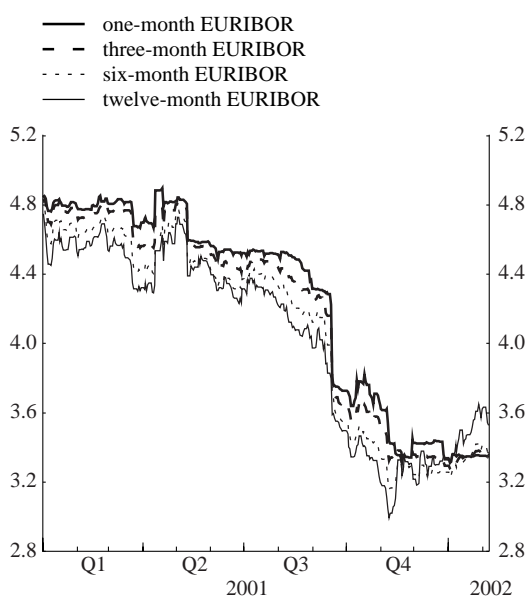
	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	182.6	0.6	+ 182.0
Main refinancing operations	118.5	-	+ 118.5
Longer-term refinancing operations	60.0	-	+ 60.0
Standing facilities	0.4	0.6	- 0.1
Other operations	3.7	-	+ 3.7
(b) Other factors affecting the banking system's liquidity	385.2	436.8	- 51.6
Banknotes in circulation	-	344.3	- 344.3
Government deposits with the Eurosystem	-	38.3	- 38.3
Net foreign assets (including gold)	385.2	-	+ 385.2
Other factors (net)	-	54.2	- 54.2
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			130.4
(d) Required reserves			128.7

Source: ECB.

Totals may not add up due to rounding.

Chart 7
Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

The marginal and average rates of allotment in the Eurosystem's main refinancing operations settled in January and early February 2002 were between 3 and 7 basis points above the minimum bid rate. Two-week money market rates remained stable and slightly above the minimum bid rate in the period between end-December and 6 February.

The one-month and three-month EURIBOR increased by 2 and 6 basis points respectively between the end of December 2001 and 6 February 2002, to stand at 3.34% and 3.35% on 6 February (see Chart 7). The marginal and average interest rates in the Eurosystem's longer-term refinancing operation settled on 31 January were close to the then prevailing three-month EURIBOR, at 3.31% and 3.33% respectively. This was 2 basis points higher than the corresponding rates in the longer-term refinancing operation settled on 21 December 2001.

Interest rates at the longer end of the money market yield curve increased more significantly. The six-month and the twelve-month EURIBOR increased by 12 and 20 basis points respectively in the period between end-December 2001 and 6 February 2002, to stand at 3.37% and 3.53%. The slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, thus steepened significantly, from 1 to 19 basis points in the period under review.

The expected path of the three-month EURIBOR, as implied in the futures prices on contracts with delivery dates in 2002, also increased significantly in the course of January. Overall, in the period between end-December and 6 February, the rates implied in futures prices on contracts with delivery dates in March, June and September 2002 increased by 18, 17 and 8 basis points respectively, to stand at 3.32%, 3.36% and 3.55% on 6 February.

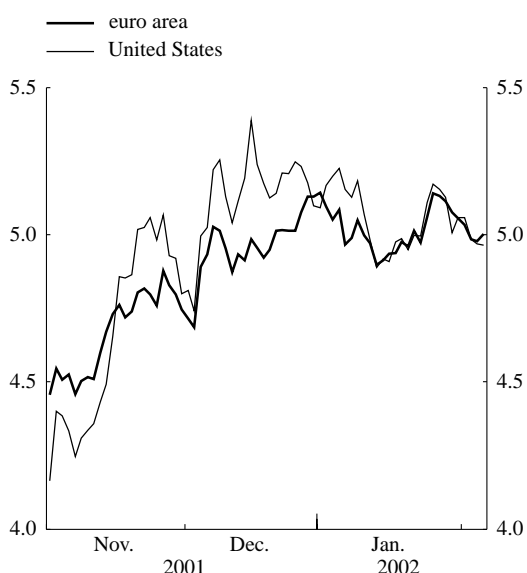
Long-term government bond yields were broadly stable in January and early February

Although subject to swings in the course of the month, average ten-year government bond yields in the euro area changed little overall between the end of December 2001 and 6 February 2002, standing at around 5% on the latter date (see Chart 8). In the United States, ten-year government bond yields also recorded swings during January but changed little overall, standing at around 5% on 6 February. As a result, the differential between ten-year government bond yields in the United States and the euro area was virtually unchanged overall, and was close to zero on 6 February 2002.

In the United States, government bond yields saw significant declines across the maturity spectrum until mid-January, followed by equally strong increases. These two distinct periods mainly reflected changing views among market participants about the outlook

Chart 8
Long-term government bond yields in the euro area and the United States

(percentages per annum; daily data)



Source: Reuters.

Notes: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity. From 1 January 2001 onwards, euro area data include Greece.

for economic activity in the United States. In the first half of the month, market participants did not seem optimistic about the prospects for a quick recovery in the pace of economic activity. Later on, this view changed, and positive economic data releases triggered increases in bond yields. However, underlying uncertainty about the reliability of corporate earnings data seemed to prompt investment shifts from the stock markets which appeared to countervail this subsequent upward pressure on long-term bond yields. By contrast with the sharp swings in long-term interest rates, investor uncertainty about future movements in US bond yields – as reflected in implied bond market volatility – decreased between the end of December 2001 and 6 February 2002, from 9.1% to around 8.5%. Nevertheless, the latter value was still 2 percentage points higher than the average of the past three years, indicating remaining uncertainties among market participants about the economic outlook.

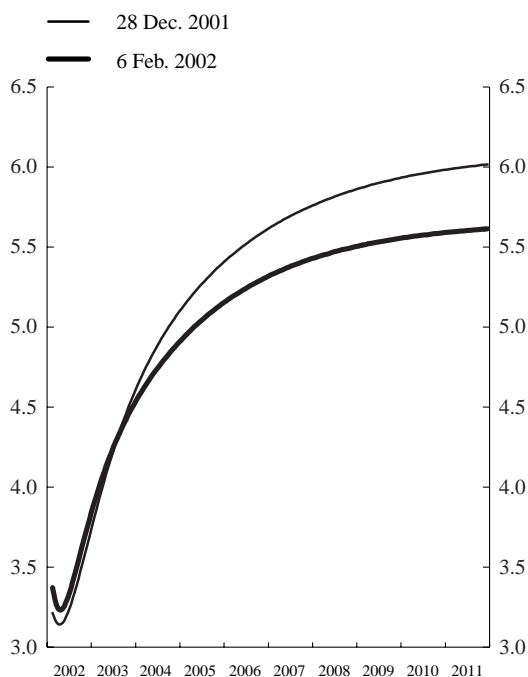
In Japan, ten-year government bond yields increased by around 15 basis points between the end of December 2001 and 6 February 2002, reaching around 1.5% on the latter date. This was the highest level in nine months. While evidence of continued weakness and deflationary tendencies in the Japanese economy may have put downward pressure on Japanese government bond yields, this seems to have been outweighed by an increasing credit risk premium on Japanese government debt.

In the euro area, the limited overall change in ten-year government bond yields between 31 December 2001 and 6 February 2002 concealed variations during this period of similar magnitude to those observed in the United States. By contrast with the overall stability of long-term bond yields, two-year bond yields in the euro area increased by 15 basis points. This brought the slope of the yield curve between ten-year and two-year bond yields down by 30 basis points to around 115 basis points. The slope of the yield curve between two-year bond yields and the three-month EURIBOR, however, grew slightly steeper, to around 50 basis points between end-December 2001 and 6 February 2002. This change in the shape of the yield curve reflected a slight shift in the views held among market participants about the likely path of short-term interest rates in the euro area. The changing views were also reflected in a slight twist in the implied forward overnight interest-rate curve for the euro area at medium-term maturities between the end of December 2001 and 6 February 2002 (see Chart 9). Market participants' uncertainty about short-term developments in ten-year bond yields – as reflected in implied bond market volatility – decreased by around 1.5 percentage points between the end of December 2001 and 6 February 2002, to a level of 4.9%. This level is ½ of a percentage point lower than the average value from January 1999 to December 2001.

These developments in the euro area bond markets seem to indicate a modest

Chart 9 Implied forward euro area overnight interest rates

(percentages per annum; daily data)



Source: ECB estimation.

Note: The implied forward yield curve, which is derived from the term structure of interest rates observed in the market, reflects the market expectation of future levels for short-term interest rates. The method used to compute these implied forward yield curves was outlined on page 26 of the January 1999 issue of the Monthly Bulletin. The data used in the estimation are derived from swap contracts.

improvement in market expectations for economic activity over the near term, as well as a perception of more limited downside risks to economic activity in the euro area. This interpretation is suggested by trends in implied bond market volatility and by the small overall change observed between the end of December 2001 and 6 February 2002 in the real yield of French ten-year index-linked bonds (see Box 2). The ten-year break-even inflation rates derived from the difference between index-linked bond yields and the yields on fixed income bonds with a comparable maturity were broadly stable over the same period, suggesting that average long-term inflation expectations for the euro area basically remained constant.

Box 2

Deriving long-term euro area inflation expectations from index-linked bonds issued by the French Treasury

Long-term bonds, whose coupons are indexed to an inflation rate, provide a tool for gauging market participants' long-term inflation expectations. From September 1998 to October 2001, the only such bond available in the euro area was a bond issued by the French government which was linked to the French Consumer Price Index (CPI) excluding tobacco.¹ On 1 November 2001, a new bond was issued by the French government which is linked to a measure of euro area inflation, namely to the preliminary estimate of the euro area Harmonised Index of Consumer Prices (HICP) excluding tobacco.² This bond represents a new financial instrument for providing more straightforward information on long-term inflation expectations in the euro area.

A measure of long-term inflation expectations derived from indexed-linked bonds is the difference between the nominal yield on a standard bond and the real yield on an inflation-indexed bond, issued by the same issuer and with similar maturity. This measure is commonly referred to as the break-even inflation rate because it provides an estimate of the level of expected inflation at which, under certain assumptions, an investor would be indifferent as to which of the two types of bond to hold. Since the launch of the new bond, the break-even inflation rate calculated from it has been around 1.8% on average,³ which was about 50 basis points above the break-even inflation rate calculated from the bond linked to the French CPI excluding tobacco. This difference in break-even inflation rates would suggest that there is a difference between long-term inflation expectations for France and for the euro area as a whole.

Since 1995, the annualised inflation rate of the French CPI excluding tobacco has been 55 basis points lower than the inflation rate of the euro area HICP excluding tobacco.⁴ The latest release of the long-term forecasts of Consensus Economics in October 2001 suggests that forecasters expect such a difference to last for a while. This survey shows that the difference between long-term inflation expectations in France and in the euro area as a whole may be about 30 basis points.⁵

It is important to bear in mind, however, that break-even inflation rates are not a completely reliable measure of market participants' inflation expectations since they are influenced by several premia. For example, the break-even inflation rate for the bonds linked to the euro area HICP and the French CPI not only reflect inflation expectations for the euro area and France respectively, but may also contain a positive premium related to inflation uncertainty and a negative premium related to the higher liquidity of the nominal bonds used to calculate the break-even inflation rate. In this respect, the aforementioned differences in the break-even inflation rates between the bond linked to the French CPI and the bond linked to the euro area HICP may also, to some extent, be related to differences in liquidity of the two index-linked bonds (but it is difficult to measure this difference precisely). Finally, part of the higher break-even inflation rate derived from the bond linked to the euro area HICP may relate to the longer maturity of this bond (2012) compared with the bond linked to the French CPI (2009).

¹ See the Box entitled "Deriving inflation expectations from inflation index-linked bonds" in the February 1999 issue of the *Monthly Bulletin* for a more detailed presentation of the French index-linked bonds and their information content.

² This estimate refers to the first official Eurostat release of the euro area HICP. It is thus to be distinguished from the "flash" estimate calculated by Eurostat. It is "preliminary" to the extent that for several euro area countries the HICP figure is only provisional at the date of the press release and thus subject to possible subsequent revision. The exclusion of tobacco is necessary to comply with the French law relating to the anti-smoking campaign.

³ The nominal bond used in the calculation of the break-even inflation rate in this box is the *Obligation Assimilable du Trésor (OAT)* maturing in December 2012.

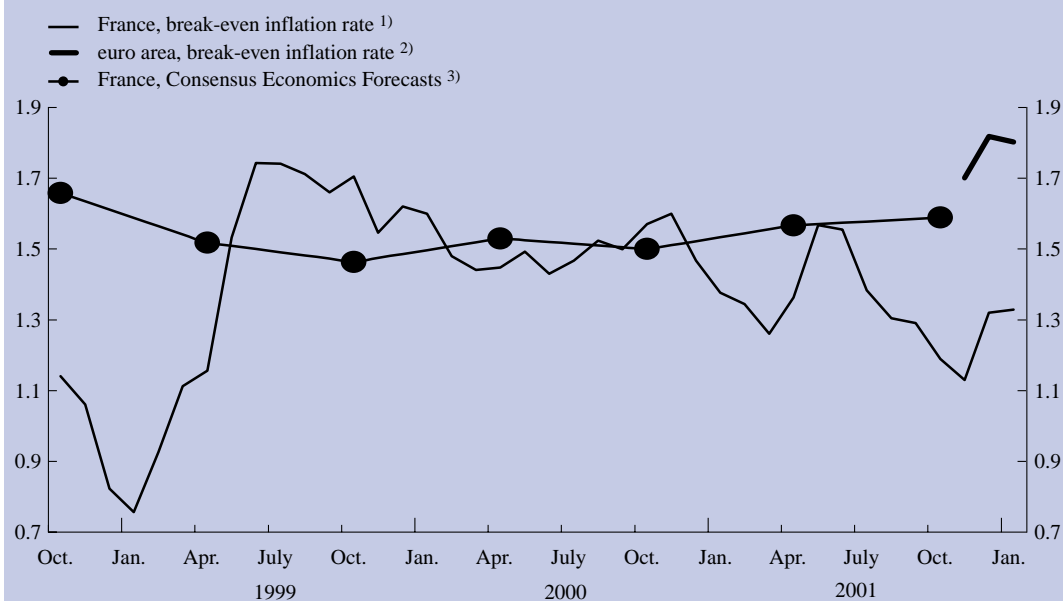
⁴ Due to lack of data availability for the euro area HICP excluding tobacco, it is not possible to compare the price indexes before 1995.

⁵ Consensus Economics does not publish a long-term inflation forecast for the euro area as a whole. The euro area figure referred to here was constructed using national CPI figures for Germany, Spain, France, Italy and the Netherlands. These countries represent around 85% of the euro area HICP.

In order to provide an indication of the relative importance of such premia, it is useful to compare break-even inflation rates with other measures of inflation expectations over a longer period. As the new bond was issued only three months ago, inferences can only be drawn from the old index-linked bond which was issued in September 1998. The chart below shows, from October 1998 onwards, the break-even inflation rate calculated from the old bond as well as long-term inflation expectations for France taken from Consensus Economics. It is worth noting that, except for a period around October 1998 and again in October 2001, the two measures were very close. Indeed, between April 1999 and April 2001, the average of the absolute difference between these two measures was around 20 basis points. Similarly, for the new bond linked to the euro area HICP excluding tobacco, the average break-even inflation rate calculated for January 2002 was around 10 basis points lower than the long-term euro area inflation expectation of Consensus Economics and was equal to the rate of euro area inflation expected five years ahead, as reported in the 2001 Q4 round of the ECB Survey of Professional Forecasters.

Different indicators of long-term inflation expectations

(in percentage points)



Sources: French Treasury, Reuters and Consensus Economics.

1) The difference between the nominal yield of the French OAT maturing in April 2009 and the real yield of the French index-linked bond linked to the French CPI maturing in 2009.

2) The difference between the nominal yield of the French OAT maturing in December 2012 and the real yield of the French index-linked bond linked to the euro area HICP maturing in 2012.

3) Average inflation expectations for France over a period ending in 2009 taken from Consensus Economics.

The significant differences observed in late 1998 and late 2001 between the French break-even inflation rate and French long-term inflation expectations from Consensus Economics can for the most part probably be explained by liquidity considerations. On both occasions, financial markets endured periods of exceptional turbulence: in autumn 1998, owing to the consequences of the Asian crisis (namely, the Russian crisis and the bankruptcy of the LTCM hedge fund), and in autumn 2001 following the 11 September terrorist attacks. During these periods, risk-averse investors increasingly bought safe and liquid assets. As index-linked bonds tend to be less liquid than nominal bonds, the nominal interest rate tends to decline by more than the real interest rate in such episodes, pushing the break-even inflation rate downwards. In this respect, the V-shape of the break-even inflation rate observed after September 2001 seemed to mainly reflect the differential impact of “flight-to-safety” flows (and their reversal) on real and nominal yields, owing to differences in liquidity in the aforementioned markets, rather than changes in long-term inflation expectations. This is also suggested by

other measures of inflation expectations which changed little after 11 September 2001. Thus, particularly in periods of exceptional turbulence in financial markets, the liquidity premium can impose considerable biases on the break-even inflation rate. When markets are more tranquil, this premium may still have a downward bias on the break-even inflation rate. However, it is then likely to be smaller and less volatile over time.

There are two lessons to be drawn from this analysis: first, when monitoring developments in break-even inflation rates, it is always necessary to cross-check against other inflation measures and to carry out a thorough analysis of shocks that could cause sharp movements in break-even inflation rates. Second, given the existence of various premia affecting break-even inflation rates, it may be more informative to focus on changes in break-even inflation rates rather than on break-even inflation levels.

Stock prices fell in January and early February

Stock prices in the euro area, the United States and Japan as measured by the Dow Jones EURO STOXX, the Standard and Poor's 500 and the Nikkei 225 indices all declined between the end of December 2001 and 6 February 2002 (see Chart 10). At the same time, uncertainty about future movements in all three of these indices, as measured by implied volatility, increased (see

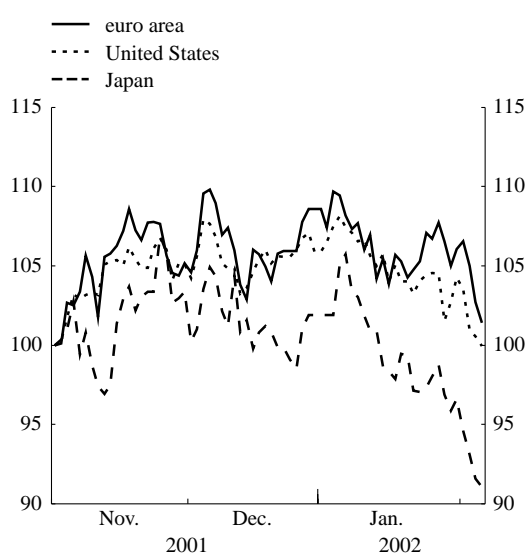
Chart 11). Although in the course of January market participants perceived growing signs that the economic downturn in the United States and the euro area was bottoming out, cautiousness about the prospects for a recovery in profits continued to depress the stock markets.

In the United States, the Standard and Poor's 500 index declined by 6% between end-December 2001 and 6 February 2002, reaching a three-month low. This was mainly due to rising pessimism among investors about the prospects for a quick recovery in corporate earnings. In particular, pessimism grew following several bankruptcy announcements in the energy, retail and telecommunication sectors in December and January. Other companies also issued warnings of financial problems, such as lower than expected earnings or difficulties in repaying debt. Moreover, there were growing concerns among market participants about the reliability of US corporate earnings data. In this environment, investors appear to have shifted funds out of the stock market and into the government bond market.

In Japan, the Nikkei 225 index declined by 11% between the end of December 2001 and 6 February 2002 to reach 18-year lows. The stock markets continued to be depressed by a perception by market participants of ongoing weakness in the domestic economy, with further deteriorations in unemployment and manufacturing output data. Moreover, market participants appeared to remain concerned about the weakness of the banking

Chart 10
Stock price indices in the euro area, the United States and Japan

(index: 1 November 2001 = 100; daily data)



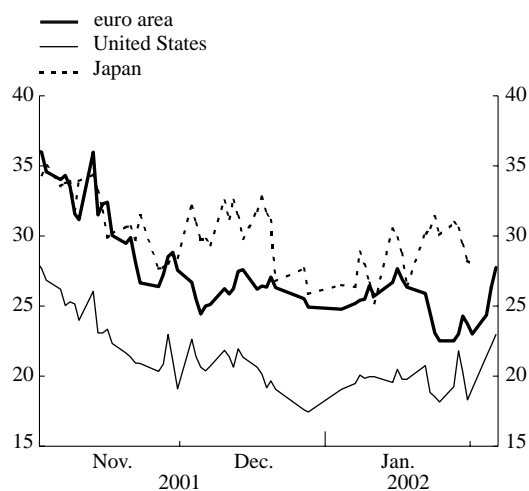
Source: Reuters.

Notes: Dow Jones EURO STOXX broad (stock price) index for the euro area, Standard & Poor's 500 for the United States and Nikkei 225 for Japan. From 1 January 2001, euro area data include Greece.

Chart 11

Implied stock market volatility in the euro area, the United States and Japan

(percentages per annum; daily data)



Source: Bloomberg.

Note: The implied volatility series reflect the expected standard deviation of percentage stock price changes over a period of up to three months, as implied in the prices of options on stock price indices. The equity indices to which the implied volatilities refer are the Dow Jones EURO STOXX 50 for the euro area, the Standard & Poor's 500 for the United States, and the Nikkei 225 for Japan.

sector and losses by retailers. Implied stock price volatility remained in January at a level comparable to the average in 2001.

In the euro area, the Dow Jones EURO STOXX index declined by 7% between end-December 2001 and 6 February 2002. This seems to have mainly been due to spill-over effects from the United States due to concerns about the reliability of profit data, especially in late January and early February. This seemed to outweigh improving market sentiment about the euro area economic outlook. On a sectoral basis, much of the decline in stock prices was accounted for by relatively large drops in the prices of technology and telecommunications stocks. The less optimistic market view of prospects for the telecommunications sector in particular stemmed from slower sales growth due to market saturation and uncertainty about the profitability of investments in third generation telecommunication projects. In this environment, implied stock price volatility increased towards the end of the month, to stand, on 6 February 2002, at a level slightly above the average over 2000-2001.

2 Price developments

Higher annual HICP inflation in January 2002 according to Eurostat's flash estimate

According to Eurostat's flash estimate for January 2002, the annual rate of HICP inflation in the euro area was 2.5%, up from 2.1% in December 2001. Some uncertainty surrounds this flash estimate given the preliminary nature of the available country data, but the increase in HICP inflation appears to reflect a number of specific factors. In particular, higher vegetable and fruit prices are assessed as having resulted from unfavourable weather conditions. Moreover, tax increases on tobacco in a few euro area countries are

likely to have had an upward effect on processed food prices. As regards any pressures on prices stemming from the euro cash changeover, taking the above factors into account, there remains no evidence of a significant upward impact. Further analysis of the underlying developments will be possible when official data on HICP inflation in January 2002 and its individual price components are released. The higher outcome in January 2002 confirms earlier expectations that the decline in inflation would be somewhat erratic in the first months of this year because of base effects, government measures (e.g. tax changes) or developments in some of the volatile components.

Table 2
Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1999	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2002
				Q1	Q2	Q3	Q4	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	1.1	2.4	2.7	2.6	3.2	2.7	2.2	2.8	2.5	2.4	2.0	2.1	.
<i>of which:</i>													
Goods	0.9	2.7	2.7	2.8	3.5	2.7	1.8	2.8	2.3	2.1	1.5	1.7	.
Food	0.6	1.4	4.6	3.2	5.0	5.3	4.9	5.2	5.2	5.2	4.7	4.7	.
Processed food	1.0	1.2	2.9	2.0	2.8	3.4	3.5	3.4	3.5	3.6	3.5	3.6	.
Unprocessed food	0.1	1.7	7.2	5.2	8.4	8.1	6.9	7.8	7.8	7.8	6.5	6.6	.
Industrial goods	1.0	3.4	1.8	2.6	2.8	1.5	0.3	1.7	0.9	0.6	0.0	0.2	.
Non-energy industrial goods	0.7	0.7	1.5	1.2	1.5	1.6	1.6	1.5	1.6	1.6	1.5	1.6	.
Energy	2.3	13.4	2.8	7.3	7.3	1.2	-4.1	2.1	-1.3	-2.7	-5.0	-4.6	.
Services	1.6	1.7	2.5	2.3	2.5	2.6	2.8	2.6	2.7	2.8	2.8	2.8	.
Other price and cost indicators													
Industrial producer prices ¹⁾	-0.4	5.5	2.2	4.6	3.7	1.5	-1.0	1.7	0.7	-0.7	-1.3	-1.1	.
Unit labour costs ²⁾	1.3	1.1	.	2.2	2.5	2.5	.	-	-	-	-	-	-
Labour productivity ²⁾	0.9	1.4	.	0.2	0.0	0.0	.	-	-	-	-	-	-
Compensation per employee ²⁾	2.3	2.5	.	2.4	2.5	2.5	.	-	-	-	-	-	-
Total hourly labour costs ³⁾	2.2	3.4	.	3.2	2.9	3.4	.	-	-	-	-	-	-
Oil prices (EUR per barrel) ⁴⁾	17.1	31.0	27.8	28.4	31.7	29.0	22.4	28.7	28.8	23.8	21.7	21.5	22.6
Commodity prices ⁵⁾	-5.9	16.7	-7.6	-0.8	-3.0	-10.4	-15.6	-10.7	-18.1	-19.3	-15.1	-12.3	-6.2

Sources: Eurostat, national data, International Petroleum Exchange, HWWA (Hamburg Institute of International Economics) and ECB calculations.

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Excluding construction.

2) Whole economy.

3) Whole economy (excluding agriculture, public administration, education, health and other services).

4) Brent Blend (for one-month forward delivery).

5) Excluding energy. In euro; in ECU up to December 1998. Weighted according to extra-euro area commodity imports.

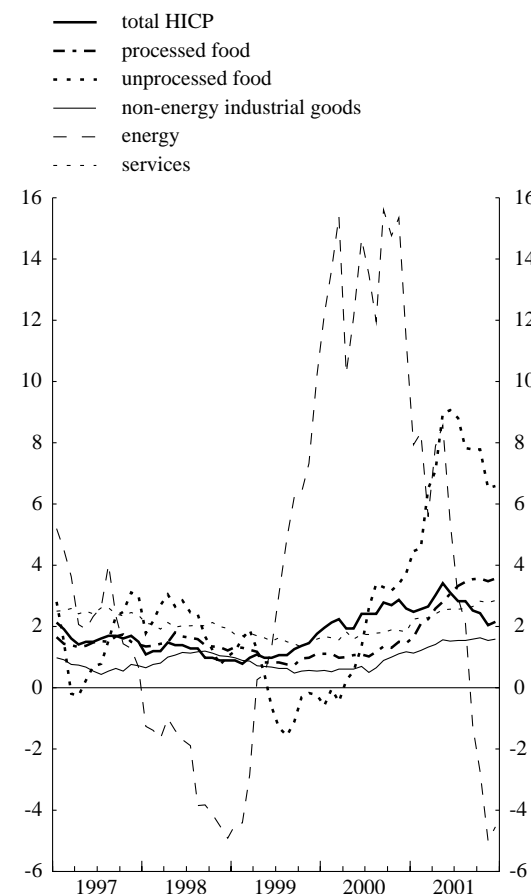
The slight increase in HICP inflation between November and December 2001 – from 2.0% to 2.1% – reflects a small rise in the year-on-year rates of change for all the main sub-components except that for services prices, which remained unchanged (see Table 2). The annual rate of change in the HICP excluding unprocessed food and energy was 2.5% in December 2001, up from 2.4% in the previous month.

Although the year-on-year rates increased somewhat for both the overall HICP and the HICP excluding unprocessed food and energy between November and December 2001, short-term movements measured by the three-month annualised rate of change (calculated using seasonally adjusted data)

Chart 12

Breakdown of HICP inflation in the euro area by component

(annual percentage changes; monthly data)



Source: Eurostat.

Note: Data refer to the Euro 12 (including periods prior to 2001).

show that the recent easing of short-term price pressures continued in December. However, these short-run developments should be interpreted with caution on account of their rather volatile nature.

The annual rate of decrease in energy prices was 4.6% in December 2001, compared with 5.0% in November (see Chart 12). This slower rate of decline is fully attributable to a base effect associated with the decline in energy prices in December 2000. Notably, the level of energy prices fell by 1.1% in December 2001 from the previous month, which partially reflects the slight fall in oil prices from €21.7 per barrel in November to €21.5 in December. In January 2002, oil prices increased and were, on average, quoted at €22.6 per barrel.

The year-on-year rates of change in the prices of processed as well as unprocessed food increased by 0.1 percentage point in December 2001 to 3.6% and 6.6% respectively. The increase in the year-on-year rate for unprocessed food prices, is entirely explained by higher vegetable prices, reflecting weather conditions which had a negative impact on market supply. As the negative weather effects subside, declines in the rate of change are expected to take place.

The year-on-year rate of change in non-energy industrial goods prices increased slightly to 1.6% in December 2001. The annual rate of change in this component has been broadly stable since May 2001. The annual rate of change in services prices was stable for the third consecutive month and stood at 2.8% in December 2001. This suggests that the lagged effects of the past oil price increase on both of these components may start to unwind.

The annual increase in the HICP was 2.7% on average in 2001

The December figure of 2.1% puts the annual average growth rate of the HICP at 2.7%, which is 0.3 percentage point higher than the

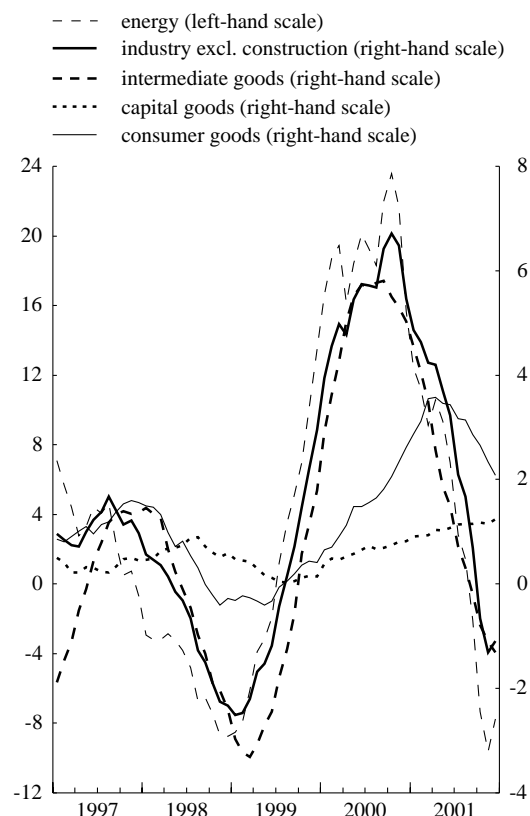
average rate of increase observed in 2000. The corresponding average for the rate of change in the HICP excluding unprocessed food and energy is 2.2%, up from 1.3% in 2000.

Producer price pressures continued to ease in December 2001

Reflecting developments in all of the main sub-components, price pressures in the industrial sector continued to ease in December 2001. Although the year-on-year rate of decline (see Chart 13) in industrial producer prices slowed somewhat in December 2001 (1.1% compared with 1.3% in November), the level of producer prices continued to decline. The slower year-on-

Chart 13 Breakdown of industrial producer prices for the euro area

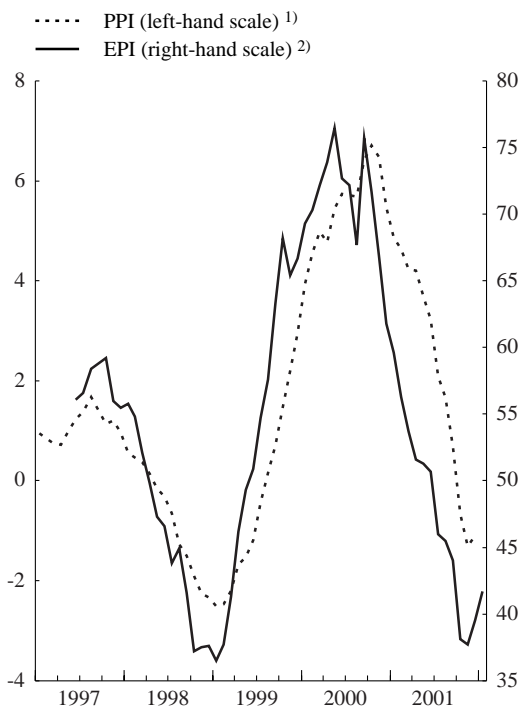
(annual percentage changes; monthly data)



Source: Eurostat.
Note: Data refer to the Euro 12 (including periods prior to 2001).

Chart 14 Overall producer prices and manufacturing input prices for the euro area

(monthly data)



Sources: Eurostat and Reuters.

Note: When available, data refer to the Euro 12 (including periods prior to 2001).

1) Producer Price Index; annual percentage changes; excluding construction.

2) Eurozone Price Index; manufacturing input prices from the Purchasing Managers' Survey. An index value above 50 indicates an increase in manufacturing input prices, whereas a value below 50 indicates a decrease.

year rate of decline is exclusively explained by a base effect (related to the large decline in the energy component in December 2000).

The latest information on the Eurozone Price Index from the Reuters Purchasing Managers' Survey shows a reading of below 50 again for January 2002, thereby signalling a further decline in the average price of inputs in the manufacturing sector (see Chart 14). However, the expected rate of decline was less pronounced than in the previous three months, which is in turn consistent with the observed increase in energy as well as non-energy commodity prices between December 2001 and January 2002.

Labour cost growth broadly unchanged between the second and third quarters

Wage developments remained moderate up to and including the third quarter of 2001. This is reflected not only in available information about negotiated wages, but also in the annual growth rate of compensation per employee, which was unchanged at 2.5% between the second and third quarters of 2001. During the same period, the annual rate of change in labour productivity was also unchanged, at 0.0%. This low level of labour productivity growth reflects the cyclical slowdown of the economy. As a result of the unchanged growth rates in compensation per employee and labour productivity, unit labour costs are estimated to have grown by 2.5% year-on-year in the second as well as the third quarter of 2001.

According to the second estimate released by Eurostat, total hourly labour costs in the

non-agricultural business sector increased by 3.4% on an annual basis in the third quarter of 2001, up from 2.9% in the previous quarter. However, recent movements in total hourly labour costs reflect changes in wage payment practices (treatment of bonuses, retroactive payments, etc.) in one euro area country as opposed to genuine labour cost pressures and, hence, are currently judged to overstate the increase in labour costs.

Looking ahead, a continuation of the recent process of wage moderation is warranted for fostering employment and supporting a favourable outlook for price stability in the medium term. Forthcoming wage negotiations will, against this background, be closely monitored by the ECB with a view to assessing any signals of increasing labour costs. If wage moderation is maintained, and assuming that other determining factors also develop favourably, the annual inflation rate should fall below 2% this year, in line with the ECB's definition of price stability.

3 Output, demand and labour market developments

Economic activity remained subdued in the second half of last year

As reported in the previous issue of the Monthly Bulletin, euro area real GDP grew by 0.1% quarter-on-quarter in the third quarter of last year, unchanged compared with the rate of growth in the previous quarter (see Table 3). However, the contributions to quarter-on-quarter growth differed somewhat between the two quarters. In the third quarter the contribution from domestic demand was negative, at -0.1 percentage point, while that from net exports was positive, at 0.2 percentage point. This reversed the pattern of a negative contribution from net exports and a positive one from domestic demand observed in the second quarter of 2001.

Industrial production data provide some indications of activity in the fourth quarter of 2001. Industrial production (excluding

construction) decreased by 0.7% month-on-month in November, following a decline of 1.5% in October (see Table 4). On a three-month moving average basis, the level of industrial production fell by 1.5% in the three-month period up to November, compared with the three-month period up to August. This followed a decline of 0.4% in the three-month period up to October and implies a renewed decline in industrial production growth after some improvement was observed during the summer months. The weak outcome in October and November suggests that quarter-on-quarter growth in industrial production in the fourth quarter will most likely be lower than in the third quarter, when it was -0.6%. This will have a negative impact on overall real GDP growth in the fourth quarter.

The pattern of growth in manufacturing production was similar to that in industrial production (excluding construction), pointing

Table 3**Composition of real GDP growth in the euro area***(percentage changes, unless otherwise indicated; seasonally adjusted)*

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1998	1999	2000	2000	2000	2001	2001	2001	2000	2000	2001	2001	2001
				Q3	Q4	Q1	Q2	Q3	Q3	Q4	Q1	Q2	Q3
Real gross domestic product <i>of which:</i>	2.9	2.6	3.4	3.2	2.8	2.5	1.6	1.4	0.4	0.6	0.6	0.1	0.1
Domestic demand	3.6	3.2	2.8	2.8	2.2	1.7	1.0	0.8	0.1	0.5	0.2	0.3	-0.1
Private consumption	3.0	3.2	2.6	2.5	1.9	2.0	1.8	1.8	0.1	0.2	0.9	0.5	0.2
Government consumption	1.2	2.1	1.9	1.6	1.6	2.0	2.0	2.1	0.1	0.7	0.7	0.4	0.2
Gross fixed capital formation	5.2	5.4	4.4	3.9	3.3	1.4	-0.4	-1.3	0.9	0.0	-0.4	-0.8	0.0
Changes in inventories ^{3), 4)}	0.4	-0.2	0.0	0.2	0.1	-0.1	-0.3	-0.4	-0.2	0.2	-0.4	0.0	-0.2
Net exports ³⁾	-0.6	-0.5	0.6	0.5	0.6	0.8	0.6	0.6	0.3	0.1	0.4	-0.2	0.2
Exports ⁵⁾	7.3	5.2	11.9	12.2	11.9	8.8	5.2	0.8	3.5	2.4	-0.2	-0.6	-0.7
<i>of which goods</i>	7.3	4.9	12.2	12.2	12.3	9.9	4.6	1.1	3.4	2.4	0.2	-1.5	-0.1
Imports ⁵⁾	9.9	7.2	10.7	11.4	10.7	7.0	3.7	-0.6	2.9	2.2	-1.3	-0.1	-1.4
<i>of which goods</i>	10.4	6.9	11.1	12.1	12.3	7.9	3.8	-1.2	3.6	2.3	-1.8	-0.2	-1.4
Real gross value added:													
Agriculture and fishing ⁶⁾	1.5	2.2	0.1	0.5	-0.6	0.3	0.0	-0.3	1.2	-0.7	-0.5	0.1	0.9
Industry	2.6	1.1	4.1	3.8	3.5	2.7	1.0	0.0	0.6	0.4	1.0	-1.1	-0.3
Services	3.1	3.2	3.5	3.3	3.3	2.9	2.5	2.4	0.6	0.8	0.7	0.5	0.4

Sources: Eurostat and ECB calculations.

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Annual rates: percentage change compared with the same period a year earlier.

2) Quarterly rates: percentage change compared with the previous quarter.

3) As a contribution to real GDP growth; in percentage points.

4) Including acquisitions less disposals of valuables.

5) Exports and imports cover goods and services and include internal cross-border trade in the euro area. Intra-euro area trade is not cancelled out in import and export figures used in national accounts. Consequently, these data are not fully comparable with balance of payments data.

6) Also includes hunting and forestry.

Table 4**Industrial production in the euro area***(annual percentage changes, unless otherwise indicated)*

	1999	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
			Sep.	Oct.	Nov.	Sep.	Oct.	Nov.	June	July	Aug.	Sep.	Oct.
			month-on-month			three-month moving averages							
Total industry excluding construction <i>by main industrial groupings:</i>	2.0	5.5	-0.7	-2.6	-4.2	-0.6	-1.5	-0.7	-1.2	-0.5	-0.6	-0.4	-1.5
Total indus. excl. construction and energy ¹⁾	1.8	5.7	-0.9	-2.8	-4.7	-1.5	-1.3	-0.8	-1.3	-0.2	-0.2	-0.2	-1.8
Intermediate goods	1.5	5.9	-2.1	-3.8	-5.8	-0.9	-1.1	-1.1	-1.1	-0.3	-0.5	-1.0	-2.1
Capital goods	2.4	8.6	-0.1	-1.8	-4.3	-1.2	-0.8	-0.8	-1.2	-0.4	-0.4	-0.1	-1.3
Consumer goods	1.7	2.3	0.1	-1.8	-3.2	-0.4	-1.3	-0.8	-0.8	-0.4	-0.4	-0.5	-1.4
Durable consumer goods	1.3	5.9	-4.3	-7.8	-7.9	-3.2	-2.7	-0.5	-2.6	-1.9	-2.2	-2.0	-4.1
Non-durable consumer goods	1.8	1.6	1.1	-0.6	-2.2	0.2	-1.1	-0.8	-0.4	-0.1	0.0	-0.2	-0.8
Energy	1.6	1.6	0.8	-0.4	1.3	0.2	-0.8	0.6	1.2	0.9	0.1	-0.2	-0.2
Manufacturing	2.0	5.9	-0.9	-2.9	-4.9	-0.6	-1.7	-1.0	-1.6	-0.6	-0.7	-0.5	-1.8

Sources: Eurostat and ECB calculations.

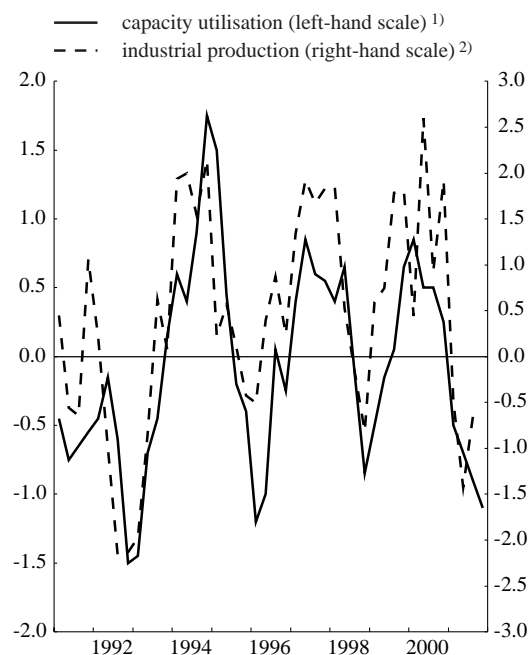
Notes: Annual percentage changes are calculated using data adjusted for variations in the number of working days; percentage changes on the previous month and three-month centred moving averages against the corresponding average three months earlier are calculated using seasonally and working day adjusted data. Data refer to the Euro 12 (including periods prior to 2001).

1) Manufacturing excluding the manufacture of coke and refined petroleum products, but including non-energy mining and quarrying activities.

to a considerable decline in quarter-on-quarter growth in this sector in the fourth quarter of 2001 compared with the third quarter. Such a decline is also suggested by survey data on capacity utilisation in manufacturing (see Chart 15). In January 2002 the utilisation rate stood at 80.8%, after 81.8% in October 2001, implying an average rate of 81.3% in the fourth quarter of 2001. This is lower than the corresponding average for the third quarter, at 82.4%. As regards the main industrial groupings, all sectors except the energy sector recorded a month-on-month fall in production in November. Measured on a three-month average basis, the decline in the three-month period to November, compared with the three-month period to August, was strongest in the durable consumer goods and intermediate goods sectors (-4.1% and -2.1% respectively), while in the non-durable consumer goods and

Chart 15
Capacity utilisation and industrial production in manufacturing in the euro area

(seasonally adjusted data; quarterly averages)



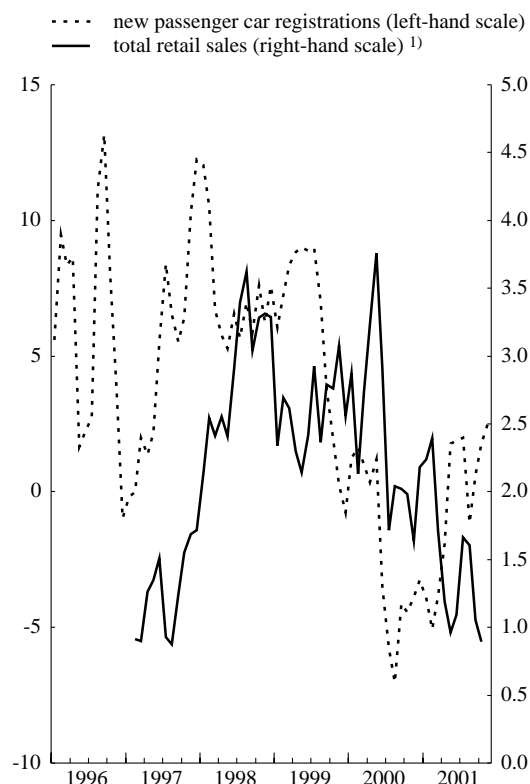
Sources: Eurostat and European Commission Business and Consumer Surveys.

1) Change compared with the previous period in percentage points.

2) Percentage change compared with the previous period.

Chart 16
New passenger car registrations and retail sales in the euro area

(annual percentage changes; three-month centred moving averages)



Sources: Eurostat and ACEA/A.A.A. (European Automobile Manufacturers' Association, Brussels).

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Calculated using seasonally adjusted data.

capital goods sectors it was more limited, at -0.8% and -1.3% respectively. The relative resilience of production in capital goods industries in recent months reflected to a large extent output developments in the manufacture of motor vehicles.

Euro area retail sales volumes increased by 1.2% month-on-month in November 2001, following a decline of 0.9% in October. Taking the data for October and November together, retail sales declined by 0.2% compared with the average level in the third quarter of 2001. As a result, quarter-on-quarter growth in retail sales in the fourth quarter of 2001 could have been lower than in the third quarter, when it was 0.3%. At the same time, passenger car registrations

saw a strong rise in quarter-on-quarter growth, from -5.3% in the third quarter to 2.1% in the fourth quarter, supporting growth in private consumption in the last quarter of 2001. In year-on-year terms, growth in retail sales volumes has been on a broadly downward trend since mid-2000, while over the same period there has been some recovery in the rates of change in car registrations (see Chart 16).

Business confidence continued to improve in January 2002

The latest results from survey data for the euro area manufacturing sector point to further improvements in business confidence at the beginning of 2002. In particular, the Purchasing Managers' Index (PMI) for the euro area manufacturing sector rose sharply by 2.1 index points to 46.2 in January 2002. This increase was the strongest in the short history of the PMI since mid-1997 and followed smaller increases of around 0.5 index point in November and December 2001. As regards the individual components,

the increase in January mainly reflects improvements in new orders and changes in output, with only small improvements in the indices for stocks of purchased products and suppliers' delivery times and a marginal decline in the employment index. Industrial confidence according to the European Commission's Business Survey also increased in January 2002, for the second consecutive month (see Table 5). The increase reflects in particular more positive assessments with regard to production expectations and stocks of finished products, while the assessment of order books remained unchanged. The recent improvements in the PMI and the industrial confidence indicator are not as yet reflected in the data on actual production, which are available only up to November 2001 (see Chart 17). Business confidence in the services sectors also improved further in January 2002, reversing to a large extent the sharp decline recorded between September and October 2001. However, these data only cover a limited period and caution is thus required when interpreting them (see Box 3 for more details on these survey data).

Table 5
Results from European Commission Business and Consumer Surveys for the euro area
(seasonally adjusted data)

	1999	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001	2002	
				Q1	Q2	Q3	Q4	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.
Economic sentiment index ¹⁾	-0.2	2.6	-2.8	-0.6	-1.4	-1.3	-1.4	-0.6	0.0	-1.0	-0.5	0.3	0.1
Consumer confidence indicator ²⁾	7	12	6	12	9	3	0	3	2	1	-1	1	0
Industrial confidence indicator ²⁾	0	12	-1	8	2	-3	-10	-3	-4	-9	-11	-10	-7
Construction confidence indicator ²⁾	14	21	15	19	17	13	11	12	15	12	10	11	8
Retail trade confidence indicator ²⁾	0	5	-1	3	-1	-1	-4	-3	-1	-4	-4	-5	-7
Services confidence indicator ²⁾	3	7	-8	3	1	-9	-27	-9	-11	-25	-29	-28	-22
Business climate indicator ³⁾	-0.1	1.3	-0.1	0.9	0.2	-0.4	-1.2	-0.4	-0.6	-1.1	-1.2	-1.2	-1.0
Capacity utilisation (%) ⁴⁾	81.9	83.9	82.8	84.0	83.3	82.4	81.3	-	-	81.8	-	-	80.8

Sources: European Commission Business and Consumer Surveys and the European Commission (DG ECFIN).

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Percentage changes compared with the previous period.

2) Percentage balances; data shown are calculated as deviations from the average over the period since April 1995 for the services confidence indicator, since July 1986 for the retail trade confidence indicator and since January 1985 for the other confidence indicators.

3) Units are defined as points of standard deviation.

4) Data are collected in January, April, July and October of each year. The quarterly figures shown are the average of two successive surveys, i.e. the surveys conducted at the beginning of the quarter in question and at the beginning of the following quarter. Annual data are derived from quarterly averages.

Box 3

Business survey data for activity in the euro area services sectors

Short-term statistics on activity in the services sectors are scarce. Some provisions for services statistics exist in various EC regulations for different statistical domains (e.g. national accounts, short-term business statistics, labour markets), but the availability of data for the euro area is very limited as yet, owing to the long implementation times and derogations granted in the regulations. Improvements are expected for the year 2003, when the results on selected services branches from the Short-Term Statistics Regulation (turnover and employment for the different market activities) become available. Moreover, the further development of a broader statistical basis for services activities is one of the priorities which was set by the Economic and Financial Committee (EFC) for EMU statistics, endorsed by the ECOFIN Council in November 2001.¹

For the euro area as a whole, the available quantitative information consists mainly of quarterly data on real gross value added and employment in services, as reported in Tables 5.1 and 5.4 of the "Euro area statistics" section of the ECB's Monthly Bulletin. Starting in this current issue of the Monthly Bulletin, the section will also report qualitative monthly survey data for the services sectors from the European Commission's Business and Consumer Surveys in Table 5.3. This box introduces the main characteristics of these data and discusses their usefulness for the analysis of current economic developments.

Survey data for the euro area services sectors are available from two sources

The results from the EC services survey are published by the European Commission (DG ECFIN) on a monthly and seasonally adjusted basis, shortly after the end of the reference month, together with the other survey results from the "Joint Harmonised EU Programme of Business and Consumer Surveys". This makes the services survey data a very timely indicator of activity in these sectors. At this juncture, the survey covers only selected market-related services activities, such as machinery and equipment rental, computer and IT-related activities, research and development and other business activities (e.g. consultancy, architectural activities), as well as some community services. It is planned that the scope of the survey will be extended to cover transportation, financial intermediation and activities relating to the hotel and restaurant sector.

The EC services survey consists of five questions, enquiring about i) the assessment of the business climate, ii) the evolution of demand in recent months, iii) the evolution of demand expected in the months ahead, iv) the evolution of employment in recent months, and v) the evolution of employment expected in the months ahead. The composite services confidence indicator is the average of the percentage balances taken from the first three questions. Results for the euro area date from April 1995.

In addition to the EC services survey, there are also survey data available from the Eurozone Services Purchasing Managers' Index published by Reuters/NTC. The PMI survey covers a significant share of euro area countries and refers to all private sector services activities. The euro area series are available from July 1998. By contrast with the EC services survey, the results of the PMI services survey do not include a composite indicator compiled on the basis of the responses to the individual questions of the survey (as is the case, for instance, of the PMI manufacturing survey).

Services survey indicators are closely aligned with output growth in services

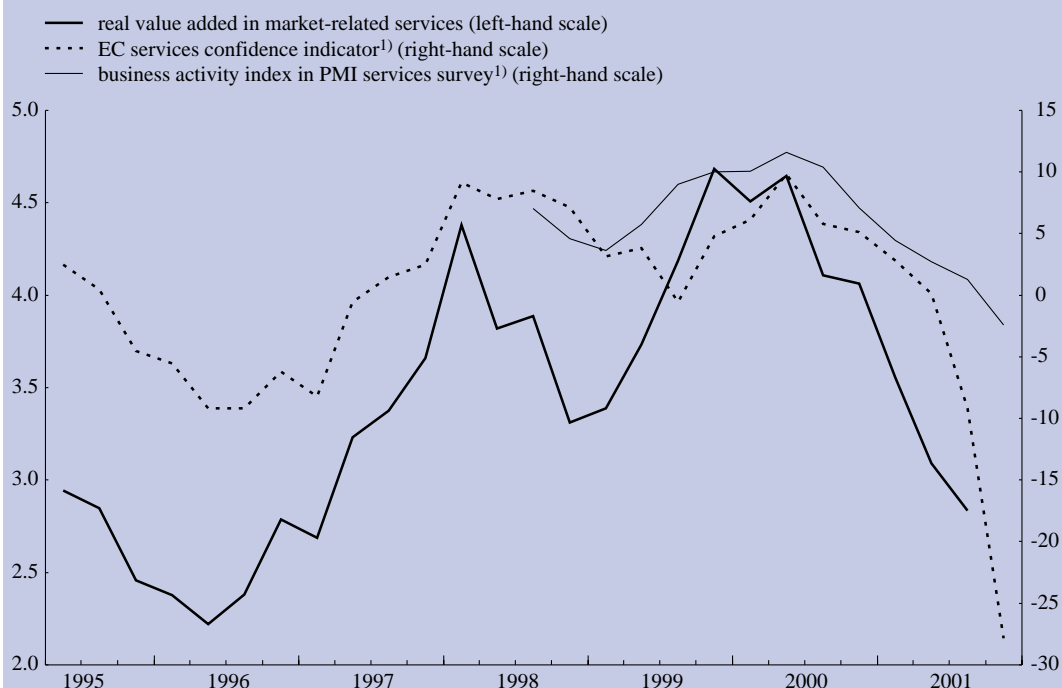
In order to assess the information content of the services surveys for actual activity, the data can be compared with those from national accounts on the real gross value added in market-related services, i.e. total services excluding public administration, health and education. Overall, there is a discernible, simultaneous movement

1 Information requirements in EMU, Fourth progress report on the implementation of the Monetary Committee's report, Economic and Financial Committee, 26 October 2001.

of both the EC services confidence indicator and the business activity index in the PMI services survey with the year-on-year growth rate in output of market services (see the chart below). However, the strength of the simultaneous movement between the services confidence indicators and output growth in market-related services varies over sub-periods. In the sub-period from mid-1998 to date, for instance, the correlation is rather low in the case of the EC services survey, reflecting divergent developments in mid-1999. One possible reason for such divergences might be the broader coverage of services activities in value added results.

Output growth and survey data in the euro area services sectors

(annual percentage changes, percentage balances and index points)



Sources: Eurostat, European Commission Business and Consumer Surveys, Reuters and ECB calculations.

Note: All data are seasonally adjusted.

1) Quarterly averages. EC services confidence indicator is mean adjusted over the period from April 1995. Activity index in the PMI services survey is deviation from the value of 50; positive deviations indicate an expansion of economic activity.

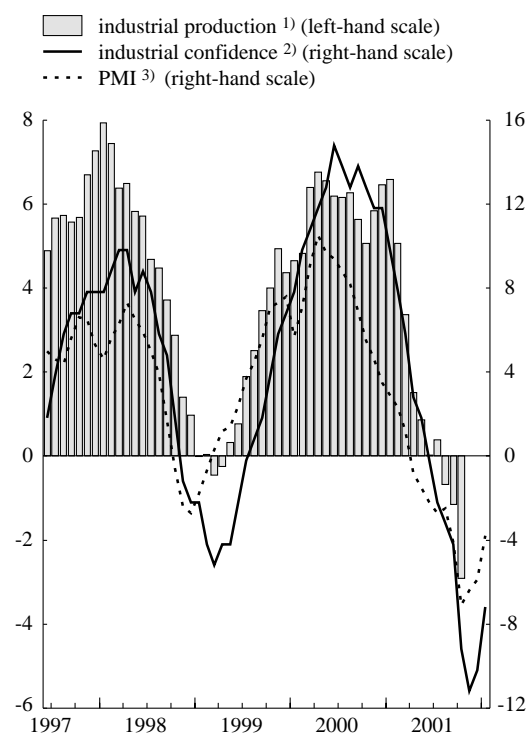
Over the relatively short period for which services survey data are available, their correlation with year-on-year output growth in market-related services is somewhat lower than that between the corresponding manufacturing survey data and year-on-year output growth in industry excluding construction. Overall, while services survey data contain useful information with regard to activity in the market-related services sectors, in particular with regard to the general scarcity of data relating to these sectors, some caution is required in view of the short period for which the services survey data are available. A firm assessment of the indicator properties of services survey data would ideally be based on a longer period.

Consumer confidence declined in January 2002, following an increase in December 2001. While expectations with regard to the general economic situation improved further in January, this was more than offset by a deterioration in households' expectations with regard to their own financial situation and their ability to save. The assessment of the level of unemployment expected in the coming 12 months was unchanged compared with December. Taken together, the results suggest that the recent stabilisation in consumer confidence after a protracted period of decline is still fragile and that a

sustained and clear improvement in consumer confidence is yet to occur.

Overall, while data on actual activity indicate that output growth continued to be subdued in the fourth quarter of 2001, the latest survey data suggest that confidence started to improve at the turn of the year. The improvements in business confidence indicators reflect to a large extent more positive expectations with regard to the economic outlook, suggesting that the high uncertainty in the aftermath of the 11 September terrorist attacks in the United States has started to decline. Several factors support expectations of a gradual improvement in the economic situation over the course of this year. These factors include the decreasing – though still significant – uncertainty with regard to developments in the world economy, sound fundamentals in the euro area, favourable financing conditions and the beneficial effects on real disposable income from the past and expected future declines in inflation.

Chart 17
Industrial production, industrial confidence and the PMI for the euro area
(monthly data)



Sources: Eurostat, European Commission Business and Consumer Surveys, Reuters and ECB calculations.

Note: When available, data refer to the Euro 12 (including periods prior to 2001).

- 1) Manufacturing; annual percentage changes in three-month moving averages; working day adjusted data.
- 2) Percentage balances; deviations from the average since January 1985.
- 3) Purchasing Managers' Index; deviations from the value of 50; positive deviations indicate an expansion of economic activity.

Unemployment rate remained at 8.5% in December 2001

The standardised rate of unemployment stood at 8.5% in December 2001, unchanged since September (see Table 6). At the same time, the number of unemployed continued to rise. The increase in December, by 27,000, was below the average of 40,000 in the three previous months and considerably less than the increase in November (revised downwards to 50,500). However, the smaller increase in December may reflect specific activities at the end of the year, including the recruitment of temporary staff as a result of the cash changeover, rather than an improvement in labour market conditions. Owing to a decline in unemployment in the first half of the year, the unemployment rate for 2001 as a whole was 8.5%, 0.4 percentage point lower than in 2000. The total number of unemployed in the euro area in December 2001 was slightly higher than in December 2000 (see Chart 18).

Table 6**Unemployment in the euro area***(as a percentage of the labour force; seasonally adjusted)*

	1999	2000	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
				Q1	Q2	Q3	Q4	July	Aug.	Sep.	Oct.	Nov.	Dec.
Total	10.0	8.9	8.5	8.5	8.4	8.4	8.5	8.4	8.4	8.5	8.5	8.5	8.5
Under 25 years ¹⁾	19.5	17.5	16.7	16.7	16.7	16.7	16.9	16.7	16.7	16.7	16.8	16.9	16.9
25 years and over	8.6	7.8	7.4	7.4	7.3	7.3	7.4	7.3	7.3	7.3	7.4	7.4	7.4

Source: Eurostat.

Notes: According to ILO recommendations. Data refer to the Euro 12 (including periods prior to 2001).

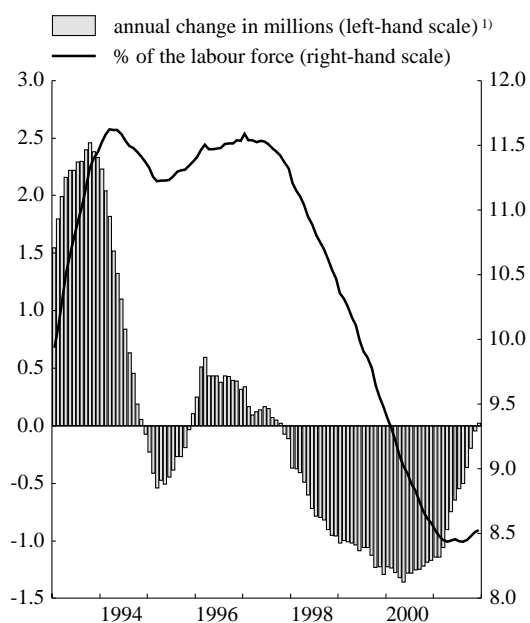
1) In 2001 this category represented 23.6% of total unemployment.

The unemployment rates for those under 25 and for those 25 and over remained unchanged at 16.9% and 7.4% respectively in December 2001. The increase in the number of unemployed, however, was larger for those under 25 (17,000). Compared with the previous year, the unemployment rates of both age groups declined in 2001, by 0.8 percentage point to 16.7% for those under 25 and by 0.4 percentage point to 7.4% for those 25 and over.

Employment growth remained weak in the third quarter of 2001

As reported in the last issue of the Monthly Bulletin, national accounts employment data show that employment growth remained weak, but unchanged, in the third quarter of 2001, at 0.2% quarter-on-quarter (see Table 7). The annual rate of growth of employment, however, continued to decline, to stand at 1.3% in the third quarter.

While overall employment growth was unchanged in the third quarter, compared with the second quarter, the underlying developments varied across sectors. In line with weak production data and employment expectations in manufacturing, the growth rate of employment in industry (excluding construction) continued to decline in the third quarter, to -0.2% quarter-on-quarter, while employment growth increased in construction, counterbalancing the decline in other industrial sectors. Consistent with a lagged effect of relatively resilient private consumption in the first half of 2001, quarter-on-quarter employment growth in services remained unchanged at 0.4% in the third quarter. The annual growth rate of employment in services, however, continued to decline, falling below 2.0% for the first time since the second quarter of 1998. Developments in the quarterly employment growth rate within the services sector show some differences among sub-sectors in the third quarter. Employment growth increased in the sub-sector that includes trade and transport, while it declined in both the finance

Chart 18**Unemployment in the euro area***(monthly data)*

Source: Eurostat.

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Annual changes are not seasonally adjusted.

Table 7
Employment growth in the euro area

(annual percentage changes, unless otherwise indicated; seasonally adjusted)

	1998	1999	2000	2000	2000	2001	2001	2001	2000	2000	2001	2001	2001
				Q3	Q4	Q1	Q2	Q3	Q3	Q4	Q1	Q2	Q3
	Quarterly rates ¹⁾												
Whole economy	1.6	1.6	2.1	2.1	2.2	1.9	1.6	1.3	0.5	0.5	0.4	0.2	0.2
<i>of which:</i>													
Agriculture and fishing ²⁾	-1.4	-2.9	-1.5	-1.8	-0.1	-0.3	-0.6	-1.2	0.0	0.3	-0.2	-0.7	-0.7
Industry	1.0	0.3	1.0	1.1	1.3	1.3	0.8	0.4	0.3	0.4	0.2	-0.1	-0.1
Excluding construction	1.1	0.0	0.8	1.1	1.1	1.2	0.8	0.2	0.4	0.2	0.3	-0.1	-0.2
Construction	0.3	1.0	1.6	0.9	1.7	1.4	1.1	1.1	0.3	1.0	0.0	-0.1	0.3
Services	2.2	2.6	2.8	2.8	2.7	2.4	2.0	1.8	0.6	0.6	0.4	0.4	0.4
Trade and transport ³⁾	1.7	2.3	2.8	2.8	2.6	1.9	1.6	1.4	0.7	0.5	0.2	0.2	0.5
Finance and business ⁴⁾	5.0	5.5	5.9	5.9	5.5	4.8	3.9	3.3	1.1	1.1	0.8	0.8	0.4
Public administration ⁵⁾	1.4	1.5	1.3	1.3	1.5	1.7	1.6	1.6	0.2	0.5	0.4	0.4	0.2

Sources: Eurostat and ECB calculations.

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Quarterly rates: percentage change compared with the previous quarter.

2) Also includes hunting and forestry.

3) Also includes repairs, communication, hotels and restaurants.

4) Also includes real estate and renting services.

5) Also includes education, health and other services.

and business and the public administration sub-sectors.

Employment expectations from the European Commission Business Survey for manufacturing continued to deteriorate in January, indicating that the decline in employment growth in industry (excluding construction) is likely to continue in early 2002. These developments are supported by the employment indicator of the Purchasing Managers' Survey of manufacturing. Employment expectations from the European Commission Business Survey for construction also remained weak. Compared with manufacturing and construction, the employment outlook for services appears to be more positive. Based

on national data from the European Commission Business Surveys, employment expectations in retail trade are likely to have remained stable in January 2002. Both employment expectations in services from the European Commission Business Survey and the employment indicator of the Purchasing Managers' Survey of services improved in January. Overall, employment expectations and the impact of the slowdown in economic activity continue to imply weakness in the euro area labour market in the early months of this year. This is also suggested by a decline in job vacancies, as discussed in Box 4 on the information content of job vacancies in the euro area.

Box 4

The information content of job vacancies in the euro area

The term “job vacancies” covers newly created jobs, existing positions currently vacant, and positions about to fall vacant in the near future for which the employer has taken recent, active steps to find a suitable candidate. Information on vacancies may act as a leading indicator for certain labour market variables, in particular employment and unemployment, and may thus be considered to be an important variable to monitor.

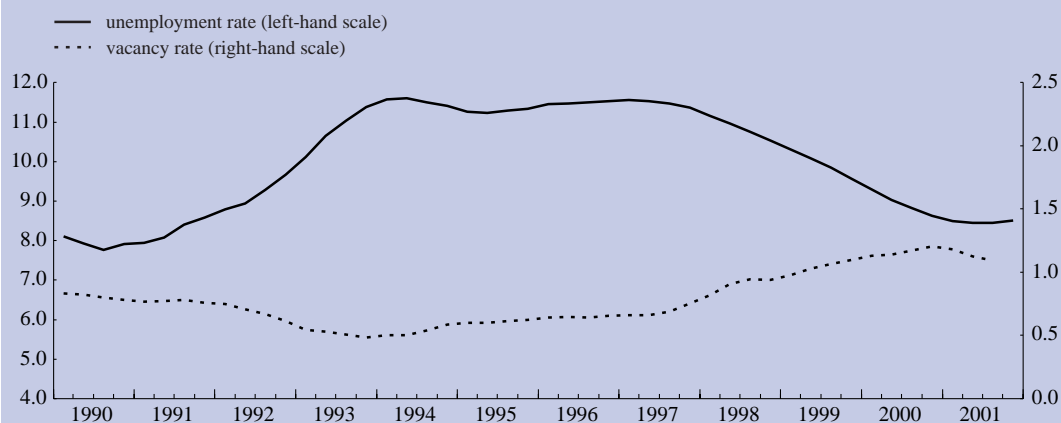
Unfortunately, no statistics for job vacancies in the euro area as a whole are currently available, although some discussion of this issue has been initiated recently by the European Commission (Eurostat). Some euro area countries do publish a measure of vacancies, but a number of caveats need to be borne in mind when looking at this information. First, and more generally, available vacancies data probably represent only a fraction of the actual vacancies on the labour market because the information is mostly obtained from public employment offices to which not all vacancies are reported. Moreover, this fraction can change over time as a result of institutional and other changes. Second, a euro area estimate drawn up on the basis of available data covers only a limited number of countries (around 60% of the euro area labour force¹). Third, the definition of job vacancies varies from one country to the next: some countries do not include temporary or public sector jobs, for example. Nevertheless, the available information may be of interest to the extent that it reflects the general trend in vacancy developments and can be examined in conjunction with other labour market indicators for the euro area.

Relationship of the job vacancy rate to the unemployment rate, employment and real GDP

The chart below shows an estimate of the job vacancy rate for the euro area (on the basis of available data) viewed alongside the unemployment rate (both plotted as a percentage of the total labour force). It shows that, in line with cyclical economic developments, vacancies and unemployment have broadly tended to move in opposite directions: economic upturns are generally accompanied by an increase in the vacancy rate (as firms create new jobs) and a fall in the unemployment rate, whereas economic downturns result in fewer new jobs being created and a corresponding rise in the rate of unemployment. It also shows that the vacancy rate estimate is, as one would expect, a leading indicator of the unemployment rate, thereby providing some support for the usefulness of monitoring job vacancy developments.

Euro area unemployment and job vacancy rates

(as a percentage of the labour force; seasonally adjusted)



Sources: National data and ECB calculations.

¹ The countries covered are Belgium, Germany, Spain, the Netherlands, Austria, Portugal and Finland.

The results of a cross-correlation analysis performed on the cyclical components² of the vacancy rate, the unemployment rate, employment and real GDP provide further evidence of the expected relationship between the vacancy rate and both economic activity and labour market variables during the period of analysis (1970 to 2001). First, there was a strong positive correlation between the vacancy rate and employment and real GDP, combined with a strong negative correlation with the unemployment rate. Second, increases in the vacancy rate were found to be coincident with GDP growth and proved to be leading indicators of employment growth and falls in the rate of unemployment by one to two quarters. Despite this, any inferences regarding future developments still need to be made with caution owing to the lack of harmonisation of the available data and the low coverage.

Recent developments

Recent vacancy developments have been in line with employment and unemployment developments, pointing to a deterioration in the labour market. Indeed, the estimated vacancy rate appears to have declined throughout 2001, while the unemployment rate rose in the last quarter of the year, following a slowdown in the pace of decline in the first quarter and a levelling-off in the following two quarters. If the vacancy rate is assumed to have leading indicator properties, then its recent sustained decline could point to lower employment growth and a further increase in the unemployment rate in early 2002.

Overall, an indicator of job vacancies can provide additional useful information complementing that of other indicators used to monitor labour market developments. However, current estimates for the euro area have to be interpreted with caution. Improvements in terms of both coverage and reliability, resulting in a harmonised vacancy indicator for the euro area, would be desirable.

² Obtained using the Hodrick-Prescott filter.

4 Exchange rate and balance of payments developments

Euro declined slightly in January and early February 2002

In January and early February 2002 foreign exchange markets were characterised by an appreciation of the US dollar against all major currencies. The strength of the dollar seems to have been driven mainly by positive market assessments of the prospects for economic growth in the United States compared with the rest of the world. Against this background, the euro depreciated against the US dollar and the Swiss franc, but remained broadly unchanged vis-à-vis the pound sterling and the Japanese yen compared with the end of last year. In effective terms, the euro declined only slightly in January and early February.

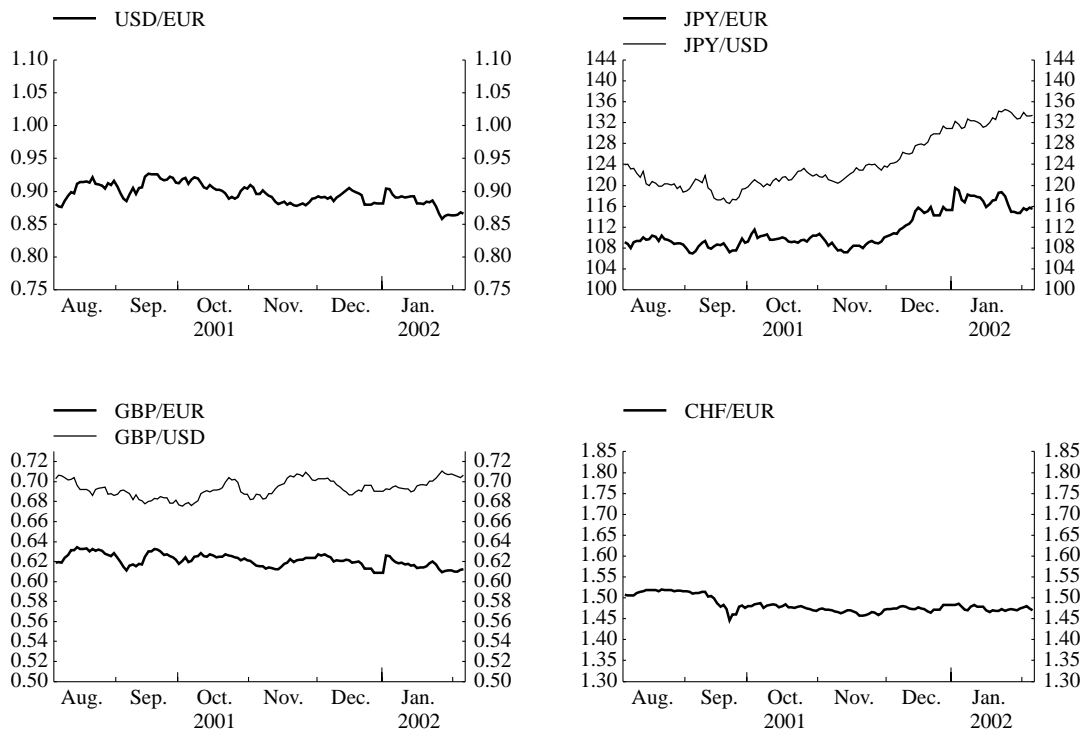
In the first half of January the euro was relatively stable against the US dollar, trading

around an average of USD 0.89. In the second half of the month, however, the euro declined against the US currency at a time when the dollar was generally strong (see Chart 19) as a result of a more optimistic assessment of the US economic outlook by market participants. This reassessment of market expectations seems to have stemmed from the combined effect of the testimony of the Federal Reserve Chairman before the Senate Budget Committee on 24 January and data releases in the United States surprisingly showing that the economy recorded a positive, yet small rate of growth in the last quarter of 2001. The decision by the Federal Open Market Committee (FOMC) on 30 January to leave its target for the US federal funds rate unchanged at 1.75% was widely expected and did not have any significant impact on foreign exchange markets. On 6 February, the euro was quoted

Chart 19

Patterns in exchange rates

(daily data)



Source: ECB.

at USD 0.87, about 1½% below its level at the end of December and 3.3% below its average value in 2001.

In January and early February the yen fluctuated against the euro around an average of JPY 117, while it continued to decline against the US dollar. Deteriorating economic conditions in Japan, coupled with firming prospects for a recovery in the United States, seem to have been behind the recent weakness of the Japanese currency, which reached its lowest level against the US currency since October 1998. On 6 February of this year, the euro was quoted at JPY 115.55, almost at the same level as at end-December 2001 and 6.3% above its 2001 average, while the US dollar stood at JPY 133.37, or almost 2% higher than at the end of the previous year.

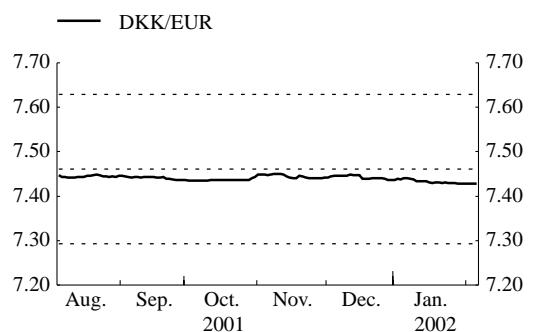
In January and early February the euro remained broadly stable against the pound

sterling, which, for its part, depreciated against the US dollar at a time when the US currency was generally strong. On 10 January the Bank of England's Monetary Policy Committee decided to maintain its key policy

Chart 20

Patterns of exchange rates within ERM II

(daily data)



Source: ECB.

Note: The horizontal lines indicate the central parity (DKK 7.46) and the fluctuation bands ($\pm 2.25\%$ for DKK).

rate at 4%. On 6 February, the euro was quoted against the pound sterling at GBP 0.61, roughly ½% higher than its end-December level and 1.6% below its 2001 average.

As far as other European currencies are concerned, the Danish krone continued to fluctuate in a narrow range at slightly below its central parity in ERM II (see Chart 20). Since the end of December the euro has depreciated by almost 1% against the Swedish krona and against the Swiss franc. On 6 February, it traded against the Swiss currency at CHF 1.47, 2.7% below its average level in 2001.

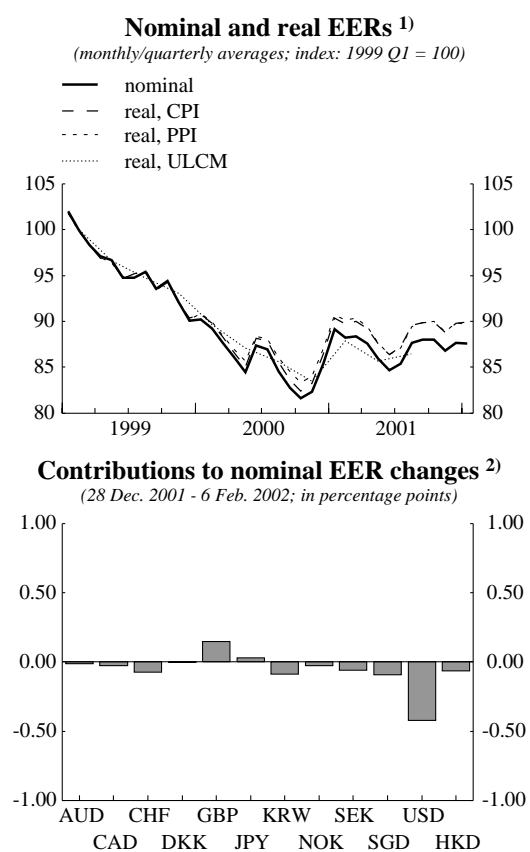
The nominal effective exchange rate of the euro, as measured against the currencies of the 12 most important trading partners of the euro area, declined slightly in January, mainly due to its depreciation against the US dollar. On 6 February the nominal effective exchange rate was less than 1% below its average level in 2001. In real terms, movements in effective exchange rates deflated by CPI, PPI and ULCM continued to follow the trend of the nominal index fairly closely (see Chart 21).

Current account in surplus in November 2001

During the latter part of last year, developments in the current account continued to be driven by the rising goods surplus. Although exports of goods declined in line with weak foreign demand, imports decreased more rapidly as a result of the slowdown in domestic demand and the sharp fall in oil prices. The latest data show that the current account registered a surplus of €2.8 billion in November 2001, compared with a deficit of €6.5 billion in November 2000 (see Table 8). The move into surplus was due mainly to a shift from a goods deficit of €0.5 billion to a surplus of €9.3 billion, combined with a shift in the income account from a deficit of €0.8 billion to a surplus of €0.4 billion. These developments were partially offset by an increase in the services deficit from €0.1 billion to €1.9 billion, while the deficit for current transfers remained virtually unchanged as compared with November 2000.

In the first 11 months of 2001, the cumulative deficit on the *current account* declined in comparison with the same period in 2000 (from €61.9 billion to €12.2 billion). This largely reflected an increase of €53.4 billion in the cumulative goods surplus, along with a shift in the services item from a deficit of €2.5 billion to a surplus of €2.6 billion, which was partially offset by an increase of €10.1 billion in the income deficit. At the same time, the deficit for current transfers decreased slightly.

Chart 21
Effective euro exchange rates



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro. The latest observations for monthly data are January 2002. In the case of the ULCM-based real EER, the latest observation is for Q3 2001 and is partly based on estimates.

2) Changes are calculated using trade weights against 12 major partner currencies.

Seasonally adjusted trade data show that the increase in the goods surplus in late 2001 was primarily due to imports decreasing at a stronger pace than exports as subdued economic activity in the euro area and lower oil prices offset weak foreign demand (see Chart 22). Exports of services continued the decline which began in September, perhaps as a result of the drop in international travel

associated with the terrorist attacks on 11 September, while imports picked up slightly in November 2001 compared with the previous month (see Chart 23).

The rapid slowdown in import-intensive categories of euro area expenditure – such as equipment investment and stock building – seems to be a key factor behind the decline

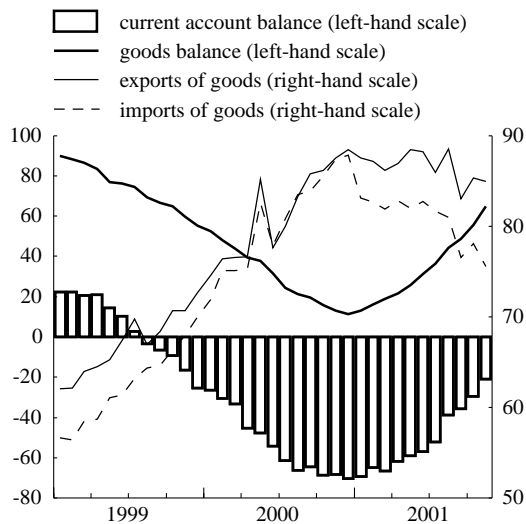
Table 8
Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

	2000 Jan. - Nov.	2000 Nov.	2001 Jan. - Nov.	2001 Sep.	2001 Oct.	2001 Nov.
Current account balance	-61.9	-6.5	-12.2	0.0	0.1	2.8
Credits	1458.1	145.7	1563.7	132.8	146.6	138.1
Debits	1520.0	152.2	1575.9	132.8	146.5	135.3
Goods balance	10.3	-0.5	63.7	5.4	9.6	9.3
Exports	890.6	93.0	955.1	80.3	95.1	90.2
Imports	880.3	93.5	891.3	74.9	85.5	80.9
Services balance	-2.5	-0.1	2.6	0.1	0.2	-1.9
Exports	267.4	25.5	285.3	25.8	25.9	22.3
Imports	270.0	25.6	282.7	25.7	25.7	24.2
Income balance	-26.4	-0.8	-36.5	-1.3	-4.3	0.4
Current transfers balance	-43.3	-5.0	-42.0	-4.2	-5.4	-4.9
Capital account balance	10.0	1.5	8.2	0.0	0.3	0.4
Financial account balance	77.9	3.9	-78.5	-33.0	-14.6	-15.4
Direct investment	12.4	1.5	-94.5	-15.7	5.3	7.8
Abroad	-362.5	-35.6	-199.6	-19.8	-2.0	-13.8
Equity capital and reinvested earnings	-275.2	-25.7	-122.7	-5.0	-4.6	-6.5
Other capital, mostly inter-company loans	-87.3	-9.9	-76.9	-14.9	2.6	-7.3
In the euro area	374.9	37.1	105.1	4.1	7.3	21.6
Equity capital and reinvested earnings	299.3	24.5	78.4	6.3	3.0	11.7
Other capital, mostly inter-company loans	75.6	12.7	26.7	-2.2	4.3	9.9
Portfolio investment	-112.4	3.3	52.6	44.6	0.3	11.5
Equities	-236.3	-9.2	134.7	31.3	19.8	9.9
Assets	-254.7	-16.6	-89.1	15.4	-5.8	-12.4
Liabilities	18.4	7.4	223.7	15.9	25.6	22.3
Debt instruments	123.9	12.6	-82.0	13.3	-19.5	1.6
Assets	-111.9	-7.2	-152.1	12.5	-30.6	-25.6
Liabilities	235.8	19.7	70.1	0.8	11.1	27.1
Memo item:						
Combined net direct and portfolio investment	-100.0	4.9	-41.9	28.9	5.6	19.3
Financial derivatives	2.6	-2.4	-21.6	-1.1	-3.8	-4.0
Other investment	159.8	-6.3	-27.0	-59.1	-13.8	-30.7
Reserve assets	15.5	7.8	12.0	-1.6	-2.6	0.0
Errors and omissions	-26.0	1.1	82.4	33.0	14.2	12.1

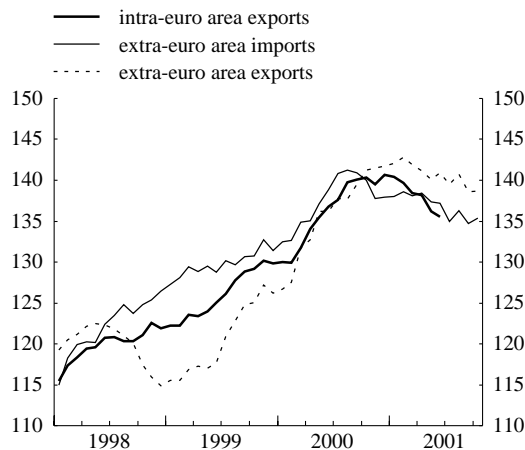
Source: ECB.

Notes: Figures may not add up due to rounding. For the financial account, a positive sign indicates an inflow, a negative sign an outflow; for reserve assets, a negative sign indicates an increase, a positive sign a decrease. A detailed set of tables on Euro 12 balance of payments data can be found on the ECB's website.

Chart 22**The euro area current account balance, the goods balance and exports and imports of goods***(EUR billions; seasonally adjusted)*

Source: ECB.

Note: Data refer to the Euro 12. Balances are cumulated over 12 months; exports and imports of goods are monthly values.

Chart 24**Intra-euro area and extra-euro area trade volumes¹⁾***(1995 = 100; seasonally adjusted; three-month moving average)*

Sources: Eurostat and ECB calculations based on Eurostat data.

1) All data refer to the Euro 12 (estimated using Euro 11 unit value indices); latest extra-euro area observations are for October 2001; latest intra-euro area observations are for June 2001.

in both extra-euro area import volumes and intra-euro area import volumes (see Chart 24). This is consistent with the steep fall in extra-euro area import volumes of

Chart 23**Euro area exports and imports of services***(EUR billions; seasonally adjusted)*

Source: ECB.

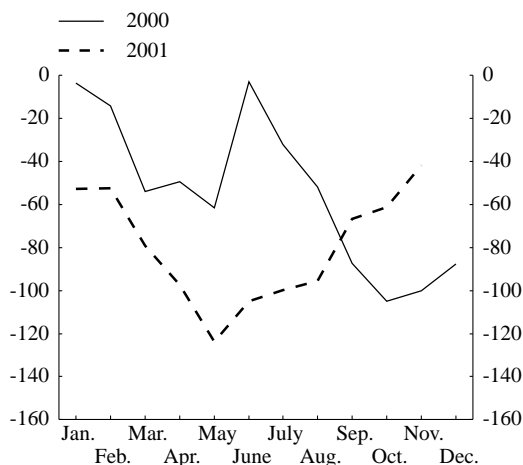
capital goods, while import volumes of consumption and intermediate goods fell less rapidly (see Table 9 in the “Euro area statistics” section). At the same time, the decline in extra-euro area export volumes was largely driven by the fall in export volumes of intermediate goods, which account for almost half of euro area exports of goods. A geographical breakdown of the euro area’s exports shows a steep decline in export volumes to the United States since the beginning of 2001, while the decrease in export volumes to Asia is somewhat less pronounced. By contrast, export volumes to the United Kingdom did not decline but remained fairly flat over the first three quarters of 2001.

Combined direct and portfolio investment continued to register net inflows in November 2001

Developments in the financial account in November 2001 were characterised by net inflows of €19.3 billion in combined direct

Chart 25
Euro area combined net direct and portfolio investment flows in 2000 and 2001

(EUR billions; cumulated data)



Source: ECB.

Note: A positive (negative) number indicates a net inflow (outflow).

and portfolio investment (see Table 8). This was due to net inflows in both direct investment (€7.8 billion) and portfolio investment (€11.5 billion).

Net inflows in direct investment were accounted for by net inflows in both equity capital and reinvested earnings (€5.2 billion), as well as “other capital, mostly inter-company loans” (€2.6 billion).

Within portfolio investment, investment in equity in November 2001 continued the pattern already witnessed since May 2001 by registering net inflows of €9.9 billion. Debt instruments also registered net inflows, albeit of a smaller magnitude (€1.6 billion), which in turn reflected net inflows of €17.6 billion

in bonds and notes, and net outflows of €16.0 billion in money market instruments. Euro area residents invested a net amount of €11.2 billion in foreign money market instruments – the highest net outflow recorded so far under this item of the euro area b.o.p. – while non-residents were net sellers of €4.9 billion of money market instruments issued by euro area residents.

The developments in the financial account in November 2001 were most likely influenced by a significant deterioration in the economic conditions in the United States, as evidenced by US data releases in that month. This might have influenced the portfolio decisions of non-euro area residents, who purchased equities (€22.3 billion) and bonds and notes (€32.0 billion), issued by euro area residents. Despite the global economic slowdown, the net purchase by euro area residents of foreign equities (€12.4 billion) coincides with an environment of stock exchange indices picking up again in the major economies after the fall in September.

In the first 11 months of 2001, combined net outflows in direct and portfolio investment (€41.9 billion) were less than half as high as in the same period in 2000 (€100.0 billion; see Chart 25). This development reflects primarily a switch in equity portfolio investment (from net outflows of €236.3 billion in the period from January to November 2000 to net inflows of €134.7 billion in the corresponding period in 2001), which was only partially offset by a shift in both direct investment and investment in debt instruments from net inflows in 2000 to net outflows in 2001.

The stock market and monetary policy

This article discusses the role of the stock market in the economy and in the monetary policy strategy of the ECB. Traditionally, stock markets play a less prominent role in the euro area economy than in the United States, for instance. However, there are some indications that they have become more important in the euro area over recent years.

In an efficient market, stock prices are determined by the discounted stream of expected dividends to be distributed to stockholders in the future. In this respect, stock prices are inherently forward-looking and quickly incorporate any new information that leads market participants to revise their expectations about stock price fundamentals. However, experience also suggests that investor sentiment may sometimes lead to stock price “bubbles”, a situation when actual stock prices temporarily by far exceed fundamental values. Nevertheless, identifying such situations is inherently very difficult.

Stock prices may play a role in economic developments through cost-of-capital, wealth, confidence and balance sheet effects. Moreover, they may provide information about market participants’ expectations for the future course of the economy. Thus, as they provide indications of aggregate demand and supply developments, stock prices need to be monitored by central banks in order to identify risks to price stability. Finally, while stock prices are not a suitable goal for monetary policy, a credible monetary policy oriented towards safeguarding price stability can make an important contribution to the efficient functioning of the stock market.

I Introduction

The introduction of the euro in January 1999 acted as a catalyst for the increasing integration of euro area stock markets. At the same time, large swings in stock prices worldwide enhanced the interest of the general public and policy-makers in stock market developments. In the light of this, this article discusses the role of the stock market in the economy and in the monetary policy strategy of the ECB.

The article starts by briefly reviewing the role of the stock market in the financial system,

presenting some evidence for the euro area. Next, theoretical issues regarding the valuation of stocks in an efficient market and possible reasons for temporary market inefficiency are discussed, with a special focus on stock market bubbles. After surveying the role of the stock market in the transmission mechanism of monetary policy, the article looks at why and how the stock market is taken into account in the monetary policy strategy of the ECB.

2 The role of the stock market in the euro area financial system

The financial system performs the essential function of channelling household savings to the corporate sector and allocating investment funds among firms. This allocation can be effected either through direct contact between borrowers and lenders on financial markets, via the issuance of securities (such as stocks or bonds), or indirectly through the use of financial intermediaries (such as banks, investment and pension funds, or insurance companies). The efficiency of the

allocation of both financial means and implied risks determines the ability of households to shift consumption over time and firms’ capacity to build up and renew the capital stock. Hence, long-term growth and economic welfare also depend critically on the efficiency of the financial system.

The general importance of the stock market within the financial system largely rests on how widely the corporate sector, households

and institutional investors typically use stocks as a financing and investment instrument. This generally follows from the motives and incentives of potential stock issuers and holders, which in turn are determined within a complex network involving market forces, economic policy, the legal and regulatory framework of the financial system as well as slowly changing traditions and conventions.¹

Within this context, firms issue stocks and sell them either to the public (shares quoted and traded on stock exchanges) or in private placements (unquoted shares) to raise external funds to finance their activities.² In addition, they may issue or repurchase own stocks in order to adjust their capital structure. As equity competes with other sources of corporate finance, the relative cost of equity capital – i.e. the difference between the return on equity capital demanded by the market and the interest rate on loans or bonds, net of taxes, issuing costs and all other forms of costs – is one important determinant of the supply of stocks.

From a demand perspective, stocks usually pay a periodic stream of income to their holders in the form of dividends. Apart from dividends, stock returns also comprise capital gains or losses stemming from stock price changes. Furthermore, owning equities usually implies the right to participate in a firm's decision-making process. Sometimes this becomes the dominant motive for holding stocks, for example when a corporation seeks strategic participation in other firms. Private households, by contrast, use stocks mainly as a savings vehicle. They can hold stocks either directly or indirectly by purchasing claims on the assets of institutional investors that invest in stocks. The scale of financial wealth allocated by households to the stock market will depend on their motives for saving, the perceived risk and return characteristics of equity portfolios relative to other assets and on their attitude toward risk.

From a monetary policy perspective, it is vital to note that the overall importance of the stock market within the financial system, and

for the economy as a whole, is determined by long-term and cyclical factors affecting the supply of and demand for stocks. For example, differences in the taxation of equity capital and debt as well as the degree of government involvement in the pension system – a main motive for households' long-term saving is provision for old age – typically determine trends in stock market developments. By contrast, short-term factors such as swings in stock prices and interest rates – which may change the relative cost of equity capital and investors' expectations of stock returns – cause short-term cyclical variations in the importance of the stock market for issuers and holders. A central bank needs to monitor both sets of factors carefully, as they jointly determine how strongly corporate investment and private consumption typically respond to changes in stock prices. This link between stock prices and economic activity is part of the monetary transmission mechanism and will be discussed in more detail in Section 4. The remainder of this section briefly describes recent trends in the importance of the stock market within the euro area financial system.

As the euro area financial system is still dominated by bank intermediation, stock markets play a far less prominent role in the euro area than in the United States, for instance, which traditionally relies more heavily on market-based financing. However, several developments may indicate that stock markets have assumed a somewhat more prominent role in the euro area over recent years. The overall importance of the stock market is quite often gauged by the ratio between the market value of domestic shares traded on a country's stock exchange (market capitalisation) and nominal gross domestic product (GDP). The chart shows the development of the capitalisation/GDP ratio for the euro area and the United States from 1990 to 2000. On the one hand, the

¹ See "The euro equity markets", ECB, August 2001.

² On the different forms of equity capital, see Box 1 in the article "Characteristics of corporate finance in the euro area" in the February 2001 issue of the Monthly Bulletin.

figures clearly show that the US stock market was about two to three times larger (in relative terms) than the euro area stock market. On the other hand, the euro area stock market grew at a more rapid pace than that in the United States. The ratio increased about fourfold from 1990 to 2000 in the euro area, compared with around threefold in the United States. However, much of this surge in market capitalisation was driven by stock price developments. Measured by broad market price indices, euro area stock prices increased by 320% between the end of 1989 and the end of 2000, while US stock prices increased by 240% in the same period.³

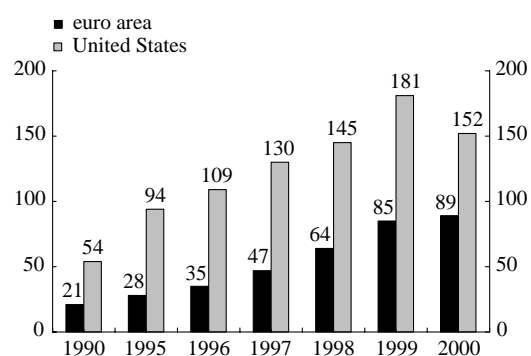
Looking at a different indicator over a more recent period, the number of domestic companies listed on euro area stock exchanges increased from 3,900 at the end of 1998 to 4,900 at the end of 2000.⁴ Moreover, the amount of new capital raised on euro area stock markets increased from €130 billion in 1998 to €320 billion in 2000. While initial public offerings accounted for only one-third of the gross issuance of shares in the euro area in 1998, their share increased to 50% in 2000.⁵

The financial balance sheets and flows of non-financial sectors⁶ in the euro area broadly confirm the stock market's gradually increasing role in the euro area financial system. In terms of amounts outstanding, the

percentage of quoted shares in non-financial corporations' main liabilities (quoted shares, domestic loans plus securities other than shares) increased from 42% in the fourth quarter of 1997 to 51% in the same quarter of 2000. The percentage of quoted shares in total financial assets held by all non-financial sectors increased from 14% in 1997 to 21% in 2000. The increased direct exposure of these sectors to equity markets is supplemented by larger indirect holdings of stocks via investment in mutual fund shares and insurance products. The share of investment in non-monetary mutual funds in the total assets of the non-financial sector increased from 8% in 1997 to 12% in 2000. Moreover, mutual funds substantially stepped up the proportion of equities in their total assets.⁷ Although the non-financial sectors' investment in insurance products remained basically constant at around 21% of total assets between 1997 and 2000, it seems that insurance companies and pension funds have also increased the relative size of their equity holdings.

However, much of the increase in amounts outstanding of quoted shares reflects revaluation effects caused by sharply rising stock prices.⁸ By using financial flows at transaction values, it is possible to check for such revaluation effects. According to such data, the total external financing needs of non-financial corporations increased by 27% between the fourth quarter of 1997 and the fourth quarter of 2000, while financing via the issuance of quoted shares only increased by 17% in the same three-year period. Hence, at transaction values, equity financing of firms

Chart
Market capitalisation of domestic shares as a percentage of GDP



Source: FIBV and ECB calculations.

3 Measured by Datastream total market stock price indices for the euro area and the United States.

4 See "The euro equity markets", ECB, August 2001, p. 11.

5 Ibid, p. 17.

6 Non-financial sectors comprise general government, non-financial corporations and households, including non-profit institutions serving households. All figures are calculated from data published in the "Euro area statistics" section of the Monthly Bulletin.

7 According to statistics of the European Federation of Investment Funds and Companies (FEFSI), investment funds in the euro area increased the share of equities in their total assets from 24% in 1998 to 40% in 2000. See "The euro equity markets", ECB, August 2001, p. 29.

8 See the article "Financing and financial investment of the non-financial sectors in the euro area" in the May 2001 issue of the Monthly Bulletin.

actually became less important, relative to the other sources of external financing, between 1997 and 2000. As far as asset holdings are concerned, the non-financial sectors' investment in financial assets at transaction values increased by 21% between

the fourth quarter of 1997 and the fourth quarter of 2000. Direct holdings of quoted shares increased by as much as 38% in that period, confirming the increased importance of stocks as an investment vehicle for the non-financial sectors.

3 What determines stock prices?

For the stock market to fulfil its economic functions sufficiently well, equity prices must not deviate systematically from their "fundamental" value. This value, generally speaking, depends on the future stream of income that corporations are expected to generate. If equity prices fully reflect all the available information that is relevant for valuing stocks, we say that the efficiency condition is met. If it is not met, stock prices might send the wrong signals to market participants about the true profitability and risks of certain companies, or even of the stock market as a whole. This, in turn, would lead to an inefficient allocation of capital in the economy, as some relatively unprofitable firms would tie up scarce financial resources that could have been invested in alternative projects with higher productivity or lower risk.

The following contains a discussion of the standard economic approach to valuing stocks – the dividend discount model – and possible sources of market inefficiencies, with a special focus on stock market bubbles.

Valuing stocks by the discounted present value of future dividends

In general, financial assets are valued according to the discounted present value of the future cash flow that investors expect to derive from holding the asset. The discount rates applied to future cash flows are the expected rates of return that investors demand for holding the asset in their portfolios. Applied to the valuation of shares, the discounted cash flow method corresponds to the dividend discount model.

If stock prices are efficient, they will equal the discounted present value of (rationally) expected future dividends (see annex).

The discount rates can be broken down into a measure of "opportunity costs", which are the returns expected on investing in assets other than stocks, and a corresponding equity-specific risk premium. If investors did not care about differences in risk between the various assets, all assets would be expected, in equilibrium, to earn the same rate of return. In this case, the discount rate for stocks would equal this uniform rate of interest. Risk-averse investors, however, demand higher rates of return for holding riskier assets. The difference between the expected rates of return on a riskier and a safer asset thus constitutes a risk premium, and it reflects both investors' risk preferences and the perceived risk properties of asset returns. As stocks tend to be riskier than, for example, government bonds or bank deposits, investors demand a correspondingly higher expected rate of return for holding stocks. In fact, the equity (risk) premium, as empirically approximated by the long-term average of the margins by which observed returns on stocks exceeded those on either long-term bonds or short-term bank deposits, is generally found to be positive.

The main conclusion drawn from the dividend discount model is that stock prices are inherently forward-looking or, to put it differently, the stock market "trades the future". Moreover, changes in stock prices are mainly driven by "news", i.e. by incoming information that leads market participants to revise their expectations about stock fundamentals. These properties can be particularly useful for monetary policy, as stock prices can be used as indicators of

market participants' expectations regarding future economic activity (which is linked to future corporate earnings and dividends). This issue will be addressed further in Section 4.

Possible sources of stock market 'inefficiency'

The fact that stock price fundamentals are not directly observable implies that any evaluation of whether stocks are efficiently priced requires a judgement as to whether investors' expectations about future dividends, interest rates and stock market risks are justifiable and correctly reflected in stock prices. What arguments may be put forward to arrive at such a conclusion? In general, such an assessment has to be based on both empirical and theoretical considerations.

In theory, the hypothesis of market efficiency rests on the assumption that investors have an incentive to use all available information when deciding at which price to sell or buy stocks. Even if investors do not all use the available information in a rational way, an effective arbitrage mechanism assures that rational investors push securities prices sufficiently close to their fundamental values. Arbitrage works perfectly when, for example, rational investors can sell (or sell short) an "overpriced" security in one market and simultaneously buy the same asset or a security with the same pay-off structure as a hedge in another market where it is correctly priced or underpriced. The effect of arbitrageurs' trades causes the prices on the two different markets to balance out quickly at the fundamentally justified level. This mechanism is effective in bringing about efficient prices even if investors do not all behave rationally, as long as stocks have close substitutes.

In real-world stock markets, however, no such perfect substitutes for stocks are readily available. As a consequence, fundamental arbitrage becomes risky, as it involves the use of imperfect substitutes. This implies the

risk that relative prices of the assets perceived as over and undervalued may widen even further within the investment horizon, due to the arrival of good or bad news concerning one of the securities (idiosyncratic risk) or due to the trading activities of uninformed investors (investors who trade on irrelevant information, or "noise traders").

Risky arbitrage meets limited risk-bearing capacities of arbitrageurs that may arise from borrowing constraints and short investment horizons. This limits their aggregate ability to bring stock prices into line with fundamentals. For example, a short-term orientation may result from delegated portfolio management and the corresponding agency problems. Mutual fund managers, for instance, may resist taking an arbitrage position if they do not expect asset prices to revert to fundamental values within the performance evaluation period, because the fund managers' pay usually depends on short-term performance measures. Moreover, they may fear that temporary losses from holding arbitrage positions may lead retail investors to sell their shares in the fund, which may force the fund to liquidate arbitrage positions before prices revert to efficient levels.

However, limited arbitrage is not sufficient to create market inefficiencies. It has to be compounded by some form of irrational behaviour on the part of at least some investors (investor sentiment). Theories of "investor sentiment" – based on evidence from experimental studies and psychological theories about belief formation – try to explain the motives behind investors behaving in a way that drives prices away from fundamentals. Most of them can be subsumed under "overreaction" and "positive feedback trading". Overreaction describes the view that, after a series of good earnings news, investors become overly optimistic that future earnings announcements will also be good, driving stock prices up to unduly high levels, or that, after a series of bad news, prices will be pushed down to unduly low levels. Positive feedback investors buy stocks after prices rise and sell after prices fall. Such

behaviour may result from, *inter alia*, extrapolative price expectations or technical trading rules.

Imperfections in real-world capital markets, combined with the potential threat of irrationality on the part of some investors, imply that the efficiency of stock prices remains an empirical question. However, empirical evidence with regard to the efficiency of stock prices is quite mixed, depending mainly on the theoretical framework chosen and the empirical methodology applied. As the fundamental value of stocks is not directly observable, it is impossible to decide with certainty whether stocks are efficiently priced at a specific point in time or not. Nevertheless, experience suggests that investor sentiment may sometimes lead to stock price “bubbles”, a situation when actual prices temporarily by far exceed fundamental values.

Can stock price bubbles be detected?

As mentioned above, a bubble could emerge from investors overreacting to a string of positive earnings news, leading to overly optimistic earnings and dividend expectations (“intrinsic bubbles”). In addition, bubbles can result from positive feedback trading, *i.e.* from investors buying stocks with the expectation that observed price increases will continue, with the result that stock prices may in fact increase further on account of higher demand, thus giving rise to further expectations of future price rises, and so forth. In this case, self-fulfilling expectations are the main driving force behind a bubble that feeds itself once triggered by some extraneous event (“extrinsic bubbles”).

Identifying a bubble empirically, however, is very difficult, in particular from an *ex ante* point of view. For instance, large price movements themselves do not necessarily indicate a bubble, as efficiently priced stocks also have an inherent tendency to react strongly to news about fundamentals.

A commonly used tool to assess the level of stock prices is to put stock valuation ratios, such as the dividend yield and price-earnings ratio, in a historical context. This is based on the idea that these valuation ratios should, over time, eventually revert to some long-run equilibrium level. According to the dividend discount model (in the form of equations 6 and 7 in the annex), this long-run equilibrium level is determined by the long-run growth potential of dividends or corporate earnings and the long-run levels of real interest rates and the equity risk premium.

Statistically, historical comparisons may be made in two ways. A simple method consists of comparing current valuation ratios with historical averages. Alternatively, a long-run equilibrium relationship between stock market valuation ratios and, for example, real interest rates and potential output growth (as a rough measure of long-term dividend growth) can be estimated, allowing the long-run equilibrium to vary over time. For both methods, a stock market over or undervaluation might be indicated when current valuation ratios are considerably out of line with the estimated long-run equilibrium level.

However, neither of the two approaches can provide sufficient proof of a stock market bubble. For example, extraordinarily high price-earnings ratios may be justified by correct expectations of extraordinary growth of corporate earnings over an extended future period of time. In this case, the initially high price-earnings ratio would be expected to decline towards its long-run average over time, driven mainly by the materialisation of earnings expectations, but not by sharp drops in stock prices caused by the bursting of a bubble. For an example of these difficulties, see Box I on the recent case of sharp price increases and subsequent declines in the market for high-technology stocks.

Hence, historical comparisons cannot solve the problem of diagnosing bubbles with an

Box I

Recent stock price developments in the high-technology sector

During the decade between the end of 1989 and 1999, equity prices in the United States, as measured by the broad Standard & Poor's 500 index, experienced extraordinarily large increases in both nominal (+315%) and real terms (+275%), compared with developments over the past 130 years. A number of possible reasons have been put forward to try to explain these spectacular price rises. Technological advances led some observers to claim that stock market developments reflected the entry of the US economy into a "new era", in which productivity growth had reached a permanently higher level. High-technology stocks, such as those with links to internet business, benefited most from this "new era" thinking. Others claimed that the equity premium had shrunk to very low levels as a result of financial innovation and the proliferation of institutionalised savings (both allowing households to better diversify equity risk) and demographic factors.¹

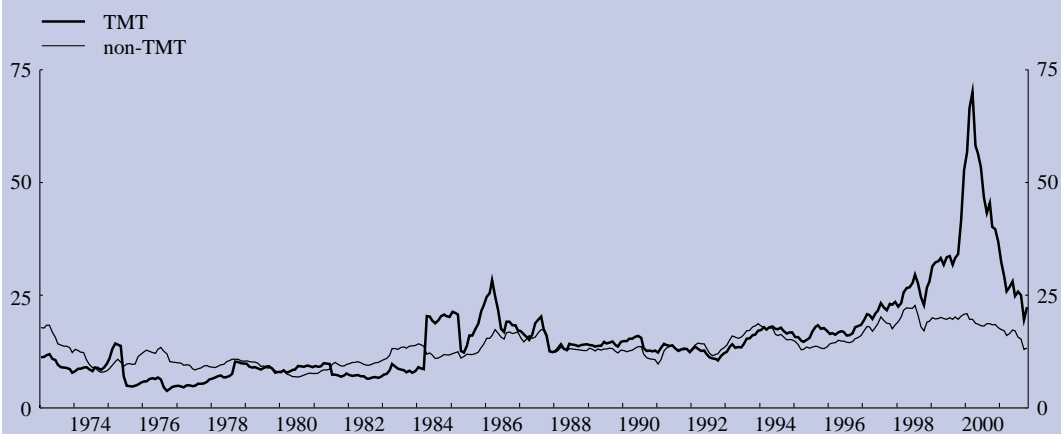
One could argue that particularly stock prices in the high-technology sector were strongly inflated by market euphoria about the earnings outlook for such stocks over the more distant future. As more and more investors jumped on the bandwagon, stock prices surged to unprecedented high levels. This may have resulted from the combination of an initial overreaction to intrinsic factors and reinforcing factors stemming from the influence of positive feedback trading.

While the acceleration of stock prices was most pronounced in the United States, it also spilled over to euro area stock markets, although somewhat later. Price-earnings ratios in the euro area's booming high-technology sector increased sharply, in particular from November 1999 onwards. In March 2000, the monthly average price-earnings ratio of stocks in the technology, media and telecommunications sectors (TMT) peaked at 70, compared with an average of 13 between January 1973 and December 1998 (according to Datastream data). While prices of TMT stocks surged to such unprecedented levels, the price-earnings ratio of other stocks increased to a maximum of only 21 in January 2000, which compares with an average value of 13 – the same as in the TMT sector – over the period 1973 to 1998. This suggests that if stocks were indeed overvalued during the recent boom period, the phenomenon was mainly confined to high-technology stocks.

From April 2000 onwards, the prices of TMT stocks dropped sharply, reflecting investors' increasing concern as to whether these stocks could live up to the high earnings expectations. Between March 2000 and October

Price-earnings ratios of technology, media and telecommunications (TMT) stocks and non-TMT stocks in the euro area

(monthly averages)



Source: Datastream.

¹ See International Monetary Fund, *World Economic Outlook*, May 2000, p. 87.

2001, stock prices in the TMT sector declined by about 70%, while non-TMT stocks fell by only 15% over the same period. As a result, the price-earnings ratio of TMT stocks had declined to 22 by October 2001, which was still above the historical average. By contrast, the price-earnings ratio of non-TMT stocks had fallen to 15, very close to its historical average.

Accordingly, it was not materialised earnings expectations that brought price-earnings ratios down closer to historical standards, but rather a correction of prices, which is more in line with a bubble interpretation of recent stock price developments in the high-technology sector. However, it is not the disappointment of investors' earnings expectations itself that supports the overvaluation hypothesis, but more the overall dynamics of recent developments in the high-technology sector and several indications of extraordinary market euphoria and excessive earnings optimism in the late 1990s.

adequate degree of certainty. They can only provide some weak indications of periodic market excesses pushing valuation ratios far beyond thresholds set by historical patterns. In general, there seems to be no alternative

to a more eclectic approach using all available information and tools – from econometric models to anecdotal evidence – to attempt to infer whether a bubble exists or not.

4 Stock market fluctuations and economic activity

The process through which monetary policy may affect the economy in general, and the price level in particular, is known as the monetary transmission mechanism. It is a complex and long chain of causes and effects which describes the linkages between monetary policy, financial asset prices and the supply and demand conditions on markets for goods and services. The stock market is one element that may play a role in this transmission mechanism. Before discussing how stock price developments are related to the real economy, we briefly discuss whether and how monetary policy may affect stock prices.

Stock price reactions to monetary policy

The trend in real stock prices (i.e. stock prices deflated by a price index for goods and services) reflects the long-term growth rate of real corporate earnings. This, in turn, is linked to the long-run potential rate of real growth of the economy. Long-term real stock prices are also determined by the trend in real interest rates – which, in turn, is also related to potential economic growth – plus

a long-term equity risk premium linked to investors' average risk preferences and the available opportunities to diversify stock market risks.

Monetary policy can, in the long-term, only control the trend in the general price level of goods and services, which, in turn, have an impact on nominal profits and therefore *nominal* stock prices as well. By contrast, the only long-term impact of monetary policy on *real* stock prices is linked to the fact that a stability-oriented monetary policy reduces inflation uncertainty, and thus also uncertainty about future nominal asset prices. This reduces corresponding risk premia in, for example, bond and stock prices, which helps to make the allocation of production factors more efficient and therefore raises the economy's potential rate of growth. Thus, a change in the monetary policy regime towards an environment of price stability can also be expected to have a positive impact on the long-term trend level of real stock prices. Apart from this, however, monetary policy can have no other persistent effects on real dividend growth, real interest rates, the equity premium, and thus real stock prices.

This notwithstanding, monetary policy may, in the short-term, have some impact on nominal as well as real stock prices through two different but inter-related channels. First, it may affect market participants' expectations about short-term economic growth (and thus short-term corporate earnings and dividends). Second, it may affect short-term discount rates via changes in short-term real interest rates in the money market. In practice, investors, and thus stock prices, often anticipate the effects of monetary policy decisions. The immediate reaction of the stock market to an anticipated monetary policy decision is typically rather small. By contrast, unexpected monetary policy measures may trigger some stock price changes after the announcement of the decision. As the effect on dividend expectations and the effect on discount rates tend to work in the same direction, stock prices usually fall in response to an (unanticipated) interest rate increase, and rise in reaction to an (unexpected) interest rate reduction.

However, there might be deviations from this "normal" reaction pattern. For example, if the central bank is perceived to be better able to assess future economic developments than the public, an unexpected interest rate reduction may be interpreted by the market as signalling forthcoming "bad news" about economic growth. As a result, stock prices may on occasion also react negatively to an unexpected reduction in the official interest rate. It is therefore very difficult to predict the direction of stock price reactions to changes in official interest rates.

Stock prices and economic activity

The stock market may play a role in economic developments through four main channels: cost of capital, wealth, confidence and balance sheet effects.⁹ The first channel operates through the impact that stock prices may have on firms' cost of equity capital, and thus on their investment spending. An increase in stock prices may signal good opportunities

for investment, as this investment can be financed at lower cost by new issues of stock. In fact, when stock prices rise, the market value of the firm relative to the replacement cost of its stock of capital (the so-called "Tobin's q") tends to increase. It follows that it would be profitable for the firm to expand its capital stock, leading to increased investment spending, aggregate demand and output. As the capital stock adjusts, gradually, to its higher long-term value, q will revert to a normal level.

Several factors may weaken this channel: uncertainty, adjustment costs and the irreversible nature of investment decisions. Uncertainty regarding the future profitability of an investment and the existence of sunk costs imply, first, that waiting may be valuable, which affects the timing of investment decisions, and, second, that there may be threshold effects, which mean that rates of return may have to move substantially for investment to be undertaken. However, there is also a cost to waiting. The longer one waits, the more likely it is that very profitable investment opportunities will be realised by other investors, so that the net effect of the value of waiting on investment is unclear.

The second channel operates through the impact of wealth on consumption. A permanent increase in stock prices implies an increase in financial wealth. Assuming that economic agents try to smooth their consumption over time, the increase in financial wealth leads to higher current and future consumption, stimulating aggregate demand and output. It should be noted that, for most households in the euro area, changes in stock prices seem to have modest direct wealth effects, since direct and indirect holdings of quoted shares are still relatively small. Thus there are reasons to believe that this transmission channel is currently not very important in the euro area, although its role may have increased somewhat over recent

⁹ See the article "Monetary policy transmission in the euro area" in the July 2000 issue of the *Monthly Bulletin*.

years, in line with the developments described in Section 2.

As a third potential channel, stock prices may affect investment and consumption via confidence effects. For example, a decline in stock prices may signal increased downward risks to future economic activity and employment, which may hurt consumer confidence and actual consumption spending – even of households that do not own stocks. Likewise, a general fall in stock prices may lead even firms that have not issued quoted shares to revise their profit expectations and investment plans downwards.

The fourth channel is the possibility that stock prices affect consumption and investment through a balance sheet effect. Because of

asymmetric information in credit markets, the ability of firms and households to borrow depends on the value of the collateral they can offer. As the value of the collateral increases, the ability to borrow and invest increases. This process, known as the financial accelerator, suggests that initial financial conditions (i.e. the risk attached to and the value of collateral) are essential to determining the magnitude and duration of the effects of equity price changes on investment and consumption.

Leading indicator properties of stock prices

In order to understand the leading indicator properties of stock prices for future

Box 2

What can stock prices tell us about future economic growth?

Stock prices reflect – among other factors – market participants' expectations of future corporate earnings and dividends. Hence, they should have some predictive content for earnings and dividends if these expectations tend to materialise. This implies that stock prices should also be a reasonable predictor of future economic growth in general, as economic activity and corporate earnings are closely related. This box contains empirical evidence that largely confirms the leading indicator properties of stock prices for real economic activity in the euro area.

First, the chart below depicts annual percentage changes in quarterly stock prices and real GDP of the euro area. In this case, the leading indicator property of stock prices is suggested by the fact that most of the turning points in the time series for the annual changes in stock prices appear earlier than the turning points in year-on-year GDP growth. However, there are exceptions, for example in 1999. Second, a simple correlation analysis of lead and lag patterns between quarterly percentage changes in the two variables reveals that the highest correlation is obtained for stock price changes and real GDP growth two quarters ahead. Third, simple econometric analysis suggests that, in the euro area, a one-off 10% increase in stock prices predicts a 0.3% increase in real GDP over the long term. With regard to the time profile of this estimated reaction pattern, GDP starts to pick up by around 0.18% two quarters later, and the total impact will be reached after around one and a half years.

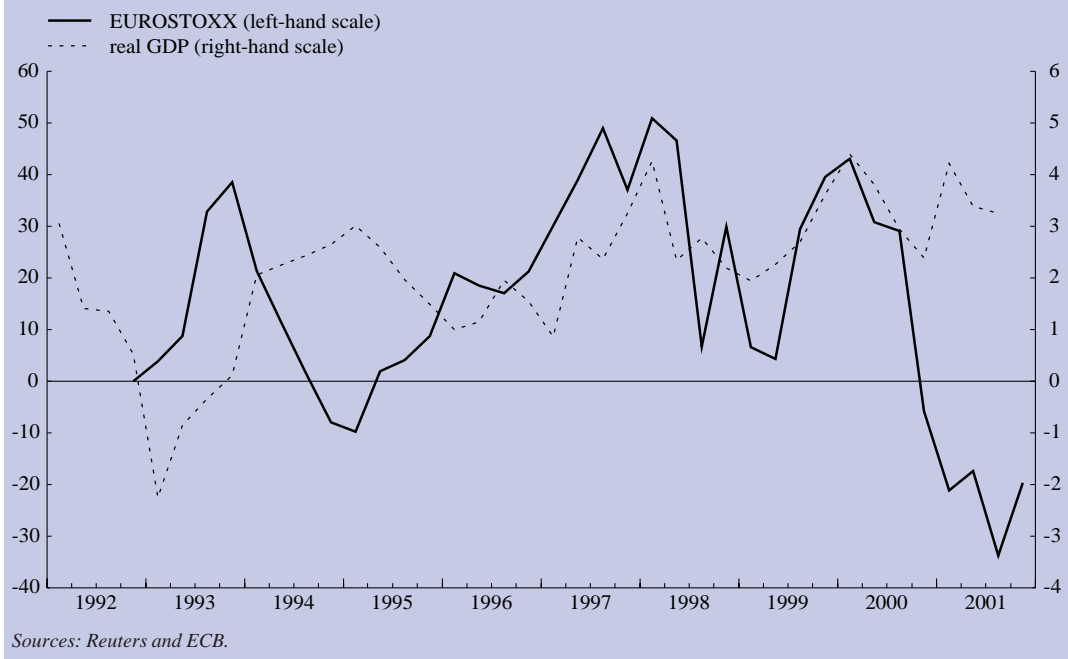
It should be borne in mind that the methodologies applied neglect all other possible factors that may influence either stock prices or economic activity. In fact, the inclusion of other variables in the analysis may change the quantitative results reported. Hence, the investigation should be viewed as illustrative only of the leading indicator property of stock prices for real GDP growth (see the article entitled "The information content of composite indicators of the euro area business cycle" in the November 2001 issue of the Monthly Bulletin).

It must be emphasised that the leading indicator property does not imply that stock prices are causing real GDP growth in an economic sense. Stock prices can have forecasting power for GDP growth as long as correctly anticipated earnings of the corresponding corporations move in line with general economic activity. Empirically,

however, it is extremely difficult to disentangle this more passive role of the stock market from its active part played in the transmission mechanism.

Stock prices and real GDP for the euro area

(year-on-year percentage change; quarterly data)



economic developments, it is useful to refer again to the dividend discount model. For example, the model suggests that stock prices rise if investors expect higher future dividends, and fall if they expect lower dividends. It follows that changes in stock prices may reflect a reassessment by market participants of the short-term prospects for economic growth, as corporate earnings, and thus dividends, are closely related to economic activity. If market participants' expectations tend, on average, to be confirmed by later economic developments, stock prices can be used as a predictor, or leading indicator, of real economic growth (see Box 2).

However, given that stock prices may also rise if investors apply a lower discount rate – which can result from lower expected real interest rates, an increased appetite for risk or lower perceived equity risks – it is not easy at any given moment in time to identify which factor is driving the change in stock prices.

In general, it is extremely difficult, if not impossible, to distinguish between movements in stock prices justified by economic developments that are expected to occur in the future and movements based on other factors or unrealistic expectations about the future growth of dividends, and thus output. For example, expected developments in technology may or may not materialise. If they do not, expectations will be disappointed and there will be a correction in stock prices that might be observationally equivalent to the “bursting” of a bubble where stock prices had been out of line with fundamentals.

The conclusion is that, even though stock prices quite often have useful leading indicator properties for economic developments, their information content has to be carefully assessed in conjunction with other economic data and analyses.

5 The role of the stock market for monetary policy

Recent worldwide stock market volatility has enhanced interest in the possible role of asset prices in monetary policy. This section explains how the stock market is taken into account in the monetary policy strategy of the ECB and also discusses why monetary policy should not regard stock prices as its objective.

The role of the stock market in the monetary policy strategy of the ECB

Maintaining price stability is the primary objective of the ECB. Price stability has been defined by the Governing Council of the ECB as a year-on-year increase of below 2% in the Harmonised Index of Consumer Prices (HICP) for the euro area. In the framework of its strategy, the ECB takes stock price movements into account because these are relevant for assessing economic conditions, and thus the risks to price stability.¹⁰

As mentioned in Section 4, stock prices can be seen as leading indicators of economic activity, either because they reflect market expectations of economic developments (passive role) or because of their impact on real economic developments (active role). Insofar as they provide information about the evolution of aggregate demand and supply in the euro area, stock prices may help in identifying shocks hitting the economy and the source and the degree of persistence of price pressures in the euro area. However, stock prices are very volatile and may at times deviate from levels that reflect fundamental or “equilibrium” values. Therefore their information content is typically more uncertain and difficult to assess than that of other economic indicators.

Stock prices are one of the many economic and financial variables which are monitored under the second pillar of the ECB’s monetary policy strategy. In addition, there are synergies, on occasion, between an analysis of stock market developments and the

monetary analysis under the first pillar of the ECB’s monetary policy strategy. For example, a combination of high money and credit growth and quickly rising stock prices might occasionally signal that stock price developments might not be sustainable. In this sense, monetary aggregates may be useful as indicators of stock market “bubbles”. Conversely, stock price movements may help in identifying special factors that temporarily distort the information content of monetary aggregates.

Stock prices are not a suitable goal for monetary policy

The above notwithstanding, it should be stressed that stock prices are not a suitable goal for monetary policy.

First, monetary policy cannot control stock prices over the long term. In fact, whereas the trend in the prices of goods and services is ultimately related to an excessive supply of money, the trend in real stock prices is mainly driven by underlying real factors – e.g. technological developments and preferences – which cannot be controlled by monetary policy. Second, while monetary policy might have some short-term impact on stock prices, it is impossible for monetary policy to control stock prices in any precise manner over the short term, not least because it is very difficult to predict how stock prices react to changes in official interest rates. Third, a more fundamental argument is that it is very unlikely that monetary authorities have better information on equilibrium stock prices than the market as a whole. Finally, if monetary policy were focused on stock market developments, the public’s perception as to the commitment of the central bank to its primary objective of

¹⁰ For further reference on the monetary policy objective and strategy of the ECB, see the articles “The stability-oriented monetary policy strategy of the Eurosystem” in the January 1999 issue and “The two pillars of the ECB’s monetary policy strategy” in the November 2000 issue of the Monthly Bulletin.

maintaining price stability could become blurred.

Even a monetary policy that tried to stabilise stock prices only occasionally could lead to moral hazard problems if the markets expected this to become a more systematic policy response. Were the central bank expected to react in an accommodating way to a perceived emergence of financial fragility, it would effectively provide the financial markets with insurance against large losses. This could actually reinforce risk-taking by the private sector, supporting stock price

bubbles and thereby also raising the probability of subsequent large corrections in asset prices.

Obviously, the moral hazard issue does not imply that monetary policy should not be concerned with the impact of sharp movements in stock prices. However, it should be clear that stock prices are not an objective, but merely one among many indicators which should be assessed and taken into account in the conduct of monetary policy.

6 Concluding remarks

Despite its recent growth, the stock market in the euro area plays a less important role in economic developments than in the United States. However, this does not imply that euro area stock markets are not relevant to monetary policy. Notably, stock prices may provide complementary information about market expectations for the future course of the economy. Moreover, stock price movements seem to have a moderate, though discernible, impact on aggregate demand and supply in the euro area economy. In addition, stock market developments are interrelated with developments in money and credit.

The information that stock market developments may provide is taken into account in the assessments under both the first and second pillars of the ECB's monetary policy strategy. However, monetary policy does not react to stock prices as such, but only to the extent that they may add incremental information signalling risks to price stability in the euro area. At the same time, a credible monetary policy, oriented towards safeguarding price stability, and thus reducing uncertainty about nominal prices in the economy, contributes to an efficient functioning of the stock market.

Annex

Stock valuation according to the dividend discount model

According to the dividend discount model, stocks can be valued by the discounted present value of the future cash flow generated from holding them. The cash flow consists of dividends and capital gains. This method can be applied to any investment horizon. The following paragraphs show, step by step, how the model can be derived.

Let $E_t h_{t+1}$ be the expected and required return on holding a stock over the coming period (with h denoting the rate of return and E_t

indicating rational expectations based on information available in period t). The length of the period corresponds to the frequency at which dividends are paid out. The holding period return consists of two components: a dividend (D_{t+1}) plus a capital gain or loss ($S_{t+1} - S_t$), both as a percentage of the stock price S at the end of period t :

$$E_t h_{t+1} = E_t D_{t+1} / S_t + (E_t S_{t+1} - S_t) / S_t \quad (1)$$

Solving for the current stock price S_t yields:

$$S_t = (E_t D_{t+1} + E_t S_{t+1}) / (1 + E_t h_{t+1}) = \delta_{t+1} (E_t D_{t+1} + E_t S_{t+1}), \quad (2)$$

with $\delta_{t+1} = 1/(1 + E_t h_{t+1})$ as the discount factor ($E_t h_{t+1}$ being the discount rate). Equation 2 states that the current stock price equals the present value of the next period's expected dividend and stock price, discounted by the expected rate of return. The stock price expected for period $t+1$ can be obtained by taking equation 2 one period forward, as $E_t S_{t+1} = \delta_{t+2}(E_t D_{t+2} + E_t S_{t+2})$. Substitution into equation 2 gives:

$$S_t = \delta_{t+1} E_t D_{t+1} + \delta_{t+1} \delta_{t+2} (E_t D_{t+2} + E_t S_{t+2}). \quad (3)$$

By recursive substitution and assuming, for ease of exposition, that investors discount at a constant rate h , the standard formula for the dividend discount model is obtained:

$$S_t = \sum_{i=1}^{\infty} \delta^i E_t D_{t+i} + \lim_{T \rightarrow \infty} \delta^T E_t S_{t+T}, \quad (4)$$

$$S_t = \sum_{i=1}^{\infty} \delta^i E_t D_{t+i},$$

$$\text{if } \lim_{T \rightarrow \infty} \delta^T E_t S_{t+T} = 0.$$

The current stock price is uniquely determined if the second component – the discounted present value of the stock price in the infinite future – becomes zero. This condition is equivalent to ruling out stock price bubbles. It is met if stock prices are not expected to grow faster than the discount rate, which is guaranteed as long as investors discount at expected holding period returns. The model predicts that stock prices will rise if investors expect higher future dividends and/or if they apply a lower discount rate, and that they will fall in the opposite case. To facilitate analysis further, assume that dividends are expected to grow at a constant rate g which is smaller than the discount rate h . In this case, the solution of equation 4 approaches the limit:

$$S_t = \sum_{i=1}^{\infty} \frac{D_t (1+g)^i}{(1+h)^i} = D_t \frac{1+g}{h-g}. \quad (5)$$

This form of the dividend discount model is known as Gordon's growth model. By rearranging equation 5 and assuming that a constant fraction ϕ of earnings G is paid out as dividends (i.e. $D_t = \phi G_t$), the model can be

solved for the dividend yield (D_t/S_t) and the price earnings ratio (S_t/G_t), two widely used stock market valuation indicators:

$$\frac{D_t}{S_t} = \frac{h-g}{1+g}, \quad \frac{S_t}{G_t} = \frac{\phi(1+g)}{h-g}. \quad (6)$$

The discount rates are usually determined by modelling the behaviour of risk-averse investors under uncertainty about stock returns. The simplest way of dealing with uncertainty in the dividend discount model is by breaking down the discount rates into an interest rate r , measuring the opportunity costs, and an equity risk premium ρ . However, this breakdown is a mere identity and thus not operational. To make it operational, a model of the risk premium is needed. The capital asset pricing model (CAPM) is one possibility. Assume that the range of assets comprises a one-period risk-free asset (that yields the interest rate r_t , which is usually approximated by a short-term interest rate) and the market portfolio of stocks. In this case, the expected one-period return on the stock portfolio and the corresponding risk premium can be specified as:

$$E_t h_{t+1} = r_t + \rho_{t+1} = r_t + \lambda_{t+1} E_t \sigma_{t+1}^2, \quad (7)$$

with λ_{t+1} as the "market price of risk" and $E_t \sigma_{t+1}^2$ the expected variance of one-period returns on the market portfolio of stocks (measuring non-diversifiable stock market risk). The market price of risk reflects the investors' degree of risk aversion, and it increases with investors' risk aversion. Hence, the CAPM in the variant of equation 7 predicts that investors demand a higher rate of return for holding stocks if the opportunity costs r_t increase, the investors' degree of risk aversion increases and/or the expected stock price volatility increases.

Using equations 6 and 7, the following information content of, for example, the price-earnings ratio is obtained: the ratio increases when investors expect higher long-term dividend growth, a higher dividend payout ratio, lower interest rates and/or a lower equity risk premium.

Recent developments in international co-operation

This article highlights recent developments in international co-operation, focusing on efforts in crisis prevention. It shows that the scope and nature of international co-operation have changed significantly over the last two decades in response to new policy challenges associated with rapidly increasing cross-border private capital flows and the emergence of new economies participating in the globalisation process. As a result, international co-operation has shifted away from a predominant focus on exchange rate matters among major industrialised economies to the design of optimal policy frameworks for both mature economies and systemically important emerging market economies (EMEs). The new scope and nature of international monetary and financial co-operation are aimed mainly at reaching a consensus on best practices in policy formulation (macroeconomic and financial stability policies) and improving the transparency and accountability of policy-making vis-à-vis other relevant policy-makers, market participants and public opinion. The ultimate objective is to prevent currency, external debt or banking crises, by relying increasingly on a set of internationally agreed standards and codes. Prevention and better surveillance are expected to foster global financial stability by enhancing the effectiveness of domestic policy-making through rules-based frameworks and market discipline. While the new scope and nature of international co-operation have contributed to the pursuit of sounder domestic policies than in the past, there are areas in which implementation issues are still open. These include, inter alia, ownership of standards and codes and the assessment of their observance, as well as the need to ensure consistency with well-established IMF surveillance and conditionality procedures.

I Introduction

The scope and nature of international economic co-operation has changed over the past two decades with regard to the relative emphasis placed on the three main areas of international co-operation in the post-Bretton Woods era, namely exchange rate stability, external debt sustainability and systemic financial stability. Whereas international co-operation in the 1980s focused mainly on exchange rate stability among major industrial countries, the external debt and banking crises of Mexico and Asian EMEs in the 1990s brought to the fore the question of external debt sustainability in all emerging market countries coupled with domestic and systemic financial stability concerns.

This article aims to illustrate how this experience led to a shift from a mode of co-operation relying on *ad hoc* and often *crisis-driven* arrangements to one based on the design and implementation of measures aimed

at strengthening the international financial system in a more systematic and preventive manner. Section 2 illustrates recent developments in the global financial system that have determined the shift in the focus of international co-operation, while Section 3 deals with the implications of the changes in the global financial system for the scope and nature of international co-operation. Section 4 reviews the design and implementation of standards and codes, the new key component of international economic co-operation. The final section offers some concluding remarks.

The article does not address current issues relating to crisis management and resolution. As for the effects of recent developments in international co-operation on the ECB's relations with international organisations and fora, the reader may like to refer to the article "The ECB's relations with international organisations and fora", published in the January 2001 issue of the Monthly Bulletin.

2 Changes in the global financial system

The global financial system has undergone profound changes over the past few decades. Countries have increasingly opened their capital accounts, thus allowing market forces to play a major role in determining asset prices and other policy-relevant financial variables (e.g. interest rates) as well as the pattern of capital flows – which is known as the deepening of financial integration. At the same time, a growing number of economies have been participating in the globalisation process, which has widened the scope of financial integration. However, the financial integration process has been accompanied by episodes of severe financial distress with widespread cross-border spillover effects – a corollary of financial globalisation. While these financial crises can be characterised *ex post* as transitory interruptions in the financial integration process, thus not affecting its long-term development, they have significantly contributed to shaping the scope and nature of international co-operation.

Deepening of financial integration

The main force behind the deepening of financial integration has been the shift from a financial system dominated by the official sector to one dominated by market forces.

Under the Bretton Woods regime, exchange rate stability was regarded as the precondition for the success of trade liberalisation, and free capital movements were considered as a potential source of instability. This implied that countries were allowed, and to some extent even encouraged, to impose capital controls to support the system of fixed but adjustable exchange rates. At the domestic level, these controls were instrumental in achieving a wide variety of targets, ranging from industrial policy and sectoral development objectives to the regulation of the domestic banking and financial markets, possibly supporting mechanisms of direct monetary control. As market pressure put the viability

of the Bretton Woods system to the test, the recourse to capital controls became more widespread, involving both “weak” and “strong” currencies. In the post-Bretton-Woods era, a number of industrial countries relaxed, and eventually lifted, capital controls together with domestic credit and financial market regulations and restrictions. Starting in the United States and Germany, the process gathered momentum as the United Kingdom and Japan began liberalising their controls in 1979 and 1980 respectively. In continental Europe, the full liberalisation of capital movements was achieved in the framework of the Single Market, which became effective in 1990 in virtually all EU Member States, marking the first stage of Economic and Monetary Union and fulfilling a precondition for the adoption of the euro.

The progressive dismantling of capital controls was motivated by their declining effectiveness due to continuous technological progress and financial innovation (i.e. the emergence and rapid expansion of Euro-currency markets). Added to this was the growing conviction that the over-regulation of the credit and financial markets that accompanied capital account restrictions distorted the allocation of resources and weakened the ability of economies to adjust to rapidly changing domestic and external conditions, thus resulting in lower than optimal potential output growth. As such, the liberalisation of capital movements was an important element of the move towards market-oriented policies aimed at achieving sustainable non-inflationary growth rates.

As a result of the shift towards a market-dominated financial system, asset prices and other policy-relevant financial variables became more and more market-determined and the relative importance of bank intermediation decreased in favour of capital markets. In addition, diversification opportunities increased substantially, on both the assets and liabilities

sides. For policy-makers, the growth of financial markets facilitated the adoption of market-friendly structural reforms, as in the case of the privatisation of state-owned enterprises. At the same time, policy-makers have been subject to growing scrutiny, as financial markets have been “pricing in” the quality of public policies more effectively, both in terms of formulation and of implementation.

Widening of financial integration

The deepening of financial integration has been accompanied by a widening of the process through the emergence of new participants in globalisation. Two developments are noteworthy in this respect.

First, the increasing importance of emerging markets in the world economy. Asian EMEs have recorded sustained growth over an extended period. For China, Hong Kong SAR, Indonesia, Korea, Malaysia, the Philippines, Singapore, Taiwan – Province of China and Thailand, the average annual growth rates of real GDP, trade and official reserves amounted to 7%, 12%, and 17% respectively in the period from 1980 to 2000. Accordingly, these countries’ average shares in the world totals rose from 5.3% in the 1980s to 6.9% in the 1990s for GDP, from 8.9% to 14.8% for trade and from 8.4% to 22.1% for official reserves. Several Latin American countries were also able to return to a growth path following the “lost decade” of the 1980s. Whereas GDP growth rates in Argentina, Chile, Mexico and Venezuela averaged 1% in the 1980s, they reached almost 4% in the 1990s. Positive developments were also recorded in the growth of trade volume (from 5% to 9%) and reserves (from -2.7% to 17.9%). In terms of world share, these countries jumped from 2.1% in 1990 to 3.2% in 2000 for GDP, from 2.0% to 2.7% for trade and from 2.3% to 3.9% for official reserves.

Second, the adoption of a market-based system by formerly planned economies in central and eastern Europe and Asia. The result of these two developments was that a growing number of countries became integrated in the global financial system, while emerging market debt instruments (e.g. bonds, international banking credits) developed as a new asset class.

Changing volume and structure of international financial flows

The gradual shift from a financial system dominated by the official sector to one dominated by market forces has been reflected in two major financial market trends.

First, the total volume of cross-border capital flows has increased steadily at a remarkable pace. For instance, IMF figures show that (gross) capital flows among industrial countries more than doubled between 1990 and 1998, reaching a peak of almost USD 4.5 trillion in 1997. This increase helped to finance the United States’ growing current account deficits as well as recycle Japanese surpluses, while the EU remained, broadly speaking, in balance.

Second, net *private* capital inflows to EMEs expanded dramatically. According to the IMF, these inflows grew from an average of around USD 15 billion p.a. in the 1980s to USD 123 billion in the 1990s, reaching a peak of USD 234 billion in 1996, i.e. before the Asian crisis. This shift in favour of emerging economies is also reflected in the fact that private capital markets have superseded official finance in covering the external financing requirements of EMEs. Net *official sector* financing of EMEs grew only slightly from an average of USD 28 billion in the 1980s to around USD 30 billion p.a. in the 1990s. Correspondingly, the average share of private financing in the total rose from 35% in the 1980s to 81% in the 1990s.

3 Implications for the scope and nature of international monetary and financial co-operation

In the post-Bretton Woods era, international co-operation has concerned three main areas, namely exchange rate stability, external debt sustainability and systemic financial stability, though the relative emphasis on each of these three components has changed over time.

International co-operation in the 1980s focused mainly on exchange rate stability among major industrial countries and external debt sustainability problems in middle-income countries, while systemic financial stability concerns were less pervasive. With the deepening and widening of financial integration, the question of external debt sustainability in all emerging market countries – not only Latin America but also Asia and Europe – coupled with domestic and systemic financial stability concerns progressively came to the fore. Moreover, a clear asymmetry emerged between the global nature of the financial system and the national nature of policy-making, an asymmetry that has proved capable of endangering international financial stability. The recognition of this led to a shift from a mode of co-operation relying on *ad hoc* and often *crisis-driven* arrangements to one based on the design and implementation of measures aimed at strengthening the international financial system in a more systematic manner.

The main areas of international co-operation

Exchange rate co-operation

The changing scope and nature of policy co-operation can be better understood by briefly recalling the main features of international co-operation in the 1980s. Policy co-operation then took place mainly among industrial countries, and its objective was to stabilise exchange rates. This focus reflected the experience with the floating rate system in the 1970s and 1980s, whose performance did not match that which had been expected

by the advocates of free floating before the demise of the Bretton Woods system. In particular, major exchange rates suffered swings regarded as undesirably large and not in line with developments in economic fundamentals.

From March 1979, exchange rate co-operation in Europe took place within the framework of the European Monetary System (EMS), which built on the experience of the so-called Snake, an early attempt to form a European exchange rate arrangement following the end of the Bretton Woods system. The exchange rate mechanism (ERM) within the EMS aimed to create an area of monetary stability in support of the process of European economic integration.

With a public commitment “to work towards greater exchange rate stability”, the G5 countries set the stage in January 1985 for large-scale co-ordinated intervention in the foreign exchange markets. Intervention operations were carried out jointly in the following months with the aim of reversing an excessive US dollar appreciation. These operations were put in a broader context with the Plaza Accord in September 1985, in which the G5 governments declared themselves ready to co-operate more closely to achieve the goal of further dollar depreciation. As such, the Plaza Accord was a basis for further co-operation, which delineated the respective roles of intervention and underlying domestic policy adjustments. Exchange rate co-operation continued with the Louvre Accord in February 1987, when participating countries agreed “to intensify their economic policy co-ordination efforts” and “to co-operate closely to foster stability of exchange rates around current levels.” In the 1990s, the G7 countries’ exchange rate policy co-operation moved gradually away from *ad hoc* market reactions and policy actions at times of tension to a medium-term policy orientation towards stable domestic macroeconomic

frameworks broadly consistent with one another. They recognised that the pursuit of sound macroeconomic and structural policies at home is a necessary though insufficient condition for exchange rate stability. They also came to the conclusion that the more systematic approach of minimising the risks of potential instability rather than suppressing its market outcomes might be more effective over the medium term.

External debt sustainability

International co-operation in the 1980s also addressed the external debt sustainability issue, with the Baker and Brady Plans aiming to restore the balance of payments viability of middle-income countries that were hit by the debt crisis of the early 1980s. In particular the Brady Plan, adopted in 1989, reflected the widespread recognition that a lasting solution of the debt crisis required a centralised co-ordination of the creditors-debtors relationships under the aegis of the IMF. However, it made no attempt to implement reforms that could have helped to prevent the emergence of similar problems later on. Thus the Brady Plan, in spite of its widespread implementation both in Latin America and in South-East Asia, should be regarded as an example of ad hoc one-off international co-operation. It was only after the debt crises suffered by Mexico and Asian EMEs in the 1990s that the international community started strengthening the international financial system in a more systematic and preventive manner.

Systemic financial stability

In the 1980s, international co-operation in this area was organised among industrial countries and related almost exclusively to banking supervision matters. The Basel Committee on Banking Supervision was created in 1974 following the Herstatt bankruptcy, which highlighted growing international systemic risks arising from rapidly developing foreign exchange operations

and related cross-border settlements. The Committee introduced its Capital Accord in 1988, in line with its objective of fostering co-operation among the major industrial countries in order to regulate and supervise an increasingly global banking industry and largely in reaction to the external debt problems of middle-income countries in the 1980s. By raising the amount of capital prudential authorities were to require of individual institutions to enable them to withstand potential risks (e.g. market, credit), this agreement helped create a level playing field among internationally active banks. Although the Capital Accord reflected the recognition that increased cross-border linkages among domestic financial institutions, markets and infrastructures called for minimum common standards, the mutually agreed rules were initially designed and applied by industrial countries only. The Committee, however, has from the outset encouraged and provided leadership for non-G10 countries on a wide range of banking issues. This was ultimately reflected in the “Core Principles for Effective Banking Supervision”, agreed following political impulse and guidance from the G7 Summit of Heads of State and Government in Halifax in 1995.

The changing paradigm underlying international co-operation

The international co-operation activities in the 1980s were accompanied by an emerging paradigm of medium-term stability-oriented policies among policy-makers in industrial countries based on the desirability of internally stable currencies and sound public finances. As a result, the policy focus shifted away from activist and short-term-oriented demand management policies to stability-oriented macroeconomic policies as a precondition for attaining sustainable non-inflationary growth.

The new policy paradigm is based on the following principles:

- The exchange rate is an asset price determined by market participants' perceptions of actual and expected economic performances and policies. Exchange rate movements thus reflect the market assessment of countries' fundamentals and consistency across domestic policies. At the policy level, this means that exchange rates can be regarded as the outcome, rather than an objective, of policies.
- It is essential for each individual country to "put its own house in order". In an environment of free capital flows, market-determined asset prices and other policy-relevant financial variables are expected to penalise flawed domestic policies. As a result, sound policy frameworks at the national level are required to improve countries' economic and financial performances, thereby helping to stabilise global financial developments.
- The assignment of objectives to policy areas should follow an "optimal" framework, which includes three main elements: (i) maintaining price stability is the primary objective of monetary policy; (ii) determining the level and composition of public expenditures and revenues is the task of fiscal policy. Within that context, fiscal policy may contribute to smoothing economic activity over the business cycle, mainly through the operation of automatic stabilisers, in a manner consistent with sound and sustainable public finances; and (iii) enhancing potential output growth is the main objective of structural policies, which should foster efficient allocation of resources – in product, labour and financial markets – and strengthen the resilience of economies to shocks.

This policy paradigm emerged only gradually as a crystallisation of the experience of individual industrial countries. The adoption by most mature economies of increasingly rules-based policy frameworks reduced the scope for policy discretion at the domestic level, enhancing policy predictability,

reducing the risk of inconsistency among domestic policies and improving domestic fundamentals. The outcome was viewed as a lessening of the need for co-ordination of actual policy decisions at the international level, since the possibility of negative externalities attributable to unsound national performances and/or policies was considered to have been reduced.

As stated above, the focus of international co-operation changed in the aftermath of the financial crises which affected EMEs in the 1990s. The abruptness and size of cross-border private capital reversals that triggered financial crises in EMEs confirmed that the orderly integration of these countries into the global financial system is a crucial element of international financial stability. It became apparent that the experience gained by industrial countries of best practices in domestic policy-making needed to be transmitted to the EMEs. Following the Mexican crisis in 1994/95, the G7 Summit of Heads of State and Government in Halifax in June 1995 highlighted the need for effective crisis prevention and, thus, the importance of sound policies and improved transparency. Likewise, in the area of supervision and regulation, the competent institutions were asked to develop and enhance standards to contain risk. The Asian crises in 1997 and 1998 gave further momentum to these initiatives. Work was stepped up in the relevant international institutions and fora on internationally agreed standards and codes aimed at enhancing transparency and accountability in the traditional domains of macroeconomic policy and ensuring the soundness of domestic financial institutions, markets and infrastructures.

The remainder of the article will illustrate why standards and codes can be considered a new key component of international co-operation. While enhanced surveillance and prevention, based on this new approach, can make a major contribution to greater global financial stability, exchange rates and external debts remain of relevance. Recent experience has shown that appropriate

domestic policy frameworks and measures may not always be sufficient. As for EMEs, the Asian crisis has highlighted the importance of consistency between any given exchange rate regime and associated macroeconomic and structural policies for global financial

stability. In addition, since the risk of external debt crises will continue to exist, an improved policy framework for crisis management and resolution is also required, especially with respect to the involvement of the private sector.

4 A new key component of international co-operation: standards and codes

Main characteristics of standards and codes

While not new in nature, the number and scope of standards and codes have increased substantially over the past few years together with the number of institutions and fora supporting this process. Three layers may be broadly distinguished in the process.

First, the political impulse is provided by international fora. These include the G7, the G10, the G20 – an informal forum established in 1999 to enhance dialogue between major industrial countries and EMEs – and the Financial Stability Forum (FSF), which was set up in April 1999 to promote international financial stability through international information sharing and co-operation in financial supervision. Second, the task of setting standards is performed by different institutions, ranging from public sector entities such as the IMF, the World Bank, the OECD and central bank committees (i.e. the Basel Committee on Banking Supervision and the Committee on Payment and Settlement Systems) to private sector bodies such as the International Accounting Standards Board and the International Federation of Accountants. Third, the role of standards-enforcer is mainly played by the IMF and the World Bank, in close consultation with the respective standard-setting body. However, the activity of enforcing standards has to take into account the fact that the observance of standards and codes remains voluntary.

The FSF has identified 12 standards and codes as key for financial stability. A description of these, and of the bodies which set them,

is given in Table I in the annex. Using the typology suggested by the FSF, standards and codes can be grouped into three broad areas: (i) macroeconomic policy and data transparency; (ii) financial regulation and supervision; and (iii) institutional and market infrastructure.

The three standards subsumed under the first category – i.e. the IMF's "Code of Good Practices on Transparency in Monetary and Financial Policies", "Code of Good Practices in Fiscal Transparency" and "Special Data Dissemination Standard" – are based on the recognition of the benefits of rules-based and transparent policy frameworks and, to a certain extent, render the policy paradigm referred to above operational. An example is the Code of Good Practices on Transparency in Monetary and Financial Policies, where the term "financial policies" refers to the regulation, supervision and oversight of financial and payment systems, including markets and institutions, with a view to promoting financial stability, market efficiency and consumer protection. The four main principles of this code, which also apply to the companion code on fiscal transparency, are: (i) clarity of roles, responsibilities and objectives of the central bank and financial agencies; (ii) an open process for the formulation and reporting of policies by the central bank and financial agencies; (iii) the provision of reliable information to the markets and public at large; and (iv) accountability of, and assurances of integrity by, the central bank and financial agencies.

The second category includes standards that can be seen as a continuation and broadening

of the endeavours to improve international co-operation in banking supervision which started with the first Capital Accord mentioned above. The three standards – “Core Principles for Effective Banking Supervision”, “Objectives and Principles of Securities Regulation” and the “Insurance Core Principles” – set out principles considered essential for effective supervision and regulation in the three areas concerned.

The standards listed in the third category concern mainly market infrastructure, such as the “Core Principles for Systemically Important Payment Systems”, and microeconomic issues, such as corporate governance, accounting and auditing, but also criminal justice and law enforcement which are covered in the Forty recommendations of the Financial Action Task Force (FATF) regarding money laundering. These standards can also be considered as elementary building blocks in countries’ endeavours to develop sound domestic financial systems, as they represent the micro foundation of their institutional and market infrastructure.

The IMF and the World Bank prepare “Reports on the Observance of Standards and Codes” (ROSCs) that evaluate exclusively the extent to which countries observe internationally recognised standards in 11 areas which have been deemed useful for the operations of the IMF and the World Bank. In addition, in 1999 the two institutions started the joint Financial Sector Assessment Program (FSAP), which provides for comprehensive “health checks” of countries’ financial sectors. This includes the observance of relevant international standards and codes. The assessments are usually composed of modules that cover individual standards and codes, an approach that allows flexibility regarding the areas to be assessed. In line with the voluntary nature of the observance of standards, participation in ROSCs and FSAPs and the publication of the outcome of the two exercises remains voluntary.

So far, only a limited – but growing – number of countries have participated in ROSCs and

FSAPs. As of end-September 2001, 169 ROSC modules had been produced for 57 countries, of which 109 modules for 36 countries had been published. The ECB also participated in the process. In November 2001, a ROSC, covering the transparency of monetary and financial policies and the Core Principles for Systemically Important Payment Systems, was published together with the 2001 IMF Article IV staff report on the monetary and exchange rate policies of the euro area. The IMF found that overall the Eurosystem maintains a high level of transparency in all aspects of its operations and a high degree of observance of the relevant Codes. As regards the FSAP, 62 countries have volunteered to participate in the programme, of which 22 assessments have been finalised and four of these published. However, this limited participation in ROSCs and FSAPs reflects not only the voluntary nature together with the relative newness of the process, but also the resource-intensive character of the initial assessments and their regular updates. Despite the decision to step up the process by setting a target of 24 FSAPs per year, it will take a number of years before ROSCs and/or FSAPs are drawn up for all IMF/World Bank member countries.

Open issues

Despite growing agreement on their importance and merits, the process of developing and implementing standards and codes as well as assessing countries’ observance of them has given rise to questions and challenges, most of which are related to the early stage of the exercise and to its voluntary nature.

Ownership

Given the voluntary nature of the process, a widespread implementation of standards and codes is dependent on the acceptance of them. There has been criticism from some quarters that the first standards and codes have been developed in fora encompassing

only industrial countries (G7 or G10) and that emerging market and developing countries have been largely excluded from the process, although they are supposed to implement the standards and codes as well. In order to address this problem the IMF and the World Bank have initiated “outreach programs”, in which external consultation procedures have been an integral part of the preparations for more up-to-date standards and codes. By increasing the involvement of their entire membership as well as private sector institutions and academics, the two Bretton Woods institutions have improved the acceptability of standards and codes. Other standard-setters with smaller memberships than the IMF and the World Bank have also increasingly opened up their preparation process to extensive external consultation involving EMEs and in some cases the private sector and academics (e.g. Basel Core Principles and Core Principles for Systemically Important Payment Systems). Such a dialogue with national authorities and representatives of the private and academic sectors needs to be continued in order to enhance awareness, acceptance and ownership. Open processes for preparing standards and codes are also likely to provide useful feedback and may lead to an improvement of existing standards.

Self-assessment

Some countries have resorted to self-assessment, i.e. conducted by their own national authorities. Self-assessment can be regarded as an important contribution to countries’ ownership of standards and codes. It is a useful first step for identifying weaknesses and setting priorities in the implementation process, thereby also constituting an initial basis for external assessment. In view of its possible limited objectivity, self-assessment cannot be considered as a substitute for external assessment by the relevant international institutions. In addition, only external assessors are able to ensure the consistency of assessments across countries.

Modes of implementation

Ideally, standards and codes should be regarded as universal instruments to be applied consistently across countries since they reflect an international consensus on what constitutes best practices in a given policy area. However, economic and institutional conditions differ between countries. Consequently, some observers argue that standard-setters should adopt a multi-track approach to the design of standards, i.e. they should envisage different benchmarks for countries at different stages of development. This approach has been partially followed for the codes on data dissemination, where two sets of standards with different requirements have been developed (General and Special Data Dissemination Standards). However, the key feature and the main benefit of the standards and codes approach is the agreement on and the use of consistent definitions across countries. Therefore, there is a clear trade-off between universality of design and consistency in the application of standards and codes. As compliance with standards should inter alia reassure markets that countries are “good risks”, it seems inappropriate to apply differentiated standards to individual countries. An alternative avenue through which to take account of different conditions at country level is to set credible timetables for the full implementation of standards and codes. Likewise, it seems inevitable that differences in institutional capacity and level of development should lead countries to prioritise among standards.

Surveillance and conditionality

The elaboration of best policy practices has considerable potential to help the IMF be more focused in its bilateral surveillance activities and to guide its conditionality policies. In addition, the new emphasis on standards and codes redefines the IMF as the institution responsible not only for crisis management but also for crisis prevention. However, partly as a result of the voluntary

nature of compliance and the still limited country coverage, there are no formal links at present between the observance of standards and codes and the IMF's main instruments of international co-operation, i.e. surveillance and financial assistance combined with conditionality.

As for surveillance, the assessment of a country's observance of standards can help detect potential deficiencies in domestic policy areas and is therefore recognised by the IMF Executive Board as an important element of its surveillance exercise. ROSCs are currently circulated to the Executive Board in the context of the discussions on countries' Article IV consultations. The Executive Board may encourage countries to participate in voluntary ROSCs or FSAPs if potential weaknesses are detected during the Article IV consultation process and the country had not so far volunteered to participate.

Regarding the terms of the provision of financial assistance (conditionality), there might be a case for setting incentives to encourage countries to step up their efforts to comply with standards and codes and thus improve their resilience to crisis. Therefore, over time, the IMF and the World Bank should explore ways to promote a more direct link between standards and conditionality following the example provided by the IMF's Contingent Credit Line. The eligibility requirements for this credit facility list the observance of standards and codes as one element used to ascertain whether a country's policies can be considered "first class".

Role of the private sector

Ideally, country compliance with standards and codes should feed into market

participants' risk assessments and related investment decisions and terms. However, this channel of market incentives is not yet effectively working. This might be due to the relative newness of the process and the fact that awareness of standards is not widespread among market participants, including rating agencies. According to market participants, several aspects of the assessment of compliance could be improved, including the expansion of country coverage, mandatory publication of ROSCs, regular updates and improved user-friendliness through streamlined and standardised formats. Pushed to the limits, these recommendations would lead to the release of ratings. However, the IMF and the World Bank remain wary of providing quantitative ratings on compliance, as this would change the very nature of these organisations.

A small number of private sector firms have also started preparing assessments of individual countries' compliance with standards. In principle, such private sector assessments can be considered helpful as they may play a useful role in bridging the gap between the largely qualitative assessments provided by the official sector and the quantitative information requested by the private sector. Objectivity and accuracy of the assessments are, however, necessary ingredients of the exercise. Concerns about the quality and independence of evaluations would undermine the integrity of the standards and codes approach. On these counts, for the time being, these assessments cannot be considered as a substitute for the work undertaken by international financial institutions. At a later stage, if more firms were to enter this market, competitive market forces might help to ensure a more adequate level of quality.

5 Conclusions

The article has tried to show that international economic co-operation has been flexibly adapted as a response to the changing

circumstances of the 1990s, as well as to the new policy paradigm stressing the importance of rules-based and transparent policies. The

new scope and nature of international co-operation are embodied in internationally agreed standards and codes which aim to enhance transparency and accountability in the traditional domains of macroeconomic policy and ensure the soundness of domestic financial institutions, markets and infrastructures. One important feature is an attempt to address the asymmetry between the global nature of the financial system and the national nature of policy-making. This is done through the adoption of rules-based and transparent policy frameworks that narrow down the scope for policy discretion at the domestic level, thus reducing – in principle – occurrences of a need for co-ordination of actual policy decisions at the international level.

Significant progress has been made in developing and implementing standards and codes as well as assessing countries' observance of them, even if a number of open questions and challenges remain, most of which are related to the voluntary nature of compliance and to the early stage of the exercise. To ensure consistency in the whole process, the institutions and fora involved in standard setting and standard enforcement, respectively, should step up co-operation. On the one hand, standard-setters have to be involved in the development of assessment methodologies to ensure consistent interpretation. On the other, the IMF and the World Bank, given their leading role as standard-enforcers, must also participate in the evaluation of experiences and the possible future development of standards and codes.

Table**Key international standards for sound financial systems, as identified by the FSF**

Subject area	Title of standard	Standard-setting body	Main features
I. Macroeconomic policy and data transparency			
Monetary and financial policy transparency	Code of Good Practices on Transparency in Monetary and Financial Policies (September 1999)	IMF http://www.imf.org	The Code identifies desirable transparency practices for central banks in their conduct of monetary policy and for central banks and other financial agencies in their conduct of financial policies.
Fiscal policy transparency	Code of Good Practices in Fiscal Transparency (April 1998)	IMF http://www.imf.org	The Code contains transparency requirements regarding the structure and functions of government, fiscal policy intentions, public sector accounts and fiscal projections.
Data dissemination	Special Data Dissemination Standard (SDDS) (March 1996)/ General Data Dissemination System (GDDS) (December 1997)	IMF http://www.imf.org	The SDDS is mainly designed for countries having or seeking access to international capital markets. Countries subscribing to the SDDS undertake to follow good statistical practices in four dimensions: (i) coverage, periodicity and timeliness of the data disseminated; (ii) dissemination of advance release calendars; (iii) integrity of the data; (iv) quality of the data. The GDDS is mainly designed for countries that do not have or seek access to international capital markets. The GDDS takes into account, across the broad range of countries, the diversity of their economies and the developmental requirements of many of their statistical systems.
II. Financial regulation and supervision			
Banking supervision	Core Principles for Effective Banking Supervision (September 1997)	Basel Committee on Banking Supervision (BCBS). The BCBS, established by the G10 central banks, provides a forum for regular co-operation among its member countries on banking supervisory matters. http://www.bis.org	The document, prepared in close co-operation with non-G10 supervisory authorities, provides a comprehensive blueprint for an effective supervisory system and is intended to serve as a basic reference for supervisory and other public authorities internationally. It contains 25 basic principles that are considered essential for any supervisory system to be effective. To facilitate implementation and assessment, in October 1999 the Committee developed the "Core Principles Methodology".
Securities regulation	Objectives and Principles of Securities Regulation (September 1998)	International Organisation of Securities Commissions (IOSCO). IOSCO promotes co-operation among national regulators of securities and futures markets. http://www.iosco.org	The document sets out three objectives (protection of investors; ensuring that markets are fair, efficient and transparent; reduction of systemic risk) and 30 principles upon which the regulation of securities markets is based. The document also provides some examples of current practices, acknowledging that these practices will and should change as the markets evolve and as technology and improved co-ordination among regulators makes other strategies available.
Insurance supervision	Insurance Core Principles (September 1997, revised October 2000)	International Association of Insurance Supervisors (IAIS). The IAIS, established in 1994, is a forum for co-operation among insurance regulators and supervisors from more than 100 jurisdictions. http://www.iaisweb.org	The Insurance Core Principles comprise essential principles that need to be in place for an insurance supervisory system to be effective. They set out the framework for insurance supervision and identify areas that should be addressed in legislation or regulations in each jurisdiction.

Subject area	Title of standard	Standard-setting body	Main features
III. Institutional and market infrastructure			
Insolvency	To be developed	World Bank http://www.worldbank.org	
Corporate governance	Principles of Corporate Governance (May 1999)	OECD. http://www.oecd.org	The Principles are aimed at improving the legal, institutional and regulatory framework for corporate governance in OECD and non-OECD countries. They are organised under five headings: (i) the rights of shareholders; (ii) the equitable treatment of shareholders; (iii) the role of stakeholders; (iv) disclosure and transparency; (v) responsibilities of the board.
Accounting	International Accounting Standards – IAS (on an ongoing basis)	International Accounting Standards Board (IASB). The IASB is a private sector organisation which aims to harmonise accounting principles used by businesses and other organisations for financial reporting around the world. http://www.iasc.org.uk	The Standards contain principles to be observed in the preparation of financial statements. A total of 41 IAS have been issued to date.
Auditing	International Standards on Auditing – ISAs (on an ongoing basis)	International Federation of Accountants (IFAC). IFAC is a private sector organisation which aims to develop and enhance the accountancy profession to enable it to provide services of consistently high quality in the public interest. http://www.ifac.org	The national standards on auditing and related services published in many countries differ in form and content. The International Auditing Practices Committee (IAPC) takes account of such documents and differences and is thus in a position to issue ISAs which are intended for international acceptance. ISAs have to be applied in the audit of financial statements and, if necessary in an adapted form, to the audit of other information and to related services.
Payment and settlement systems	Core principles for systemically important payment systems (January 2001)	Committee on Payment and Settlement Systems (CPSS). The CPSS, established by the G10 central banks, provides a forum for regular co-operation among its member central banks on issues related to payment and settlement systems. http://www.bis.org	The document sets out core principles for the design and operation of systemically important payment systems. It also provides guidance on how the principles can be implemented, and describes the role of central banks in ensuring that the principles are observed.
Market integrity	Forty recommendations of the Financial Action Task Force (FATF) (initially developed in 1990; revised in 1996)	FATF. The FATF was established by the G7 Summit in Paris in 1989 and comprises 26 member countries. It monitors members' progress in implementing measures to counter money laundering. http://www.oecd.org/fatf	The forty recommendations set out the basic framework for anti-money laundering efforts. They cover the criminal justice system and law enforcement, the financial system and its regulation, and international co-operation.

Sources: Financial Stability Forum (<http://www.fsforum.org>) and the relevant institutions.



Euro area statistics



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Enlargement of the euro area on 1 January 2001 to include Greece

In the “Euro area statistics” section of the Monthly Bulletin, reference statistical series relating to the euro area cover the Member States comprising the euro area at the time to which the statistics relate. Thus euro area data up to end-2000 cover the Euro 11; from the beginning of 2001 they cover the Euro 12. Exceptions to this rule are indicated where appropriate.

In the tables, the break is shown by means of a line denoting the enlargement of the euro area. In the charts, the break is indicated by a dotted line. Absolute and percentage changes for 2001 calculated from a base in 2000 use, as far as possible, a series which takes into account the impact of the entry of Greece.

Data for the euro area plus Greece up to end-2000 are available in a downloadable format (csv files) on the ECB’s website (www.ecb.int).

Conventions used in the tables

“-”	data do not exist/data not applicable
“.”	data are not yet available
“...”	nil or negligible
“billion”	10 ⁹
^(p)	provisional
s.a.	seasonally adjusted

Euro area overview table

Summary table of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates

	M1 ¹⁾	M2 ¹⁾	M3 ¹⁾²⁾		MFI loans to euro area residents excluding MFIs and general government ¹⁾	Securities issued by non-financial and non-monetary financial corporations ¹⁾	3-month interest rate (EURIBOR, % per annum, period averages) ⁷⁾	10-year government bond yield (% per annum, period averages) ⁸⁾
	1	2	3	3-month moving average (centred) ⁴⁾				
2000	8.0	4.5	4.9	-	9.6	20.7	4.40	5.44
<i>Euro area enlargement</i>								
2001	3.6	4.2	5.5	-	7.8	.	4.26	5.03
2001 Q2	2.4	3.4	4.3	-	8.2	25.7	4.60	5.19
Q3	3.9	4.5	6.0	-	7.4	26.1	4.28	5.12
Q4	5.4	5.6	7.6	-	6.5	.	3.45	4.81
2002 Q1	.	.	.	-	.	.	.	.
2001 Sep.	5.0	5.0	6.8	6.8	6.7	26.0	3.98	5.04
Oct.	5.2	5.4	7.5	7.4	6.5	24.8	3.60	4.82
Nov.	6.0	5.9	8.0	7.8	6.6	25.2	3.39	4.67
Dec.	5.0	6.1	8.0	.	6.1	.	3.34	4.96
2002 Jan.	.	.	.	.	.	.	3.34	5.02

2. Price and real economy developments

	HICP	Industrial producer prices	Hourly labour costs (whole economy) ¹¹⁾	Real GDP ¹²⁾	Industrial production (excluding construction) ¹³⁾	Capacity utilisation in manufacturing (percentages) ¹⁴⁾	Employment (whole economy) ¹⁵⁾	Unemployment (% of labour force) ¹⁶⁾
	9	10	11	12	13	14	15	16
2000	2.3	5.5	3.4	3.4	5.5	83.8	2.1	8.9
<i>Euro area enlargement</i>								
2001	2.6	2.2	.	.	.	83.2	.	8.5
2001 Q2	3.1	3.7	2.9	1.6	0.9	83.6	1.6	8.4
Q3	2.7	1.5	3.4	1.4	-0.5	83.0	1.3	8.4
Q4	2.2	-1.0	.	.	.	81.8	.	8.5
2002 Q1	.	.	.	.	.	80.8	.	.
2001 Sep.	2.5	0.7	-	-	-0.7	-	-	8.5
Oct.	2.4	-0.7	-	-	-2.6	-	-	8.5
Nov.	2.1	-1.3	-	-	-4.2	-	-	8.5
Dec.	2.1	-1.1	-	-	.	-	-	8.5
2002 Jan.	2.5	.	-	-	.	-	-	.

3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net flows)				Reserve assets (end-of-period positions) ²¹⁾	Effective exchange rate of the euro: broad group (1999 Q1 = 100)		USD/EUR exchange rate ²⁴⁾
	Current and capital accounts ¹⁷⁾	Goods ¹⁸⁾	Direct investment ¹⁹⁾	Portfolio investment ²⁰⁾		Nominal ²²⁾	Real (CPI) ²³⁾	
2000	-50.2	35.6	17.6	-111.5	378.0	88.2	86.3	0.924
<i>Euro area enlargement</i>								
2001	.	.	.	.	392.4	91.0	88.1	0.896
2001 Q2	-6.4	15.9	-51.7	25.7	410.0	89.5	86.9	0.873
Q3	6.3	23.4	-15.3	53.6	393.4	91.2	88.2	0.890
Q4	.	.	.	.	392.4	92.0	88.5	0.896
2002 Q1	.	.	.	.	.	.	.	.
2001 Sep.	0.0	5.4	-15.7	44.6	393.4	92.6	89.4	0.911
Oct.	0.5	9.6	5.3	0.3	393.6	92.8	89.4	0.906
Nov.	3.2	9.3	7.8	11.5	396.5	91.3	87.7	0.888
Dec.	.	.	.	.	392.4	91.9	88.3	0.892
2002 Jan.	.	.	.	.	.	91.6	87.9	0.883

Sources: ECB, European Commission (Eurostat and Economic and Financial Affairs DG) and Reuters.

For more information on the data, see the relevant tables in the "Euro area statistics" section.

1) Monthly growth rates refer to the end of the period, whereas quarterly and annual growth rates are calculated as period averages. Growth rates for M1, M2, M3 and loans are calculated on the basis of seasonally adjusted monthly stocks and flows.

2) M3 and its components exclude holdings by non-residents of the euro area of money market fund shares/units, money market paper and debt securities up to 2 years.

I Monetary policy statistics

Table 1.1

Consolidated financial statement of the Eurosystem

(EUR millions)

1. Assets

		Gold and gold receivables	Claims on non-euro area residents in foreign currency	Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro	Lending to euro area credit institutions in euro	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
		1	2	3	4	5	6	7	8
2001	7 Sep.	128,268	274,275	24,166	5,419	212,066	152,000	60,001	0
	14	128,229	274,508	21,487	5,316	206,078	142,999	60,001	0
	21	128,229	272,731	22,101	5,264	192,542	132,000	60,001	0
	28	128,236	262,282	22,121	5,171	213,410	151,999	60,002	0
	5 Oct.	128,236	260,738	21,750	5,134	197,093	136,999	60,002	0
	12	128,235	263,821	21,573	5,353	176,542	116,509	60,004	0
	19	128,235	264,640	22,147	5,539	203,189	142,510	60,004	0
	26	128,234	264,955	21,503	5,582	203,107	143,000	60,001	0
	2 Nov.	128,233	264,162	21,770	5,728	187,030	127,001	60,001	0
	9	128,233	262,142	21,932	5,895	164,621	104,368	60,001	0
	16	128,233	262,623	21,311	5,942	214,783	154,369	60,001	0
	23	128,233	264,958	20,997	5,980	193,762	133,002	60,001	0
	30	128,233	264,230	21,900	5,956	201,288	88,001	60,001	0
	7 Dec.	128,228	266,093	21,572	6,040	199,026	139,001	60,001	0
	14	128,228	264,143	23,388	5,823	194,462	134,001	60,001	0
	21	128,227	263,756	22,269	5,699	186,228	123,000	60,000	0
	28	126,801	264,607	25,200	5,736	203,597	142,000	60,000	0
2002	4 Jan.	126,801	265,809	23,862	6,280	201,109	116,000	60,000	25,000
	11	126,801	266,160	23,154	6,413	174,073	114,000	60,000	0
	18	126,801	270,820	20,624	6,224	165,037	105,000	60,000	0
	25	126,801	269,475	22,236	6,312	185,053	125,000	60,000	0
	1 Feb.	126,801	267,766	21,901	6,498	201,055	141,000	60,000	0

2. Liabilities

		Banknotes in circulation	Liabilities to euro area credit institutions in euro	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	Other liabilities to euro area credit institutions in euro	Debt certificates issued
		1	2	3	4	5	6	7	8	9
2001	7 Sep.	338,188	127,999	127,948	34	0	0	17	4,843	3,784
	14	334,283	114,049	113,892	143	0	0	14	4,922	3,784
	21	329,229	118,922	115,501	3,405	0	0	16	4,934	3,784
	28	327,899	131,745	131,705	39	0	0	1	4,802	3,784
	5 Oct.	329,095	120,574	120,452	109	0	0	13	5,160	3,784
	12	325,194	104,993	104,828	153	0	0	12	5,470	3,784
	19	319,984	143,582	143,444	126	0	0	12	5,512	3,784
	26	315,159	129,632	129,591	29	0	0	12	5,680	3,784
	2 Nov.	316,956	124,952	124,830	110	0	0	12	5,829	2,939
	9	312,642	103,687	103,581	94	0	0	12	9,165	2,939
	16	306,770	150,156	149,826	311	0	0	19	12,969	2,939
	23	300,526	115,953	114,745	1,152	0	0	56	16,850	2,939
	30	300,093	131,734	131,577	152	0	0	5	21,096	2,939
	7 Dec.	302,095	117,849	117,792	51	0	0	6	24,217	2,939
	14	296,918	130,282	130,010	263	0	0	9	27,447	2,939
	21	292,780	126,867	120,378	6,485	0	0	4	29,604	2,939
	28	278,110	142,595	142,126	465	0	0	4	34,757	2,939
2002	4 Jan.	394,627	131,467	131,338	121	0	0	8	23,657	2,939
	11	375,052	129,061	128,927	130	0	0	4	23,771	2,939
	18	349,219	139,161	139,001	155	0	0	5	23,811	2,939
	25	325,771	130,845	130,804	37	0	0	4	12,379	2,939
	1 Feb.	312,923	134,033	133,974	59	0	0	0	2,116	2,939

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims on euro area credit institutions in euro	Securities of euro area residents in euro	General government debt in euro	Other assets	Total	
							9	10	11	12	13	14	15	16
0	43	22	320	28,286	70,160	85,090	828,051	2001 7 Sep.
0	3,060	18	380	28,349	70,160	86,182	820,690	14
0	519	22	387	28,303	70,160	86,387	806,105	21
0	1,373	36	446	28,715	70,163	86,819	817,364	28
0	10	82	294	28,734	70,163	86,708	798,851	5 Oct.
0	12	17	793	28,293	70,166	87,307	782,084	12
0	632	43	830	28,123	70,166	87,569	810,439	19
0	72	34	418	28,371	70,171	87,654	809,996	26
0	3	25	397	28,498	70,171	89,664	795,654	2 Nov.
0	228	24	458	28,464	70,085	90,152	771,984	9
0	393	20	399	28,203	70,085	89,923	821,504	16
0	741	18	525	28,178	70,075	89,781	802,491	23
53,000	276	10	499	28,273	70,088	90,221	810,690	30
0	12	12	421	28,113	70,102	90,264	809,860	7 Dec.
0	454	6	419	28,180	70,000	90,907	805,551	14
0	3,199	29	404	28,210	69,599	91,039	795,432	21
0	1,573	24	487	27,981	68,729	91,523	814,662	28
0	30	79	88,488	27,924	68,603	90,355	899,232	2002 4 Jan.
0	65	8	88,487	27,847	68,611	90,554	872,101	11
0	30	7	88,490	27,917	68,616	90,323	864,853	18
0	28	25	44,363	27,927	68,616	88,903	839,687	25
0	11	44	531	27,601	68,575	89,397	810,126	1 Feb.

Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves	Total	
								10	11	12	13	14	15	16	17	18
47,863	8,489	3,978	14,669	7,183	69,255	141,340	60,460	828,051	2001 7 Sep.
49,858	18,713	3,904	12,407	7,183	69,787	141,340	60,460	820,690	14
45,858	9,040	3,941	11,289	7,183	70,123	141,340	60,462	806,105	21
55,876	8,507	2,485	16,349	6,889	73,585	124,991	60,452	817,364	28
49,116	8,225	2,497	14,560	6,889	73,508	124,991	60,452	798,851	5 Oct.
48,132	8,835	2,440	17,391	6,889	73,513	124,991	60,452	782,084	12
40,613	8,495	2,444	19,392	6,889	74,301	124,991	60,452	810,439	19
58,830	8,642	2,475	19,623	6,889	73,839	124,991	60,452	809,996	26
48,019	8,651	2,432	19,477	6,889	74,067	124,991	60,452	795,654	2 Nov.
47,322	8,711	2,433	18,355	6,889	74,397	124,991	60,453	771,984	9
51,757	8,676	2,429	18,082	6,889	75,393	124,991	60,453	821,504	16
67,049	8,460	2,427	20,730	6,889	75,224	124,991	60,453	802,491	23
54,422	8,580	2,524	21,215	6,889	75,754	124,991	60,453	810,690	30
60,080	9,019	2,506	22,848	6,889	75,974	124,991	60,453	809,860	7 Dec.
44,885	9,172	2,410	22,900	6,889	76,264	124,991	60,454	805,551	14
40,300	9,481	2,412	21,389	6,889	77,326	124,991	60,454	795,432	21
50,902	9,446	2,525	20,458	6,967	78,073	125,309	62,581	814,662	28
39,193	10,860	2,670	20,807	6,967	77,594	125,288	63,164	899,232	2002 4 Jan.
36,511	8,471	2,716	20,675	6,967	77,448	125,318	63,173	872,101	11
42,861	8,451	2,605	22,998	6,967	77,375	125,318	63,149	864,853	18
61,347	8,538	2,584	23,432	6,967	76,451	125,318	63,117	839,687	25
54,483	8,738	2,713	21,300	6,967	75,480	125,316	63,119	810,126	1 Feb.

Table 1.2**Key ECB interest rates***(levels in percentages per annum; changes in percentage points)*

With effect from ¹⁾	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
			Fixed rate	Minimum bid rate			
	Level 1	Change 2	Level 3	Level 4	Change 5	Level 6	Change 7
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 ²⁾	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 ³⁾	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
<i>Euro area enlargement</i>							
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50

Source: ECB.

- 1) The date refers to the deposit and marginal lending facilities. For main refinancing operations, unless otherwise indicated, changes in the rate are effective from the first operation following the date indicated. The change on 18 September 2001 was effective on that same day.
- 2) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new regime by market participants.
- 3) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

Table 1.3**Eurosystem monetary policy operations allotted through tenders ¹⁾***(EUR millions; interest rates in percentages per annum)***1. Main refinancing operations ²⁾**

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
			Fixed rate	Minimum bid rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6	7
2001 1 Aug.	100,746	71,000	-	4.50	4.50	4.51	14
8	132,809	91,000	-	4.50	4.50	4.51	14
15	111,157	70,000	-	4.50	4.50	4.51	14
22	142,012	83,000	-	4.50	4.50	4.51	14
29	72,907	70,000	-	4.50	4.50	4.50	14
5 Sep.	132,696	82,000	-	4.25	4.27	4.28	14
12	118,708	61,000	-	4.25	4.26	4.27	14
19	110,778	71,000	-	3.75	3.76	3.77	14
26	111,927	81,000	-	3.75	3.76	3.77	14
3 Oct.	76,444	56,000	-	3.75	3.75	3.76	14
10	60,510	60,510	-	3.75	3.75	3.75	14
17	143,828	82,000	-	3.75	3.78	3.79	14
24	73,932	61,000	-	3.75	3.75	3.76	14
31	99,611	66,000	-	3.75	3.75	3.76	14
7 Nov.	38,368	38,368	-	3.75	3.75	3.75	14
14	174,732	116,000	-	3.25	3.37	3.40	14
21	63,173	17,000	-	3.25	3.26	3.27	14
28	95,578	71,000	-	3.25	3.27	3.29	14
5 Dec.	106,643	68,000	-	3.25	3.27	3.27	14
12	109,662	66,000	-	3.25	3.27	3.27	16
19	140,810	57,000	-	3.25	3.43	3.46	14
28	105,649	85,000	-	3.25	3.45	3.52	12
2002 2 Jan.	88,696	31,000	-	3.25	3.28	3.29	14
9	155,890	83,000	-	3.25	3.30	3.32	14
16	116,846	22,000	-	3.25	3.31	3.32	14
23	146,286	103,000	-	3.25	3.29	3.30	14
30	108,013	38,000	-	3.25	3.31	3.32	13
6 Feb.	156,977	91,000	-	3.25	3.30	3.31	14

2. Longer-term refinancing operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		Running for (...) days
			Fixed rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6
1999 14 Jan.	79,846	15,000	-	3.13	-	42
14	39,343	15,000	-	3.10	-	70
14	46,152	15,000	-	3.08	-	105
25 Feb.	77,300	15,000	-	3.04	-	91
25 Mar.	53,659	15,000	-	2.96	2.97	98
29 Apr.	66,911	15,000	-	2.53	2.54	91
27 May	72,294	15,000	-	2.53	2.54	91
1 July	76,284	15,000	-	2.63	2.64	91
29	64,973	15,000	-	2.65	2.66	91
26 Aug.	52,416	15,000	-	2.65	2.66	91
30 Sep.	41,443	15,000	-	2.66	2.67	84
28 Oct.	74,430	25,000	-	3.19	3.42	91
25 Nov.	74,988	25,000	-	3.18	3.27	98
23 Dec.	91,088	25,000	-	3.26	3.29	98
2000 27 Jan.	87,052	20,000	-	3.28	3.30	91
2 Mar.	72,960	20,000	-	3.60	3.61	91
30	74,929	20,000	-	3.78	3.80	91
27 Apr.	64,094	20,000	-	4.00	4.01	91
1 June	64,317	20,000	-	4.40	4.42	91
29	41,833	20,000	-	4.49	4.52	91
27 July	40,799	15,000	-	4.59	4.60	91
31 Aug.	35,417	15,000	-	4.84	4.87	91
28 Sep.	34,043	15,000	-	4.84	4.86	92
26 Oct.	43,085	15,000	-	5.06	5.07	91
30 Nov.	31,999	15,000	-	5.03	5.05	91
29 Dec.	15,869	15,000	-	4.75	4.81	90
<i>Euro area enlargement</i>						
2001 25 Jan.	31,905	20,000	-	4.66	4.69	90
1 Mar.	45,755	20,000	-	4.69	4.72	91
29	38,169	19,101	-	4.47	4.50	91
25 Apr.	43,416	20,000	-	4.67	4.70	92
31 May	46,448	20,000	-	4.49	4.51	91
28 June	44,243	20,000	-	4.36	4.39	91
26 July	39,369	20,000	-	4.39	4.42	91
30 Aug.	37,855	20,000	-	4.20	4.23	91
27 Sep.	28,269	20,000	-	3.55	3.58	85
25 Oct.	42,308	20,000	-	3.50	3.52	98
29 Nov.	49,135	20,000	-	3.32	3.34	91
21 Dec.	38,178	20,000	-	3.29	3.31	97
2002 31 Jan.	44,547	20,000	-	3.31	3.33	84

3. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
				Fixed rate	Minimum bid rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6	7	8
2000 5 Jan. ⁴⁾	Collection of fixed-term deposits	14,420	14,420	-	-	3.00	3.00	7
21 June	Reverse transaction	18,845	7,000	-	-	4.26	4.28	1
<i>Euro area enlargement</i>								
2001 30 Apr.	Reverse transaction	105,377	73,000	-	4.75	4.77	4.79	7
12 Sep.	Reverse transaction	69,281	69,281	4.25	-	-	-	1
13	Reverse transaction	40,495	40,495	4.25	-	-	-	1
28 Nov.	Reverse transaction	73,096	53,000	-	3.25	3.28	3.29	7
2002 4 Jan.	Reverse transaction	57,644	25,000	-	3.25	3.30	3.32	3
10	Reverse transaction	59,377	40,000	-	3.25	3.28	3.30	1

Source: ECB.

1) The amounts shown may differ slightly from those in Table 1.1, columns 6 to 8, due to operations allotted but not settled.

2) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

3) In liquidity providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.

4) This operation was conducted with a maximum rate of 3.00%.

Table 1.4**Minimum reserve statistics****1. Reserve base of credit institutions subject to reserve requirements ^{1) 2)}***(EUR billions; end of period)*

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period) ²	Debt securities up to 2 years' agreed maturity ³	Money market paper ⁴	Deposits (over 2 years' agreed maturity and notice period) ⁵	Repos ⁶	Debt securities over 2 years' agreed maturity ⁷
	1	2	3	4	5	6	7
2000 Dec. ³⁾	10,071.5	5,711.3	136.7	187.2	1,273.6	528.3	2,234.3
<i>Euro area enlargement</i>							
2001 Jan.	10,164.2	5,712.6	139.2	196.7	1,275.6	574.6	2,265.6
Feb.	10,247.4	5,724.4	145.3	201.2	1,284.7	597.8	2,294.0
Mar.	10,503.6	5,883.5	151.1	203.4	1,292.6	654.7	2,318.3
Apr.	10,554.6	5,924.3	154.5	202.8	1,292.1	657.7	2,323.2
May	10,687.3	5,984.7	166.6	198.9	1,307.5	693.2	2,336.4
June	10,705.3	6,015.6	175.7	198.7	1,314.2	656.6	2,344.5
July	10,590.4	5,912.2	183.4	199.1	1,312.5	636.2	2,346.9
Aug.	10,551.6	5,872.7	187.8	190.2	1,309.3	654.1	2,337.6
Sep.	10,627.3	5,956.0	188.2	191.3	1,315.7	631.6	2,344.6
Oct.	10,687.8	5,962.3	190.8	196.5	1,313.7	672.4	2,352.2
Nov.	10,798.1	6,073.4	199.0	191.3	1,300.9	656.5	2,376.9
Dec. ⁴⁾	10,895.8	6,225.5	204.2	184.1	1,316.6	602.5	2,362.9

Source: ECB.

- Liabilities vis-à-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks, are excluded from the reserve base. If a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years and of money market paper held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. This percentage was 10% for calculating the reserve base until November 1999, and 30% thereafter.
- Maintenance periods start on the 24th of the month and run to the 23rd of the following month; the required reserve is calculated from the reserve base as at the end of the preceding month.
- Includes the reserve base of credit institutions in Greece (EUR 134.4 billion in November and 134.6 billion in December 2000, EUR 107.3 billion and EUR 110.3 billion of which qualify for the 2% coefficient respectively). On a transitional basis, credit institutions located in participating Member States could choose to deduct from their own reserve base liabilities to credit institutions in Greece. Starting from the reserve base as at end-January 2001 the standard treatment applies.

2. Reserve maintenance ¹⁾*(EUR billions; interest rates as annual percentages)*

Maintenance period ending in:	Required reserves ²⁾	Actual reserves ³⁾	Excess reserves ⁴⁾	Deficiencies ⁵⁾	Interest rate on minimum reserves ⁶⁾
	1	2	3	4	5
2001 Feb.	120.1	120.6	0.5	0.0	4.76
Mar.	120.4	120.9	0.5	0.0	4.77
Apr.	120.8	121.3	0.5	0.0	4.77
May	124.2	124.8	0.7	0.0	4.71
June	125.0	125.6	0.6	0.0	4.52
July	126.4	127.0	0.6	0.0	4.51
Aug.	127.2	127.7	0.5	0.0	4.50
Sep.	125.3	126.0	0.7	0.0	4.27
Oct.	124.4	125.0	0.6	0.0	3.76
Nov.	126.1	126.6	0.5	0.0	3.62
Dec.	126.4	127.3	0.9	0.0	3.30
2002 Jan.	128.7	130.1	1.4	0.0	3.34
Feb. ⁴⁾	131.7	.	.	.	.

Source: ECB.

- This table contains full data for completed maintenance periods and required reserves for the current maintenance period.
- The amount of reserve requirement of each individual credit institution is first calculated by applying the reserve ratio for the corresponding categories of liabilities to the eligible liabilities, using the balance sheet data as at the end of each calendar month; subsequently, each credit institution deducts from this figure a lump-sum allowance of EUR 100,000. The resulting reserve requirements are then aggregated at the euro area level.
- Aggregate average daily holdings of credit institutions required to hold a positive amount of reserves on their reserve accounts over the maintenance period.
- Average actual reserve holdings over the maintenance period in excess of the required reserves, computed on the basis of those credit institutions that have fulfilled the reserve requirement.
- Average shortfalls of actual reserve holdings from required reserves over the maintenance period, computed on the basis of those credit institutions that have not fulfilled the reserve requirement.
- This rate equals the average, over the maintenance period, of the ECB's rate (weighted according to the number of calendar days) on the Eurosystem's main refinancing operations (see Table 1.3).

Table 1.5
Banking system's liquidity position ¹⁾
(EUR billions; period averages of daily positions)

Maintenance period ending in:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts ⁴⁾	Base money ⁵⁾
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations ²⁾	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) ³⁾		
	Eurosystem's net assets in gold and foreign currency ¹⁾	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations ²⁾							
1	2	3	4	5	6	7	8	9	10	11	12	
2000 Dec.	394.4	210.4	45.0	0.4	0.0	0.2	0.0	360.4	61.1	111.1	117.4	478.0
<i>Euro area enlargement</i>												
2001 Jan.	383.7	205.3	45.0	0.5	0.0	0.6	0.0	368.3	52.2	94.2	119.1	488.0
Feb.	377.9	188.9	49.8	2.6	0.0	0.4	0.0	354.8	57.0	86.3	120.7	476.0
Mar.	375.6	185.2	54.1	0.4	0.0	0.5	0.0	353.0	53.0	87.7	121.0	474.5
Apr.	382.1	172.4	58.4	2.2	0.0	0.5	0.0	354.6	49.5	89.1	121.4	476.4
May	384.4	144.0	59.1	0.4	17.0	0.6	0.0	352.7	39.4	87.5	124.8	478.1
June	385.0	161.7	59.1	0.2	0.0	0.4	0.0	351.1	41.3	87.5	125.7	477.3
July	397.6	161.9	59.9	0.2	0.0	0.4	0.0	350.8	42.5	98.8	127.1	478.3
Aug.	402.1	164.0	60.0	0.1	0.0	0.2	0.0	347.6	48.8	101.8	127.8	475.6
Sep.	401.3	147.1	60.0	0.5	3.5	0.4	0.0	335.4	45.2	105.4	126.1	461.9
Oct.	389.9	136.7	60.0	1.1	0.0	0.1	0.0	325.2	43.6	93.6	125.1	450.4
Nov.	385.0	132.3	60.0	0.2	0.0	0.3	0.0	311.3	46.1	93.1	126.7	438.3
Dec.	383.7	122.5	60.0	0.5	12.4	0.8	0.0	298.0	43.5	109.3	127.4	426.2
2002 Jan. ^(a)	385.2	118.5	60.0	0.4	3.7	0.6	0.0	344.3	38.3	54.2	130.4	475.2

Source: ECB.

- 1) The banking system's liquidity position is defined as the current account holdings in euro of credit institutions in the euro area with the Eurosystem. Amounts are derived from the consolidated financial statement of the Eurosystem.
- 2) Includes monetary policy operations initiated by national central banks in Stage Two and outstanding at the start of Stage Three (excluding outright operations and the issuance of debt certificates).
- 3) Remaining items in the consolidated financial statement of the Eurosystem.
- 4) Equal to the difference between the sum of liquidity-providing factors (items 1 to 5) and the sum of liquidity-absorbing factors (items 6 to 10).
- 5) Calculated as the sum of the deposit facility (item 6), banknotes in circulation (item 8) and credit institutions' current account holdings (item 11).

2 Monetary developments in the euro area

Table 2.1

Aggregated balance sheet of the Eurosystem

(EUR billions (not seasonally adjusted; end of period))

1. Assets

	Loans to euro area residents		General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents			Holdings of shares/other equity issued by euro area residents			External assets ¹⁾	Fixed assets	Re-maining assets	Total				
	1	MFIs ¹⁾			2	3	4	MFIs	General government	Other euro area residents					5	6	7	8	9	10	11	12	13	14	15
1998	225.2	204.6	20.4	0.1	87.8	1.1	86.2	0.5	5.5	1.8	3.7	322.3	7.9	49.4	698.1			
1999 Q4	444.6	424.3	19.7	0.5	89.1	1.9	86.1	1.1	14.1	4.3	9.8	400.6	9.9	56.2	1,014.5			
2000 Q1	443.4	424.5	18.4	0.5	96.2	2.4	92.7	1.1	14.4	4.3	10.1	439.1	9.8	48.9	1,051.9			
Q2	580.7	561.8	18.4	0.5	97.4	2.6	93.6	1.2	14.7	4.4	10.4	454.8	10.0	51.8	1,209.3			
Q3	493.1	474.4	18.2	0.5	98.5	2.9	94.6	1.0	14.6	4.4	10.2	459.1	10.2	54.4	1,129.8			
2000 Dec.	445.0	427.4	17.1	0.5	97.4	2.5	93.6	1.3	15.3	4.3	11.0	380.7	11.2	56.1	1,005.8			
<i>Euro area enlargement</i>																		
2001 1 Jan.	457.0	429.3	27.1	0.6	105.3	2.5	101.4	1.3	15.3	4.3	11.0	394.2	11.3	57.4	1,040.4			
2001 Jan.	401.5	373.7	27.2	0.6	104.5	2.6	100.8	1.0	15.5	4.7	10.8	390.4	11.4	54.0	977.4			
Feb.	398.8	371.0	27.2	0.6	105.2	2.5	101.5	1.2	14.9	4.6	10.3	386.2	11.3	53.7	970.1			
Mar.	401.7	373.9	27.2	0.6	105.0	2.7	101.2	1.1	14.7	4.6	10.1	396.8	11.3	54.4	983.9			
Apr.	376.1	348.3	27.2	0.6	106.5	2.6	102.7	1.3	14.7	4.6	10.1	390.3	11.7	53.6	953.0			
May	398.5	370.7	27.2	0.6	106.4	2.9	102.3	1.3	14.3	4.6	9.7	398.9	11.8	53.2	983.2			
June	426.0	398.2	27.2	0.6	105.8	3.1	101.5	1.2	14.2	4.6	9.6	414.7	11.9	54.5	1,027.2			
July	424.4	396.6	27.2	0.6	106.9	3.3	102.4	1.2	14.3	4.7	9.7	404.9	12.0	57.3	1,019.9			
Aug.	391.1	363.3	27.2	0.6	107.6	3.5	102.9	1.2	14.0	4.6	9.4	396.9	12.0	54.6	976.0			
Sep.	388.2	360.4	27.2	0.6	106.6	3.7	101.9	1.1	13.1	4.8	8.3	397.1	11.9	54.9	971.8			
Oct.	356.7	328.9	27.2	0.6	107.8	3.9	102.8	1.2	13.4	4.8	8.7	400.0	12.0	55.6	945.7			
Nov.	370.0	342.4	27.1	0.6	107.3	3.8	102.2	1.2	13.6	4.7	8.9	400.4	12.1	55.0	958.4			
Dec. ^(p)	412.7	386.4	25.7	0.6	107.0	3.8	101.8	1.3	13.8	4.6	9.2	399.0	12.1	54.4	998.9			

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs ¹⁾	Central government	Other general government/other euro area residents	Money market paper and debt securities issued	Capital and reserves	External liabilities ¹⁾	Remaining liabilities	Total
1998	359.1	152.0	94.2	54.4	3.5	13.8	97.1	18.6	57.4	698.1
1999 Q4	393.4	341.5	279.3	53.4	8.8	7.9	174.3	49.8	47.6	1,014.5
2000 Q1	366.2	372.1	319.8	43.1	9.1	6.3	186.5	75.1	45.7	1,051.9
Q2	374.4	497.9	432.8	52.6	12.5	6.3	193.4	92.0	45.4	1,209.3
Q3	373.5	404.2	346.1	45.6	12.5	4.6	221.2	75.0	51.4	1,129.8
2000 Dec.	390.3	327.3	270.4	47.1	9.8	3.8	197.5	29.9	57.0	1,005.8
<i>Euro area enlargement</i>										
2001 1 Jan.	399.4	346.2	288.0	47.9	10.4	5.6	199.2	30.9	59.1	1,040.4
2001 Jan.	373.2	313.3	250.9	51.5	10.9	5.5	196.8	30.6	58.0	977.4
Feb.	370.6	313.1	249.7	52.0	11.4	5.5	194.8	27.9	58.3	970.1
Mar.	370.6	312.6	253.4	46.8	12.4	5.5	204.6	26.8	63.8	983.9
Apr.	372.6	289.9	234.8	41.2	13.8	5.5	205.6	25.3	54.1	953.0
May	369.6	317.5	266.5	36.0	15.1	5.5	212.1	27.6	50.9	983.2
June	368.9	342.2	274.1	51.8	16.3	5.6	223.7	32.6	54.2	1,027.2
July	366.9	343.5	282.7	46.9	14.0	5.6	214.7	31.9	57.3	1,019.9
Aug.	356.1	320.4	259.2	46.6	14.7	5.6	211.6	28.4	53.9	976.0
Sep.	346.2	323.6	269.4	37.6	16.6	5.5	209.2	30.0	57.3	971.8
Oct.	333.9	302.8	244.7	40.0	18.1	5.5	210.6	34.3	58.5	945.7
Nov.	317.5	330.4	277.5	35.2	17.6	4.7	210.1	35.2	60.6	958.4
Dec. ^(p)	286.1	391.2	342.4	35.1	13.8	4.6	211.6	35.6	69.7	998.9

Source: ECB.

1) Since the end of November 2000, balances arising from the TARGET system are netted by novation on a daily basis. This implies that the bilateral positions of each NCB vis-à-vis the ECB and other NCBs have been replaced by a single net bilateral position vis-à-vis the ECB. For the TARGET gross end-month positions in 1999 and in 2000 (January to October), see the corresponding footnote in the February 2000 and December 2000 issues of the ECB Monthly Bulletin.

Table 2.2

Aggregated balance sheet of the euro area MFIs, excluding the Eurosystem

(EUR billions (not seasonally adjusted; end of period))

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Money market paper	Holdings of shares/other equity issued by euro area residents			External assets	Fixed assets	Remaining assets	Total
	MFI	General government	Other euro area residents		MFI	General government	Other euro area residents			MFI	Other euro area residents					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	9,088.0	3,154.5	822.0	5,111.5	2,021.0	720.8	1,112.0	188.1	107.3	521.0	168.5	352.6	1,591.7	150.6	776.8	14,256.5
1999 Q4	9,779.2	3,413.9	828.3	5,537.0	2,179.3	828.8	1,123.7	226.7	129.9	650.6	211.5	439.1	1,719.4	154.0	919.3	15,531.7
2000 Q1	10,020.5	3,511.1	821.4	5,688.1	2,225.3	869.5	1,128.0	227.8	131.9	729.6	230.2	499.4	1,822.5	152.0	977.5	16,059.2
Q2	10,125.0	3,461.9	817.3	5,845.8	2,211.1	894.9	1,073.2	243.0	151.4	704.0	210.0	494.0	1,892.1	154.2	1,023.3	16,261.1
Q3	10,233.9	3,456.0	799.8	5,978.0	2,231.5	940.5	1,033.8	257.2	142.0	707.6	204.1	503.6	2,003.5	155.8	1,035.0	16,509.4
2000 Dec.	10,419.3	3,510.3	818.7	6,090.2	2,192.4	932.7	995.8	263.8	142.8	750.9	240.1	510.7	2,025.7	158.7	1,015.3	16,705.0
<i>Euro area enlargement</i>																
2001 1 Jan.	10,527.3	3,547.2	826.8	6,153.4	2,254.9	934.1	1,054.6	266.3	142.8	762.2	242.8	519.5	2,008.5	161.6	1,039.5	16,896.9
2001 Jan.	10,598.7	3,583.4	830.9	6,184.4	2,249.7	935.3	1,044.8	269.5	152.4	779.2	247.2	532.0	2,072.5	160.4	1,066.9	17,079.7
Feb.	10,668.2	3,639.9	822.7	6,205.6	2,287.3	954.3	1,054.7	278.4	154.5	788.0	248.5	539.5	2,097.2	161.0	1,054.6	17,210.9
Mar.	10,805.1	3,707.2	825.3	6,272.5	2,318.9	968.4	1,064.0	286.5	158.1	812.1	255.3	556.9	2,240.1	160.8	1,097.1	17,592.2
Apr.	10,775.5	3,646.5	817.2	6,311.8	2,336.6	975.4	1,068.7	292.6	163.0	836.0	259.3	576.7	2,223.5	161.5	1,110.8	17,607.0
May	10,799.5	3,655.3	812.1	6,332.1	2,379.0	991.2	1,089.0	298.8	163.4	835.9	258.4	577.5	2,275.8	162.8	1,131.7	17,748.1
June	10,886.2	3,691.0	809.4	6,385.9	2,393.8	990.3	1,103.7	299.8	166.6	799.1	251.3	547.9	2,287.8	163.5	1,128.3	17,825.3
July	10,845.7	3,647.1	806.6	6,392.0	2,414.7	1,003.8	1,098.0	312.9	171.5	795.0	252.4	542.5	2,210.9	164.6	1,073.8	17,676.0
Aug.	10,820.8	3,651.0	802.5	6,367.4	2,413.2	1,002.9	1,088.9	321.4	165.4	783.2	247.5	535.7	2,223.5	164.9	1,064.9	17,635.9
Sep.	10,945.6	3,722.4	803.6	6,419.6	2,414.0	996.1	1,092.4	325.6	165.2	771.5	245.1	526.4	2,295.6	165.7	1,115.8	17,873.4
Oct.	10,969.4	3,719.1	801.0	6,449.3	2,415.5	1,004.2	1,083.0	328.2	167.1	778.9	244.0	534.9	2,338.9	166.3	1,147.2	17,983.2
Nov.	11,110.7	3,793.6	816.2	6,500.9	2,428.9	1,009.5	1,087.9	331.4	158.8	782.3	246.8	535.5	2,424.5	167.1	1,137.5	18,209.7
Dec. ^(p)	11,135.8	3,799.1	820.0	6,516.7	2,421.3	1,008.3	1,077.0	335.9	154.8	809.6	248.5	561.1	2,403.3	168.1	1,156.8	18,249.7

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs				Other general government/other euro area residents				Money market fund shares/units ¹⁾	Money market paper and debt securities issued ¹⁾	Capital and reserves	External liabilities	Remaining liabilities	Total
			MFI	Central government	Other general government/other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1998	0.4	8,286.4	3,305.2	95.4	4,885.8	1,387.1	1,929.0	1,393.2	176.5	241.4	2,261.3	754.6	1,507.0	1,205.2	14,256.5	
1999 Q4	0.7	8,735.0	3,590.6	88.6	5,055.8	1,537.4	2,043.1	1,331.4	143.9	293.4	2,531.0	849.2	1,870.2	1,252.3	15,531.7	
2000 Q1	0.7	8,809.3	3,612.4	87.0	5,109.9	1,568.0	2,052.6	1,312.0	177.3	325.1	2,589.9	890.7	2,099.0	1,344.6	16,059.2	
Q2	0.6	8,849.4	3,620.7	93.3	5,135.4	1,596.2	2,080.7	1,291.3	167.3	344.7	2,652.2	898.5	2,120.2	1,395.5	16,261.1	
Q3	0.0	8,858.0	3,595.0	113.7	5,149.4	1,577.0	2,128.7	1,272.3	171.4	334.8	2,720.3	913.5	2,294.7	1,388.0	16,509.4	
2000 Dec.	0.0	9,056.8	3,679.2	117.4	5,260.2	1,648.8	2,159.7	1,276.8	174.9	323.3	2,712.9	941.5	2,299.3	1,371.2	16,705.0	
<i>Euro area enlargement</i>																
2001 1 Jan.	0.0	9,203.5	3,700.5	118.3	5,384.7	1,663.3	2,198.0	1,328.2	195.2	323.3	2,657.2	960.0	2,301.0	1,396.1	16,896.9	
2001 Jan.	0.0	9,191.4	3,727.3	95.6	5,368.4	1,613.2	2,211.7	1,329.7	213.8	337.1	2,756.6	964.1	2,414.9	1,415.6	17,079.7	
Feb.	0.0	9,222.5	3,742.1	103.6	5,376.8	1,614.5	2,223.1	1,323.4	215.8	346.9	2,791.6	969.7	2,447.2	1,432.9	17,210.9	
Mar.	0.0	9,324.9	3,806.1	103.6	5,415.2	1,623.9	2,242.6	1,322.8	225.9	358.8	2,817.3	982.4	2,636.0	1,472.8	17,592.2	
Apr.	0.0	9,302.4	3,747.8	111.3	5,443.3	1,653.5	2,241.2	1,323.8	224.9	367.0	2,829.9	986.4	2,650.8	1,470.4	17,607.0	
May	0.0	9,336.8	3,746.3	110.9	5,479.6	1,677.0	2,242.9	1,322.4	237.3	378.2	2,845.5	990.9	2,727.1	1,469.6	17,748.1	
June	0.0	9,423.6	3,798.3	113.7	5,511.6	1,715.8	2,240.6	1,330.7	224.5	382.2	2,861.2	998.2	2,710.4	1,449.9	17,825.3	
July	0.0	9,364.8	3,755.3	108.7	5,500.8	1,699.0	2,241.9	1,333.5	226.4	393.6	2,872.3	997.7	2,610.3	1,437.3	17,676.0	
Aug.	0.0	9,344.5	3,746.4	105.8	5,492.2	1,666.9	2,254.2	1,337.2	233.9	405.1	2,859.6	1,000.5	2,591.0	1,435.3	17,635.9	
Sep.	0.0	9,484.2	3,832.0	110.2	5,541.9	1,733.6	2,237.5	1,342.5	228.2	410.4	2,874.2	1,011.3	2,609.4	1,483.9	17,873.4	
Oct.	0.0	9,484.3	3,808.8	113.2	5,562.3	1,732.4	2,241.1	1,351.8	236.9	423.6	2,899.2	1,019.5	2,626.6	1,530.0	17,983.2	
Nov.	0.0	9,601.3	3,868.8	115.1	5,617.4	1,780.8	2,242.1	1,365.0	229.5	434.6	2,887.1	1,024.1	2,691.0	1,571.6	18,209.7	
Dec. ^(p)	0.0	9,709.3	3,840.1	104.2	5,765.0	1,879.4	2,262.0	1,404.3	219.4	433.0	2,883.6	1,037.4	2,679.2	1,507.3	18,249.7	

Source: ECB.

1) Amounts held by residents of the euro area. Amounts held by non-residents of the euro area are included in external liabilities.

Table 2.3

Consolidated balance sheet of the euro area MFIs, including the Eurosystem

(EUR billions (not seasonally adjusted; end of period))

1. Assets: levels

	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	Total
	1	General government	Other euro area residents	4	General government	Other euro area residents					
2000 June	6,681.9	835.6	5,846.3	1,411.0	1,166.8	244.2	504.4	2,346.9	164.2	1,041.3	12,149.6
July	6,708.5	833.9	5,874.6	1,393.1	1,140.7	252.4	509.0	2,374.1	164.9	1,086.5	12,236.1
Aug.	6,715.1	822.0	5,893.1	1,385.2	1,128.6	256.6	510.7	2,419.6	165.2	1,127.2	12,323.1
Sep.	6,796.6	818.1	5,978.5	1,386.6	1,128.4	258.2	513.8	2,462.5	166.0	1,054.9	12,380.3
Oct.	6,841.4	820.0	6,021.4	1,379.8	1,115.5	264.3	514.0	2,515.0	168.0	1,119.0	12,537.3
Nov.	6,883.7	827.0	6,056.7	1,375.9	1,112.2	263.7	515.8	2,487.9	167.7	1,068.0	12,499.1
Dec.	6,926.6	835.9	6,090.7	1,354.6	1,089.4	265.1	521.7	2,406.4	169.9	1,028.8	12,408.0
<i>Euro area enlargement</i>											
2001 1 Jan.	7,007.9	853.9	6,154.0	1,423.6	1,156.0	267.6	530.4	2,402.7	172.9	1,008.9	12,533.7
2001 Jan.	7,043.1	858.1	6,185.0	1,416.2	1,145.6	270.6	542.8	2,462.9	171.8	1,083.0	12,719.8
Feb.	7,056.1	849.9	6,206.2	1,435.7	1,156.1	279.6	549.8	2,483.5	172.3	1,072.0	12,769.3
Mar.	7,125.7	852.6	6,273.1	1,452.7	1,165.2	287.6	567.0	2,636.9	172.0	1,116.5	13,070.9
Apr.	7,156.8	844.4	6,312.4	1,465.2	1,171.4	293.8	586.8	2,613.8	173.3	1,127.3	13,123.1
May	7,172.0	839.3	6,332.7	1,491.4	1,191.3	300.1	587.2	2,674.7	174.6	1,147.5	13,247.5
June	7,223.1	836.6	6,386.5	1,506.3	1,205.2	301.0	557.4	2,702.5	175.4	1,146.2	13,310.9
July	7,226.4	833.8	6,392.6	1,514.5	1,200.4	314.1	552.2	2,615.8	176.5	1,091.4	13,176.9
Aug.	7,197.7	829.7	6,368.0	1,514.4	1,191.8	322.6	545.1	2,620.3	176.9	1,081.8	13,136.1
Sep.	7,251.0	830.8	6,420.2	1,520.9	1,194.2	326.6	534.7	2,692.8	177.6	1,133.4	13,310.4
Oct.	7,278.1	828.2	6,449.9	1,515.2	1,185.8	329.4	543.5	2,739.0	178.3	1,163.6	13,417.7
Nov.	7,344.8	843.3	6,501.5	1,522.8	1,190.1	332.6	544.5	2,824.9	179.1	1,154.0	13,570.1
Dec. ^(p)	7,363.0	845.7	6,517.3	1,516.2	1,178.9	337.3	570.2	2,802.3	180.2	1,165.3	13,597.9

2. Liabilities: levels

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Deposits of other general government/ other euro area residents				Money market fund shares/ units ³⁾	Money market paper and debt securities issued ³⁾	Capital and reserves	External liabilities ²⁾	Re-maining liabilities	Excess of inter-MFI liabilities	Total
				Over-night	With agreed maturity	Redeem-able at notice	Repur- chase agree- ments							
2000 June	341.2	146.0	5,147.9	1,608.7	2,080.7	1,291.3	167.3	319.2	1,634.8	877.6	2,212.2	1,440.9	29.7	12,149.6
July	343.1	134.6	5,150.3	1,605.0	2,088.6	1,284.6	172.0	316.8	1,639.7	893.9	2,256.0	1,475.9	25.9	12,236.1
Aug.	338.0	140.5	5,149.0	1,577.6	2,122.4	1,279.6	169.4	320.4	1,658.0	898.2	2,310.0	1,500.2	8.8	12,323.1
Sep.	339.0	159.2	5,161.8	1,589.5	2,128.7	1,272.3	171.4	310.5	1,663.8	926.3	2,369.7	1,439.4	10.7	12,380.3
Oct.	336.8	172.4	5,165.9	1,590.7	2,141.1	1,263.5	170.6	313.5	1,684.4	932.8	2,437.2	1,481.7	12.5	12,537.3
Nov.	336.9	168.7	5,187.2	1,608.9	2,148.6	1,256.2	173.5	319.8	1,668.5	920.7	2,419.8	1,477.0	0.4	12,499.1
Dec.	347.6	164.5	5,270.0	1,658.6	2,159.7	1,276.8	174.9	300.1	1,661.9	894.5	2,329.3	1,428.2	11.9	12,408.0
<i>Euro area enlargement</i>														
2001 1 Jan.	355.3	166.2	5,395.1	1,673.3	2,198.4	1,328.2	195.2	300.1	1,663.7	912.1	2,219.4	1,455.2	12.1	12,533.7
2001 Jan.	335.3	147.1	5,379.3	1,623.7	2,212.1	1,329.7	213.8	313.2	1,695.6	909.0	2,445.5	1,473.6	21.1	12,719.8
Feb.	334.3	155.6	5,388.2	1,625.5	2,223.5	1,323.4	215.8	322.3	1,710.4	911.3	2,475.1	1,491.2	-19.2	12,769.3
Mar.	335.5	150.3	5,427.6	1,636.0	2,242.9	1,322.8	225.9	333.2	1,719.2	927.1	2,662.8	1,536.7	-21.6	13,070.9
Apr.	335.4	152.5	5,457.1	1,666.9	2,241.6	1,323.8	224.9	341.8	1,719.7	928.1	2,676.2	1,524.4	-12.2	13,123.1
May	332.1	146.9	5,494.7	1,691.7	2,243.2	1,322.4	237.3	351.3	1,720.5	940.0	2,754.7	1,520.4	-13.2	13,247.5
June	332.2	165.5	5,527.9	1,731.7	2,241.0	1,330.7	224.5	349.3	1,739.6	966.0	2,743.0	1,504.1	-16.8	13,310.9
July	327.3	155.5	5,514.8	1,712.6	2,242.3	1,333.5	226.4	358.4	1,734.5	955.3	2,642.1	1,494.6	-5.7	13,176.9
Aug.	318.5	152.4	5,506.8	1,681.2	2,254.6	1,337.2	233.9	369.9	1,728.6	960.0	2,619.4	1,489.2	-8.6	13,136.1
Sep.	308.9	147.8	5,558.5	1,749.9	2,237.9	1,342.5	228.2	374.4	1,750.9	970.6	2,639.4	1,541.2	18.7	13,310.4
Oct.	294.7	153.3	5,580.4	1,750.2	2,241.5	1,351.8	236.9	386.4	1,766.7	981.4	2,660.9	1,588.5	5.4	13,417.7
Nov.	279.0	150.2	5,635.1	1,798.1	2,242.5	1,365.0	229.5	395.2	1,758.9	982.8	2,726.2	1,632.2	10.4	13,570.1
Dec. ^(p)	240.2	139.3	5,778.8	1,892.8	2,262.3	1,404.3	219.4	393.6	1,760.7	995.7	2,714.9	1,577.0	-3.1	13,597.9

Source: ECB.

1) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

2) See Table 2.1, footnote 1.

3) Amounts held by residents of the euro area. Amounts held by non-residents of the euro area are included in external liabilities.

3. Assets: flows ¹⁾

	Loans to euro area residents		Other euro area residents	Holdings of securities other than shares issued by euro area residents		Other euro area residents	Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	Total
	General government			General government							
	1	2	3	4	5	6	7	8	9	10	11
2000 July	22.2	-1.3	23.5	-18.9	-26.2	7.3	3.1	-3.5	0.7	44.9	48.6
Aug.	7.1	-8.6	15.7	-7.1	-10.5	3.5	1.0	4.1	0.3	40.5	45.9
Sep.	66.9	-4.1	71.0	-0.2	-3.5	3.3	2.4	17.6	0.7	-73.2	14.2
Oct.	40.6	1.9	38.6	-10.2	-17.0	6.8	1.6	10.1	3.2	64.3	109.5
Nov.	49.2	7.2	42.1	-6.3	-5.3	-1.0	0.5	8.0	-0.3	-51.0	0.1
Dec.	60.9	9.8	51.1	-15.6	-19.0	3.4	4.8	6.9	1.2	-29.4	28.9
<i>Euro area enlargement</i>											
2001 Jan.	34.5	2.9	31.6	-12.2	-15.7	3.4	12.5	60.4	-1.0	29.5	123.7
Feb.	14.0	-8.2	22.2	13.4	4.5	8.9	7.4	16.3	0.5	-11.9	39.7
Mar.	61.8	2.3	59.4	11.9	4.2	7.7	17.2	102.7	0.1	46.0	239.7
Apr.	33.2	-8.2	41.4	12.5	6.7	5.8	18.4	-18.5	1.2	9.9	56.8
May	5.1	-5.6	10.7	25.8	21.3	4.5	1.0	4.6	1.4	18.7	56.5
June	57.0	-2.6	59.6	14.3	13.7	0.7	-32.6	26.5	0.9	-1.4	64.7
July	12.2	-2.5	14.6	9.6	-3.2	12.8	-8.5	-45.3	1.1	-50.5	-81.4
Aug.	-19.4	-3.7	-15.6	4.5	-4.4	8.9	-6.0	52.3	0.3	-10.6	21.1
Sep.	49.1	1.0	48.0	-1.1	-4.4	3.3	-4.9	50.8	0.7	51.9	146.5
Oct.	25.7	-2.7	28.4	-6.7	-9.6	2.9	5.4	45.3	0.7	30.2	100.7
Nov.	65.8	15.0	50.7	10.0	7.9	2.1	-3.3	66.0	1.1	6.7	146.5
Dec. ^(p)	24.0	2.4	21.6	-5.2	-7.4	2.2	25.2	-24.1	1.0	9.9	31.6

4. Liabilities: flows ¹⁾

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units ²⁾	Money market paper and debt securities issued ³⁾	Capital and reserves	External liabilities ²⁾	Re-maining liabilities	Excess of inter-MFI liabilities	Total
2000 July	1.9	-11.3	-1.3	-5.0	5.0	-6.1	4.7	-3.0	2.5	15.4	13.1	37.8	-6.5	48.6
Aug.	-5.1	5.8	-5.8	-29.4	31.4	-5.1	-2.7	3.3	10.7	4.9	15.2	31.8	-15.1	45.9
Sep.	1.0	18.8	6.8	10.8	1.3	-7.4	2.0	-8.9	0.4	18.8	44.0	-66.2	-0.5	14.2
Oct.	-2.2	13.2	-1.3	-0.8	9.2	-8.8	-0.8	2.5	12.8	5.0	24.9	45.0	9.6	109.5
Nov.	0.1	-3.6	25.9	20.0	10.1	-7.2	3.0	6.1	-8.6	-11.9	17.5	-12.2	-13.2	0.1
Dec.	10.7	-4.3	96.0	53.6	20.0	20.9	1.5	-9.4	-3.1	-21.9	-11.7	-32.9	5.4	28.9
<i>Euro area enlargement</i>														
2001 Jan.	-20.1	-19.0	-15.3	-49.3	13.9	1.5	18.6	14.6	27.5	-4.3	115.6	18.0	6.6	123.7
Feb.	-1.0	8.7	8.3	1.5	11.2	-6.3	1.9	9.3	14.2	2.8	25.9	11.3	-39.8	39.7
Mar.	1.3	-5.2	33.2	8.5	15.3	-0.8	10.1	12.4	4.3	16.6	139.9	45.3	-8.2	239.7
Apr.	-0.1	2.2	29.8	30.8	-1.0	1.1	-1.1	9.3	-2.7	1.3	18.3	-11.7	10.3	56.8
May	-3.3	-5.6	29.7	21.9	-3.0	-1.7	12.4	10.4	-11.6	8.7	19.4	10.2	-1.3	56.5
June	0.1	18.6	34.3	40.3	-1.5	8.3	-12.8	-0.9	20.7	19.0	-7.3	-17.6	-2.3	64.7
July	-5.0	-10.0	-8.6	-17.6	4.1	3.0	1.9	9.5	0.8	-6.7	-62.4	-10.5	11.5	-81.4
Aug.	-8.8	-3.1	-2.4	-29.7	16.0	3.9	7.5	10.8	1.1	6.9	25.7	-6.2	-2.9	21.1
Sep.	-9.6	-4.6	51.1	68.5	-17.1	5.3	-5.6	4.1	15.6	9.8	20.2	40.8	19.1	146.5
Oct.	-14.1	5.4	21.9	0.9	2.9	9.2	8.9	12.4	14.8	7.6	18.6	45.9	-11.8	100.7
Nov.	-15.7	-3.0	52.7	47.2	-0.3	13.1	-7.4	10.1	23.5	2.5	38.5	33.2	4.6	146.5
Dec. ^(p)	-38.8	-11.0	143.9	95.0	19.8	39.3	-10.1	0.3	2.0	13.8	-16.1	-49.2	-14.0	31.6

Table 2.4
Monetary aggregates ¹⁾ and counterparts
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
1. Monetary aggregates: levels at the end of the period

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index Dec. 98=100 ³⁾
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Index Dec. 98=100 ³⁾				
			3	4	5	6	7	8
2000 June	341.2	1,674.1	2,015.3	112.85	916.4	1,244.6	4,176.3	106.29
July	343.1	1,672.3	2,015.4	112.77	924.0	1,236.8	4,176.2	106.21
Aug.	338.0	1,643.0	1,981.0	110.74	956.5	1,230.4	4,167.9	105.91
Sep.	339.0	1,654.4	1,993.4	111.38	961.5	1,220.3	4,175.3	106.04
Oct.	336.8	1,656.8	1,993.6	111.28	973.1	1,211.1	4,177.7	105.99
Nov.	336.9	1,675.2	2,012.1	112.41	986.3	1,202.0	4,200.4	106.66
Dec.	347.6	1,728.7	2,076.3	116.22	991.8	1,221.0	4,289.1	109.16
<i>Euro area enlargement</i>								
2001 1 Jan.	355.3	1,743.4	2,098.7	-	1,028.6	1,271.1	4,398.5	-
2001 Jan.	335.3	1,692.7	2,028.0	112.31	1,042.1	1,275.0	4,345.1	107.85
Feb.	334.3	1,692.9	2,027.2	112.25	1,054.6	1,269.6	4,351.4	107.99
Mar.	335.5	1,703.1	2,038.6	112.78	1,070.7	1,269.7	4,379.0	108.57
Apr.	335.4	1,735.8	2,071.2	114.58	1,072.0	1,273.3	4,416.6	109.50
May	332.1	1,759.1	2,091.2	115.52	1,072.9	1,273.1	4,437.2	109.83
June	332.2	1,798.3	2,130.5	117.71	1,070.3	1,282.9	4,483.7	111.01
July	327.3	1,780.2	2,107.5	116.52	1,077.2	1,287.1	4,471.8	110.81
Aug.	318.5	1,747.4	2,065.9	114.32	1,092.7	1,292.8	4,451.4	110.41
Sep.	308.9	1,815.1	2,123.9	117.52	1,075.2	1,299.6	4,498.7	111.57
Oct.	294.7	1,816.1	2,110.8	116.82	1,078.9	1,311.5	4,501.1	111.64
Nov.	279.0	1,864.6	2,143.6	118.60	1,081.0	1,326.4	4,551.0	112.83
Dec. ^(p)	240.2	1,963.6	2,203.8	121.95	1,094.3	1,367.2	4,665.3	115.67

2. Monetary aggregates: flows ⁴⁾

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual growth rate ³⁾ (%)
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Annual growth rate ³⁾ (%)				
			3	4	5	6	7	8
2000 July	1.9	-3.2	-1.3	6.9	5.8	-7.5	-3.0	3.7
Aug.	-5.1	-31.1	-36.3	7.1	30.9	-6.5	-11.9	4.3
Sep.	1.0	10.3	11.4	6.2	3.9	-10.1	5.1	4.2
Oct.	-2.2	0.4	-1.8	5.8	9.3	-9.3	-1.9	3.7
Nov.	0.1	20.2	20.4	5.0	15.1	-9.0	26.5	3.8
Dec.	10.7	57.4	68.1	5.7	11.0	19.3	98.4	3.7
<i>Euro area enlargement</i>								
2001 Jan.	-20.1	-50.5	-70.5	1.6	13.7	3.9	-52.9	2.6
Feb.	-1.0	-0.1	-1.1	2.1	12.3	-5.4	5.8	2.9
Mar.	1.3	8.3	9.5	2.0	13.7	-0.1	23.2	3.2
Apr.	-0.1	32.6	32.5	1.6	1.6	3.7	37.8	3.2
May	-3.3	20.4	17.1	3.2	-3.3	-0.5	13.3	3.6
June	0.1	39.5	39.6	4.3	-1.9	9.8	47.5	4.4
July	-5.0	-16.5	-21.5	3.3	8.9	4.4	-8.3	4.3
Aug.	-8.8	-31.1	-39.9	3.2	18.1	5.9	-15.9	4.3
Sep.	-9.6	67.4	57.8	5.5	-17.8	6.8	46.8	5.2
Oct.	-14.1	1.6	-12.6	5.0	3.2	11.8	2.5	5.3
Nov.	-15.7	47.9	32.2	5.5	1.2	14.8	48.2	5.8
Dec. ^(p)	-38.8	99.2	60.4	4.9	13.3	40.8	114.6	6.0

Source: ECB.

1) Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.

2) M3 and its components exclude holdings by non-residents of the euro area of money market fund shares/units, money market paper and debt securities up to 2 years.

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total	Index Dec. 98=100 ³⁾		
9	10	11	12	13		
167.3	319.2	131.5	4,794.4	107.44		2000 June
172.0	316.8	127.2	4,792.2	107.38		July
169.4	320.4	129.8	4,787.5	107.18		Aug.
171.4	310.5	128.9	4,786.1	107.10		Sep.
170.6	313.5	131.7	4,793.6	107.16		Oct.
173.5	319.8	126.7	4,820.5	107.85		Nov.
174.9	300.1	134.9	4,898.9	109.96		Dec.
<i>Euro area enlargement</i>						
195.2	300.1	135.0	5,028.8	-		2001 1 Jan.
213.8	313.2	137.9	5,010.0	109.59		2001 Jan.
215.8	322.3	144.3	5,033.8	110.10		Feb.
225.9	333.2	139.0	5,077.2	110.96		Mar.
224.9	341.8	139.5	5,122.8	111.93		Apr.
237.3	351.3	133.5	5,159.3	112.55		May
224.5	349.3	144.3	5,201.8	113.50		June
226.4	358.4	139.4	5,196.0	113.46		July
233.9	369.9	141.1	5,196.2	113.57		Aug.
228.2	374.4	145.8	5,247.1	114.53		Sep.
236.9	386.4	149.8	5,274.3	115.11		Oct.
229.5	395.2	151.7	5,327.5	116.31		Nov.
219.4	393.6	146.7	5,425.0	118.45		Dec. ^(p)
<i>Euro area enlargement</i>						
18.6	14.6	2.8	-16.9	3.6		2001 Jan.
1.9	9.3	6.2	23.2	3.8		Feb.
10.1	12.4	-6.6	39.2	4.0		Mar.
-1.1	9.3	-1.8	44.3	4.0		Apr.
12.4	10.4	-7.7	28.4	4.5		May
-12.8	-0.9	9.7	43.6	5.6		June
1.9	9.5	-4.7	-1.6	5.7		July
7.5	10.8	2.6	5.1	6.0		Aug.
-5.6	4.1	-1.3	44.0	6.9		Sep.
8.9	12.4	2.7	26.5	7.4		Oct.
-7.4	10.1	4.2	55.1	7.8		Nov.
-10.1	0.3	-6.7	98.0	7.7		Dec. ^(p)

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total	Annual growth rate ³⁾ (%)		
9	10	11	12	13		
4.7	-3.0	-1.5	-2.8	4.3		2000 July
-2.7	3.3	2.6	-8.8	4.7		Aug.
2.0	-8.9	-2.0	-3.8	4.4		Sep.
-0.8	2.5	2.9	2.7	4.2		Oct.
3.0	6.1	-4.5	31.1	3.9		Nov.
1.5	-9.4	3.7	94.2	4.2		Dec.
<i>Euro area enlargement</i>						
18.6	14.6	2.8	-16.9	3.6		2001 Jan.
1.9	9.3	6.2	23.2	3.8		Feb.
10.1	12.4	-6.6	39.2	4.0		Mar.
-1.1	9.3	-1.8	44.3	4.0		Apr.
12.4	10.4	-7.7	28.4	4.5		May
-12.8	-0.9	9.7	43.6	5.6		June
1.9	9.5	-4.7	-1.6	5.7		July
7.5	10.8	2.6	5.1	6.0		Aug.
-5.6	4.1	-1.3	44.0	6.9		Sep.
8.9	12.4	2.7	26.5	7.4		Oct.
-7.4	10.1	4.2	55.1	7.8		Nov.
-10.1	0.3	-6.7	98.0	7.7		Dec. ^(p)

3) For the calculations of the index and the growth rates, see the technical notes.

4) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.4 (cont'd)
Monetary aggregates ¹⁾ and counterparts
(EUR billions and percentage growth rates, unless otherwise indicated)
3. Seasonally adjusted levels at the end of the period

	M2								Index Dec. 98=100 ⁴⁾
	M1				Other short-term deposits ⁵⁾			Total	
	Currency in circulation 1	Overnight deposits 2	Total 3	Index Dec. 98=100 ⁴⁾	Total 5	Index Dec. 98=100 ⁴⁾	Index Dec. 98=100 ⁴⁾		
								4		6	7
2000 June	338.7	1,647.6	1,986.3	111.22	2,169.2	101.20	4,155.4	105.76	
July	338.9	1,661.3	2,000.2	111.92	2,171.2	101.22	4,171.4	106.09	
Aug.	339.2	1,676.2	2,015.5	112.67	2,185.8	101.82	4,201.2	106.76	
Sep.	339.5	1,670.8	2,010.4	112.33	2,194.9	102.19	4,205.3	106.80	
Oct.	339.8	1,677.3	2,017.1	112.59	2,200.2	102.33	4,217.3	107.00	
Nov.	337.8	1,679.5	2,017.3	112.70	2,209.9	102.87	4,227.3	107.34	
Dec.	337.1	1,677.1	2,014.2	112.74	2,198.9	102.63	4,213.1	107.23	
<i>Euro area enlargement</i>									
2001 1 Jan.	342.3	1,692.5	2,034.8	-	2,285.6	-	4,320.3	-	
2001 Jan.	341.0	1,688.4	2,029.4	112.39	2,295.7	103.11	4,325.1	107.35	
Feb.	340.0	1,709.5	2,049.5	113.49	2,310.5	103.76	4,360.1	108.21	
Mar.	337.5	1,714.6	2,052.1	113.52	2,329.7	104.51	4,381.9	108.64	
Apr.	336.2	1,725.4	2,061.5	114.04	2,340.0	104.98	4,401.5	109.13	
May	332.4	1,753.4	2,085.8	115.22	2,345.6	105.04	4,431.4	109.69	
June	329.7	1,762.9	2,092.6	115.62	2,361.4	105.78	4,454.0	110.27	
July	324.4	1,772.7	2,097.1	115.95	2,374.1	106.44	4,471.3	110.79	
Aug.	318.0	1,792.8	2,110.8	116.80	2,378.6	106.77	4,489.4	111.35	
Sep.	309.1	1,822.5	2,131.5	117.94	2,392.2	107.37	4,523.7	112.19	
Oct.	296.9	1,842.6	2,139.5	118.41	2,406.2	107.97	4,545.7	112.74	
Nov.	278.3	1,881.6	2,159.9	119.50	2,425.7	108.80	4,585.6	113.69	
Dec. ⁶⁾	234.0	1,905.1	2,139.1	118.37	2,451.6	109.96	4,590.7	113.82	

4. Seasonally adjusted flows ⁷⁾

	M2										
	M1					Other short-term deposits ⁵⁾			Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)
	Currency in circulation 1	Overnight deposits 2	Total 3	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	Total 6	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)			
									4	5	7	8	9	10	11
2000 July	0.2	12.4	12.6	0.6	6.5	0.5	0.0	1.2	13.1	0.3	3.7
Aug.	0.3	13.0	13.3	0.7	7.2	12.9	0.6	1.8	26.2	0.6	4.3
Sep.	0.3	-6.5	-6.2	-0.3	6.3	7.9	0.4	2.2	1.8	0.0	4.1
Oct.	0.3	4.4	4.7	0.2	6.0	2.9	0.1	2.0	7.6	0.2	3.9
Nov.	-2.0	4.1	2.1	0.1	5.3	11.7	0.5	2.5	13.8	0.3	3.8
Dec.	-0.7	1.4	0.7	0.0	5.1	-5.3	-0.2	2.1	-4.6	-0.1	3.5
<i>Euro area enlargement</i>											
2001 Jan.	-4.0	-3.1	-7.1	-0.3	2.2	10.9	0.5	3.5	3.8	0.1	2.9
Feb.	-1.0	20.8	19.9	1.0	2.3	14.6	0.6	3.5	34.5	0.8	2.9
Mar.	-2.5	3.2	0.6	0.0	1.6	16.7	0.7	4.3	17.4	0.4	3.0
Apr.	-1.4	10.7	9.3	0.5	1.4	10.5	0.4	4.8	19.8	0.5	3.2
May	-3.8	25.2	21.4	1.0	2.9	1.3	0.1	4.0	22.7	0.5	3.5
June	-2.7	9.8	7.1	0.3	4.0	16.4	0.7	4.5	23.6	0.5	4.3
July	-5.3	11.4	6.1	0.3	3.6	14.9	0.6	5.2	21.0	0.5	4.4
Aug.	-6.4	21.8	15.4	0.7	3.7	7.3	0.3	4.9	22.6	0.5	4.3
Sep.	-9.0	29.5	20.6	1.0	5.0	13.3	0.6	5.1	33.9	0.8	5.0
Oct.	-12.2	20.7	8.5	0.4	5.2	13.5	0.6	5.5	22.0	0.5	5.4
Nov.	-18.6	38.3	19.7	0.9	6.0	18.5	0.8	5.8	38.2	0.8	5.9
Dec. ⁶⁾	-44.3	23.8	-20.5	-0.9	5.0	25.9	1.1	7.1	5.4	0.1	6.1

Source: ECB.

- 1) Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.
- 2) M3 and its components exclude holdings by non-residents of the euro area of money market fund shares/units, money market paper and debt securities up to 2 years.
- 3) Loans, with other components of credit, are shown without seasonal adjustment on page 20*.
- 4) For the calculations of the index and the growth rates, see the technical notes.

M3 ²⁾				Loans to other euro area residents (excluding government) ³⁾		
Marketable instruments ⁶⁾		Total	Index Dec. 98=100 ⁴⁾	Total	Index Dec. 98=100 ⁴⁾	
Total	Index Dec. 98=100 ⁴⁾					
9	10	11	12	13	14	
613.1	115.47	4,768.5	106.86	5,823.3	114.76	2000 June
616.5	116.54	4,787.9	107.28	5,858.5	115.36	July
617.5	116.65	4,818.8	107.88	5,917.8	116.47	Aug.
617.4	116.59	4,822.7	107.92	5,991.1	117.63	Sep.
626.0	118.14	4,843.3	108.27	6,035.7	118.42	Oct.
626.2	118.27	4,853.5	108.59	6,067.5	119.18	Nov.
637.3	121.53	4,850.4	108.87	6,075.3	119.66	Dec.
<i>Euro area enlargement</i>						
657.8	-	4,978.1	-	6,130.0	-	2001 1 Jan.
673.9	124.63	4,999.1	109.35	6,179.7	120.48	2001 Jan.
676.0	125.01	5,036.1	110.15	6,212.7	121.14	Feb.
683.8	126.49	5,065.7	110.71	6,263.5	121.99	Mar.
689.6	127.30	5,091.1	111.23	6,303.8	122.81	Apr.
701.1	129.25	5,132.6	111.96	6,340.7	123.34	May
712.8	131.41	5,166.8	112.73	6,361.2	123.86	June
725.3	133.83	5,196.6	113.47	6,377.1	124.33	July
742.1	137.00	5,231.5	114.34	6,395.7	124.87	Aug.
757.3	138.60	5,281.0	115.28	6,432.2	125.50	Sep.
786.2	143.76	5,331.9	116.37	6,465.1	126.12	Oct.
785.6	144.29	5,371.2	117.27	6,512.4	127.02	Nov.
794.4	145.96	5,385.1	117.58	6,502.2	126.94	Dec. ⁶⁾

M3 ²⁾							Loans to other euro area residents (excluding government) ³⁾			
Marketable instruments ⁶⁾			Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	3-month moving average (centred) (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	
Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)								
12	13	14	15	16	17	18	19	20	21	
5.7	0.9	8.5	18.7	0.4	4.3	4.5	35.0	0.5	9.1	2000 July
0.6	0.1	7.3	26.8	0.6	4.7	4.5	59.1	1.0	9.5	Aug.
-0.3	0.0	6.1	1.5	0.0	4.4	4.5	73.3	1.0	10.0	Sep.
8.2	1.3	7.3	15.8	0.3	4.3	4.2	44.5	0.7	9.8	Oct.
0.7	0.1	5.2	14.4	0.3	4.0	4.1	31.9	0.6	9.3	Nov.
17.3	2.8	7.7	12.7	0.3	4.1	4.0	7.9	0.4	9.6	Dec.
<i>Euro area enlargement</i>										
17.4	2.5	10.3	21.3	0.4	3.9	3.9	104.4	0.7	9.3	2001 Jan.
2.1	0.3	9.9	36.5	0.7	3.8	3.8	32.9	0.6	9.0	Feb.
8.0	1.2	8.7	25.3	0.5	3.7	3.8	50.7	0.7	8.7	Mar.
4.4	0.6	9.1	24.2	0.5	3.9	4.0	40.4	0.7	8.4	Apr.
10.6	1.5	10.5	33.3	0.7	4.4	4.6	36.7	0.4	8.0	May
11.7	1.7	13.8	35.3	0.7	5.5	5.2	20.5	0.4	7.9	June
13.1	1.8	14.8	34.1	0.7	5.8	5.7	16.0	0.4	7.8	July
17.2	2.4	17.4	39.8	0.8	6.0	6.2	18.7	0.4	7.2	Aug.
8.7	1.2	18.9	42.6	0.8	6.8	6.8	36.4	0.5	6.7	Sep.
28.2	3.7	21.7	50.2	0.9	7.5	7.4	32.9	0.5	6.5	Oct.
2.9	0.4	22.0	41.2	0.8	8.0	7.8	47.2	0.7	6.6	Nov.
9.0	1.2	20.1	14.4	0.3	8.0	.	-10.2	-0.1	6.1	Dec. ⁶⁾

5) Other short-term deposits comprise deposits with an agreed maturity of up to two years and deposits redeemable at notice of up to three months.

6) Marketable instruments comprise repurchase agreements, money market fund shares/units, money market paper and debt securities up to two years.

7) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.4 (cont'd)
Monetary aggregates ¹⁾ and counterparts
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
5. Main counterparts of M3: levels at the end of the period

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Index Dec. 98 =100 ³⁾		
	1	2	3	4	5	6	7	8	9	10
2000 June	1,164.7	115.5	1,498.3	877.6	2,002.4	6,594.9	5,846.3	115.21	134.6	164.2
July	1,165.1	116.6	1,507.2	893.9	1,974.6	6,636.0	5,874.6	115.67	118.1	164.9
Aug.	1,166.3	118.2	1,523.0	898.2	1,950.6	6,660.4	5,893.1	115.98	109.6	165.2
Sep.	1,167.5	120.5	1,529.9	926.3	1,946.4	6,750.5	5,978.5	117.38	92.8	166.0
Oct.	1,168.4	121.3	1,548.6	932.8	1,935.5	6,799.7	6,021.4	118.14	77.8	168.0
Nov.	1,162.6	122.9	1,537.2	920.7	1,939.2	6,836.2	6,056.7	118.96	68.1	167.7
Dec.	1,168.2	125.4	1,525.2	894.5	1,925.3	6,877.6	6,090.7	119.97	77.1	169.9
<i>Euro area enlargement</i>										
2001 1 Jan.	1,170.0	126.7	1,526.9	912.1	2,009.9	6,952.0	6,154.0	-	183.3	172.9
2001 Jan.	1,170.2	126.8	1,555.3	909.0	2,003.7	6,998.4	6,185.0	120.58	17.4	171.8
Feb.	1,169.2	126.9	1,564.2	911.3	2,006.0	7,035.5	6,206.2	121.01	8.4	172.3
Mar.	1,172.5	126.4	1,576.9	927.1	2,017.7	7,127.7	6,273.1	122.17	-26.0	172.0
Apr.	1,169.7	124.6	1,577.8	928.1	2,015.7	7,193.0	6,312.4	122.98	-62.4	173.3
May	1,170.5	123.2	1,584.5	940.0	2,030.6	7,220.0	6,332.7	123.19	-80.0	174.6
June	1,170.8	122.0	1,593.2	966.0	2,041.8	7,245.0	6,386.5	124.35	-40.5	175.4
July	1,165.2	120.7	1,592.5	955.3	2,034.1	7,258.9	6,392.6	124.63	-26.3	176.5
Aug.	1,161.9	119.5	1,585.1	960.0	2,021.5	7,235.6	6,368.0	124.33	0.9	176.9
Sep.	1,162.7	118.6	1,603.5	970.6	2,025.0	7,281.6	6,420.2	125.27	53.4	177.6
Oct.	1,162.6	116.9	1,615.5	981.4	2,014.0	7,322.8	6,449.9	125.82	78.1	178.3
Nov.	1,161.5	115.8	1,605.6	982.8	2,033.4	7,378.6	6,501.5	126.81	98.7	179.1
Dec. ^(p)	1,168.0	115.8	1,612.7	995.7	2,024.6	7,424.9	6,517.3	127.23	87.4	180.2

6. Main counterparts of M3: flows ⁴⁾

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Annual growth rate ³⁾ (%)		
	1	2	3	4	5	6	7	8	9	10
2000 July	-0.8	1.4	3.9	15.4	-27.4	33.9	23.5	9.1	-16.7	0.7
Aug.	0.5	1.7	8.2	4.9	-19.1	20.1	15.7	9.5	-11.1	0.3
Sep.	-2.6	2.2	2.6	18.8	-7.6	76.6	71.0	10.0	-26.5	0.7
Oct.	-0.1	0.8	10.8	5.0	-15.0	47.0	38.6	9.8	-14.8	3.2
Nov.	-5.0	1.6	-4.7	-11.9	1.8	41.6	42.1	9.3	-9.5	-0.3
Dec.	9.0	2.5	-3.9	-21.9	-9.2	59.3	51.1	9.5	18.6	1.2
<i>Euro area enlargement</i>										
2001 Jan.	0.1	0.2	24.1	-4.3	-12.7	47.5	31.6	9.3	-55.2	-1.0
Feb.	-1.1	0.1	8.5	2.8	-3.7	38.5	22.2	9.0	-9.6	0.5
Mar.	1.6	-0.5	9.5	16.6	6.6	84.3	59.4	8.7	-37.2	0.1
Apr.	-2.6	-1.9	-0.1	1.3	-1.4	65.6	41.4	8.4	-36.8	1.2
May	0.3	-1.4	-3.9	8.7	15.7	16.2	10.7	8.1	-14.9	1.4
June	0.4	-1.1	11.3	19.0	11.0	27.7	59.6	7.9	33.9	0.9
July	-4.8	-1.4	5.2	-6.7	-5.7	19.0	14.6	7.7	17.1	1.1
Aug.	-2.2	-1.2	-1.4	6.9	-8.1	-12.8	-15.6	7.2	26.6	0.3
Sep.	0.6	-0.9	17.8	9.8	-3.3	46.5	48.0	6.7	30.6	0.7
Oct.	-0.3	-1.7	12.3	7.6	-12.3	36.7	28.4	6.5	26.8	0.7
Nov.	-1.5	-1.1	19.2	2.5	22.9	49.5	50.7	6.6	27.6	1.1
Dec. ^(p)	6.5	0.1	9.0	13.8	-5.0	49.0	21.6	6.1	-8.0	1.0

1) Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.

2) Credit comprises loans granted to non-MFIs resident in the euro area and holdings of securities issued by non-MFIs resident in the euro area.

3) For the calculations of the index and the growth rates, see the technical notes.

4) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.5

MFI loans by counterpart, type and original maturity ¹⁾

(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated))

1. Loans to non-monetary financial corporations and to government: levels at the end of the period

	Non-monetary financial intermediaries except insurance corporations and pension funds			Insurance corporations and pension funds			General government							
	Total		Index Dec.98 =100 ²⁾	Total		Index Dec.98 =100 ²⁾	Central government ³⁾	Other general government					Total	Index Dec.98 =100 ²⁾
	1	Up to 1 year		2	Up to 1 year			3	4	5	6	State government			Local government		Social security funds
			8			Over 5 years	9					10	Over 5 years	11	12
13	14													
2000 Q1	335.4	207.2	127.9	37.1	25.7	135.1	193.8	291.9	251.3	338.1	306.1	16.0	839.7	99.5
Q2	381.5	246.1	135.7	38.8	29.1	141.3	186.8	290.0	252.1	339.0	306.0	19.7	835.6	99.0
Q3	385.4	247.2	138.8	33.0	25.3	120.4	173.3	288.4	252.4	337.8	305.3	18.5	818.1	97.3
Q4	394.8	252.9	142.8	31.5	21.8	114.8	173.1	297.3	255.4	350.9	315.8	14.6	835.9	99.5
<i>Euro area enlargement</i>														
2001 1 Jan.	395.4	253.4	-	31.6	21.8	-	185.6	297.3	255.4	351.5	316.4	15.2	849.6	-
2001 Q1	418.0	273.0	153.0	35.9	26.8	130.5	189.3	295.3	255.3	352.4	314.0	15.6	852.6	99.1
Q2	425.3	280.7	155.7	35.8	26.7	130.2	175.0	294.0	254.9	350.1	312.1	17.2	836.3	97.2
Q3 ⁴⁾	408.7	258.3	149.5	35.6	26.3	130.5	168.2	293.9	254.1	350.7	313.4	17.7	830.5	96.6

2. Loans to non-monetary financial corporations and to government: flows ⁴⁾

	Non-monetary financial intermediaries except insurance corporations and pension funds			Insurance corporations and pension funds			General government							
	Total		Annual growth rate ²⁾ (%)	Total		Annual growth rate ²⁾ (%)	Central government ³⁾	Other general government					Total	Annual growth rate ²⁾ (%)
	1	Up to 1 year		2	Up to 1 year			3	4	5	6	7			State government		Local government		Social security funds
			8			Over 5 years	9						10	Over 5 years	11	12
13	14													
2000 Q2	20.6	13.8	18.6	1.7	3.5	-4.1	-7.3	-1.8	1.3	0.9	-0.1	3.7	-4.6	-0.3
Q3	8.6	1.1	24.5	-5.7	-3.8	-21.2	-9.9	-2.3	-0.3	-0.5	0.0	-1.2	-13.9	-1.1
Q4	11.2	6.8	18.2	-1.5	-3.5	6.6	0.2	8.8	3.0	12.8	10.3	-3.9	18.0	-0.9
<i>Euro area enlargement</i>														
2001 Q1	28.1	22.7	19.6	4.3	5.0	-3.4	-0.6	-2.0	-0.1	-0.7	-3.7	0.4	-2.9	-0.4
Q2	7.5	7.6	14.7	-0.1	-0.1	-7.9	-14.7	-1.3	-0.4	-2.2	-1.9	1.6	-16.7	-1.8
Q3 ⁴⁾	-16.9	-22.4	7.7	0.1	-0.4	8.4	-6.3	0.0	-0.7	0.5	1.3	0.6	-5.2	-0.8

Source: ECB.

1) Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S.123 (including financial auxiliaries, S.124); insurance corporations and pension funds, S.125; general government, S.13.

2) For the calculation of the index and the growth rates, see the technical notes.

3) A maturity breakdown is not available for loans to central government.

4) Calculated from quarterly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.5 (cont'd)

MFI loans by counterpart, type and original maturity ¹⁾

(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)

3. Loans to non-financial sectors other than government: levels at the end of the period

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾
	1	2	3	4	5	6	7	8	9	10
2000 Q1	900.8	392.8	1,207.8	2,501.4	109.9	89.0	162.5	200.6	452.1	110.0
Q2	918.2	407.1	1,236.9	2,562.1	113.0	93.5	161.5	201.9	456.9	111.7
Q3	953.5	423.6	1,256.9	2,634.0	115.8	96.4	164.9	208.3	469.7	114.4
Q4	967.3	429.3	1,287.8	2,684.4	118.6	98.1	165.4	212.9	476.5	116.1
<i>Euro area enlargement</i>										
2001 1 Jan.	996.0	436.6	1,293.6	2,726.2	-	102.7	166.3	213.0	482.0	-
2001 Q1	1,033.6	445.4	1,313.5	2,792.5	120.9	99.3	168.5	212.7	480.6	115.1
Q2	1,051.2	455.8	1,343.4	2,850.4	123.2	100.6	171.2	217.6	489.4	117.3
Q3 ^(p)	1,028.1	466.6	1,370.2	2,864.9	124.5	101.8	171.6	220.8	494.3	118.5

4. Loans to non-financial sectors other than government: flows ⁴⁾

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)
	1	2	3	4	5	6	7	8	9	10
2000 Q2	22.1	16.3	31.1	69.5	9.3	4.5	-0.4	2.8	6.9	7.1
Q3	28.8	16.4	18.1	63.2	11.1	2.1	3.2	5.8	11.1	8.0
Q4	19.3	9.6	36.3	65.2	10.8	1.8	0.5	4.6	6.9	8.0
<i>Euro area enlargement</i>										
2001 Q1	32.8	5.4	13.6	51.8	10.0	-4.4	0.1	0.4	-3.9	4.6
Q2	14.1	12.2	26.6	52.9	9.1	1.2	3.0	4.9	9.1	5.0
Q3 ^(p)	-18.0	14.0	33.6	29.7	7.5	1.5	0.1	3.2	4.9	3.6

Source: ECB.

1) Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S.123 (including financial auxiliaries, S.124); insurance corporations and pension funds, S.125; general government, S.13.

2) For the calculation of the index and the growth rates, see the technical notes.

Households											Non-profit institutions serving households			
Lending for house purchase ³⁾					Other lending					Total	Index Dec.98 =100 ²⁾	Total	Index Dec.98 =100 ²⁾	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾					
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
20.2	58.8	1,660.4	1,739.4	114.1	140.9	100.4	342.8	584.2	110.7	2,775.6	112.7	39.0	111.8	2000 Q1
21.2	60.6	1,699.2	1,781.0	116.7	144.8	102.1	341.3	588.3	111.9	2,826.2	114.8	37.6	107.8	Q2
22.8	62.9	1,747.7	1,833.5	118.9	142.4	100.8	342.1	585.3	111.7	2,888.4	116.6	37.6	107.7	Q3
23.1	62.3	1,791.6	1,876.9	121.7	146.6	101.8	340.1	588.4	113.1	2,941.8	118.9	38.2	109.3	Q4
<i>Euro area enlargement</i>														
23.1	62.7	1,802.4	1,888.2	-	146.7	101.8	340.1	588.6	-	2,958.8	-	38.2	-	2001 1 Jan.
22.8	61.7	1,832.2	1,916.8	123.6	145.9	104.4	341.9	592.2	114.0	2,989.5	120.1	37.3	106.5	2001 Q1
23.4	62.3	1,868.4	1,954.1	125.7	147.7	100.6	342.7	591.0	115.1	3,034.6	122.1	40.7	116.5	Q2
23.0	61.2	1,901.6	1,985.9	127.8	144.4	100.7	345.2	590.3	115.1	3,070.5	123.6	39.2	112.0	Q3 ⁴⁾

Households											Non-profit institutions serving households			
Lending for house purchase ³⁾					Other lending					Total	Annual growth rate ²⁾ (%)	Total	Annual growth rate ²⁾ (%)	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)					
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1.1	1.6	37.2	40.0	10.2	3.9	2.5	-0.2	6.2	5.8	53.0	8.7	-1.4	5.2	2000 Q2
0.0	0.7	32.9	33.6	9.0	-1.7	-0.9	2.0	-0.6	5.0	44.0	8.0	0.0	3.9	Q3
0.2	-0.6	42.5	42.1	8.6	4.5	2.1	0.5	7.0	3.6	56.0	7.4	0.6	2.0	Q4
<i>Euro area enlargement</i>														
-0.4	-0.9	31.2	29.9	8.3	0.2	2.6	1.8	4.5	3.0	30.6	6.6	-1.0	-4.8	2001 Q1
0.6	0.5	32.1	33.2	7.7	1.9	-2.0	5.9	5.8	2.9	48.1	6.3	3.5	8.1	Q2
-0.4	-1.1	33.3	31.8	7.5	-3.3	0.3	3.2	0.1	3.0	36.8	5.9	-1.6	4.0	Q3 ⁴⁾

3) The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.

4) Calculated from quarterly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.6
Deposits held with MFIs, by counterpart and instrument ¹⁾
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
1. Deposits held by non-monetary financial corporations and by government: levels at the end of the period

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Index Dec.98 =100 ³⁾	Total ²⁾				Index Dec.98 =100 ³⁾	Central government	Other general government			Total	Index Dec.98 =100 ³⁾
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q1	438.2	162.2	183.0	87.4	131.0	458.8	35.4	407.1	13.1	110.9	130.2	28.1	58.6	52.7	269.6	102.6
Q2	428.2	164.5	181.6	76.8	129.9	460.7	34.6	411.0	11.6	111.4	146.0	31.7	62.7	59.3	299.6	114.0
Q3	427.3	158.6	187.0	76.6	129.8	464.4	34.1	413.7	12.9	111.6	159.2	30.3	63.2	57.8	310.5	117.8
Q4	431.1	153.6	198.9	74.0	131.0	477.6	40.6	418.5	15.3	114.8	164.5	30.6	68.2	53.2	316.5	120.1
<i>Euro area enlargement</i>																
2001 1 Jan.	433.0	153.0	200.2	75.2	-	479.9	40.7	418.5	17.5	-	166.2	30.6	69.1	55.1	321.0	-
2001 Q1	441.9	151.8	194.2	91.2	133.4	483.5	38.2	423.0	18.8	115.7	150.3	30.9	65.0	57.2	303.5	113.4
Q2	455.4	164.3	195.9	89.3	136.3	486.1	41.4	424.0	16.9	116.3	164.3	31.5	66.8	60.8	323.4	120.9
Q3 ⁴⁾	456.2	163.0	202.0	86.0	134.1	487.6	39.4	426.7	17.7	116.7	153.7	33.3	67.6	60.6	315.1	117.8

2. Deposits held by non-monetary financial corporations and by government: flows ⁴⁾

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Annual growth rate ³⁾ (%)	Total ²⁾				Annual growth rate ³⁾ (%)	Central government	Other general government			Total	Annual growth rate ³⁾ (%)
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q2	-3.8	2.3	4.9	-10.6	7.2	1.9	0.3	2.8	-1.5	6.9	15.8	3.6	4.1	6.5	30.0	17.7
Q3	-0.1	-5.8	6.1	-0.2	10.1	1.0	-0.7	0.3	1.3	5.7	13.3	-1.4	-0.4	-1.5	10.0	18.2
Q4	3.9	-4.9	11.9	-2.6	8.9	13.2	6.5	4.8	2.4	6.1	5.3	0.4	5.0	-4.6	6.1	12.5
<i>Euro area enlargement</i>																
2001 Q1	7.7	-2.5	-5.9	16.0	1.8	3.7	-2.5	4.5	1.3	4.3	-15.6	0.1	-4.1	2.1	-17.5	10.6
Q2	9.6	12.4	-2.1	-1.8	4.9	2.8	3.4	1.0	-1.9	4.5	13.9	0.5	1.9	3.6	19.9	6.1
Q3 ⁴⁾	-7.2	-1.3	-1.9	-3.3	3.3	1.5	-1.9	2.7	0.9	4.6	-10.6	1.9	0.7	-0.3	-8.3	0.0

Source: ECB.

1) Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S.123 (including financial auxiliaries, S.124); insurance corporations and pension funds, S.125; general government, S.13.

2) Including deposits redeemable at notice.

3) For the calculation of the index and the growth rates, see the technical notes.

4) Calculated from quarterly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.6 (cont'd)
Deposits held with MFIs, by counterpart and instrument ¹⁾
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
3. Deposits held by non-financial sectors other than government: levels at the end of the period

	Non-financial corporations						Households ²⁾					
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.98 =100 ³⁾	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.98 =100 ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
2000 Q1	440.2	291.9	24.4	31.1	787.7	101.4	887.1	1,090.7	1,274.7	42.4	3,294.9	102.2
Q2	459.7	307.7	24.1	26.9	818.4	104.6	888.2	1,095.1	1,254.6	46.6	3,284.5	101.8
Q3	464.2	329.5	24.7	25.0	843.4	106.4	874.4	1,109.7	1,235.3	51.6	3,270.9	101.4
Q4	497.4	324.6	24.1	26.3	872.4	111.5	907.1	1,131.5	1,241.4	57.1	3,337.0	103.5
<i>Euro area enlargement</i>												
2001 1 Jan.	504.5	337.9	24.2	30.5	897.2	-	910.6	1,154.0	1,292.3	69.6	3,426.6	-
2001 Q1	478.9	349.2	24.1	32.4	884.6	108.9	906.2	1,192.3	1,287.0	78.9	3,464.5	104.6
Q2	514.5	335.7	24.4	32.1	906.7	111.3	947.4	1,198.7	1,293.5	82.5	3,522.0	106.4
Q3 ⁴⁾	515.1	322.1	25.4	35.5	898.1	112.5	964.8	1,203.7	1,304.9	84.5	3,557.8	107.5

4. Deposits held by non-financial sectors other than government: flows ⁴⁾

	Non-financial corporations						Households ²⁾					
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Annual growth rate ³⁾ (%)	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Annual growth rate ³⁾ (%)
	1	2	3	4	5	6	7	8	9	10	11	12
2000 Q2	19.8	9.5	-0.3	-4.3	24.8	8.2	2.2	4.4	-21.2	4.2	-10.3	1.2
Q3	0.3	14.1	1.3	-2.0	13.7	8.9	-13.8	14.6	-19.6	5.0	-13.8	1.0
Q4	36.8	2.8	-0.6	1.3	40.3	11.1	32.8	22.5	6.4	5.5	67.1	1.1
<i>Euro area enlargement</i>												
2001 Q1	-28.3	6.9	-0.1	1.8	-19.8	7.4	-4.6	37.8	-5.8	9.3	36.7	2.4
Q2	32.9	-13.4	0.3	-0.4	19.4	6.4	41.1	6.4	6.2	3.6	57.4	4.4
Q3 ⁴⁾	4.1	0.5	1.0	3.5	9.1	5.7	17.3	5.0	11.7	2.0	36.0	6.0

Source: ECB.

1) Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S.123 (including financial auxiliaries, S.124); insurance corporations and pension funds, S.125; general government, S.13.

2) Comprises households (S.14) and non-profit institutions serving households (S.15).

3) For the calculation of the index and the growth rates, see the technical notes.

4) Calculated from quarterly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.7
Main MFI claims on and liabilities to non-residents of the euro area
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
1. Levels at the end of the period

	Loans to non-residents								Holdings of securities other than shares issued by non-residents							
	Banks ¹⁾²⁾		Non-banks				Total	Index Dec.98 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.98 =100 ³⁾
	Total	Index Dec.98 =100 ³⁾	General government	Other	Total	Index Dec.98 =100 ³⁾			Total	Index Dec.98 =100 ³⁾	General government	Other	Total	Index Dec.98 =100 ³⁾		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q1	943.8	94.0	79.4	405.7	485.1	119.2	1,428.8	101.2	129.4	147.5	291.7	152.1	443.7	106.4	573.2	114.0
Q2	977.7	97.1	81.0	399.0	480.0	118.7	1,457.7	103.3	153.0	152.8	302.8	161.3	464.1	107.8	617.1	116.0
Q3	979.4	94.4	79.3	441.4	520.7	123.3	1,500.0	102.7	168.2	160.9	321.5	175.4	496.9	110.1	665.1	119.5
Q4	945.4	93.4	78.9	445.6	524.5	127.9	1,469.8	103.3	171.1	172.5	290.6	183.7	474.3	109.2	645.4	120.9
<i>Euro area enlargement</i>																
2001 1 Jan.	964.1	-	78.9	449.3	528.2	-	1,492.2	-	171.3	-	296.2	184.0	480.2	-	651.5	-
2001 Q1	1,051.5	100.5	76.3	517.9	594.2	143.1	1,645.7	112.7	188.8	188.1	285.7	204.8	490.4	113.2	679.3	127.1
Q2	1,071.3	100.7	78.9	519.3	598.2	141.1	1,669.5	112.3	205.1	200.5	294.3	208.0	502.3	114.0	707.4	130.0
Q3 ⁴⁾	1,082.0	104.5	75.4	527.5	602.9	147.0	1,684.9	116.7	204.1	205.5	275.4	209.6	485.0	113.8	689.1	130.8

2. Flows ⁴⁾

	Loans to non-residents								Holdings of securities other than shares issued by non-residents							
	Banks ¹⁾²⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)
	Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q2	31.0	-6.4	2.2	-4.1	-2.0	4.3	29.0	-3.1	4.7	9.6	10.1	-4.3	5.8	12.7	10.5	12.1
Q3	-27.3	-2.6	-1.7	20.5	18.8	8.3	-8.6	0.9	8.1	23.2	17.1	-6.9	10.2	13.0	18.3	15.3
Q4	-9.9	3.7	-0.7	19.9	19.2	10.4	9.3	6.0	12.2	26.7	-31.5	27.3	-4.2	7.2	8.0	11.7
<i>Euro area enlargement</i>																
2001 Q1	70.9	6.8	3.7	58.9	62.6	20.1	133.5	11.3	15.4	27.5	5.3	12.1	17.3	6.4	32.8	11.5
Q2	3.0	3.7	2.6	-11.2	-8.6	18.9	-5.6	8.7	12.4	31.2	9.1	-5.6	3.5	5.8	15.9	12.1
Q3 ⁴⁾	40.1	10.7	-3.5	28.6	25.2	19.2	65.3	13.7	5.2	27.7	-19.5	18.5	-1.0	3.3	4.2	9.5

Source: ECB.

1) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

2) Deposits placed by MFIs with banks located outside the euro area are included.

Table 2.7 (cont'd)

Holdings of shares and other equity issued by non-residents						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Index Dec.98 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.98 =100 ³⁾	
Total	Index Dec.98 =100 ³⁾	Total	Index Dec.98 =100 ³⁾			Total	Index Dec.98 =100 ³⁾	General government	Other	Total	Index Dec.98 =100 ³⁾			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
47.4	198.5	64.4	154.9	111.8	170.5	1,534.6	124.7	71.4	463.4	534.8	127.6	2,069.4	125.5	2000 Q1
50.8	205.0	67.5	160.7	118.3	176.5	1,505.6	122.4	77.2	470.1	547.3	130.7	2,052.9	124.5	Q2
58.0	226.4	81.4	191.2	139.4	203.5	1,578.2	123.5	81.7	526.3	608.0	140.2	2,186.2	127.8	Q3
61.6	241.8	80.0	193.9	141.6	210.9	1,550.8	125.1	84.6	504.0	588.6	139.1	2,139.4	128.7	Q4
<i>Euro area enlargement</i>														
62.3	-	80.2	-	142.5	-	1,553.8	-	85.6	506.6	592.2	-	2,146.0	-	2001 1 Jan.
65.1	252.2	93.9	227.9	159.1	235.8	1,781.6	140.8	89.3	577.1	666.4	154.1	2,448.0	144.2	2001 Q1
61.1	236.5	97.2	234.4	158.3	233.8	1,817.3	140.8	94.8	587.0	681.9	155.0	2,499.2	144.5	Q2
63.5	245.4	90.4	217.3	153.9	226.7	1,717.7	137.6	93.7	581.9	675.6	158.0	2,393.3	142.8	Q3 ^(p)

Holdings of shares and other equity issued by non-residents						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	
Total	Annual growth rate ³⁾ (%)	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
1.6	41.6	2.4	29.2	4.0	34.0	-29.2	4.3	5.8	7.3	13.1	16.7	-16.2	7.3	2000 Q2
5.3	31.1	12.8	64.4	18.1	49.1	14.5	9.7	4.4	35.5	40.0	22.2	54.4	12.9	Q3
4.0	47.8	1.2	47.1	5.1	47.4	20.1	12.4	3.0	-7.9	-4.9	17.7	15.2	13.8	Q4
<i>Euro area enlargement</i>														
2.7	27.1	14.0	47.1	16.7	38.3	194.9	12.9	3.5	60.1	63.5	20.8	258.4	14.9	2001 Q1
-4.1	15.3	2.7	45.9	-1.4	32.4	0.2	15.1	5.6	-1.5	4.1	18.6	4.3	16.1	Q2
2.3	8.4	-7.1	13.7	-4.8	11.4	-42.0	11.4	-1.1	14.2	13.1	12.7	-28.9	11.7	Q3 ^(p)

3) For the calculation of the index and the growth rates, see the technical notes.

4) Calculated from quarterly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.

Table 2.8**Currency analysis of certain liabilities and assets of the euro area MFIs ¹⁾***(EUR billions (not seasonally adjusted; end of period))***Liabilities outstanding****1. Deposits placed by euro area residents**

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ³⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q1	3,932.0	3,496.3	55.0	380.8	265.7	32.4	60.5	22.2	5,249.2	5,074.6	30.5	144.1	105.1	17.6	11.9	9.5
Q2	4,055.9	3,620.9	52.8	382.2	265.1	34.7	62.2	20.1	5,291.3	5,111.2	27.9	152.3	113.0	17.1	13.2	9.0
Q3	3,945.3	3,485.3	57.9	402.1	279.2	38.1	64.9	19.9	5,316.4	5,127.4	29.1	160.0	121.0	16.5	12.5	10.1
Q4	3,949.6	3,526.2	47.5	376.0	265.0	34.4	61.0	15.6	5,434.6	5,256.4	27.3	150.9	115.1	14.6	11.3	9.9
<i>Euro area enlargement</i>																
2001 Q1	4,059.5	3,558.8	55.4	445.3	316.6	40.2	67.8	20.7	5,578.1	5,367.8	31.2	179.2	130.8	23.8	12.3	12.2
Q2	4,072.3	3,585.9	52.8	433.6	309.0	40.3	65.4	19.0	5,693.6	5,480.6	30.7	182.2	133.5	24.0	11.6	13.2
Q3 ³⁾	4,092.2	3,613.9	47.7	430.6	302.8	38.7	70.8	18.4	5,714.6	5,515.8	28.1	170.8	125.0	22.6	11.0	12.2

2. Deposits placed by non-residents of the euro area

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ³⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q1	1,534.6	605.0	151.1	778.5	615.6	66.4	65.9	30.6	534.8	244.3	51.4	239.1	195.4	21.6	11.4	10.8
Q2	1,505.6	598.2	134.1	773.2	614.1	61.0	63.2	34.9	547.3	243.5	52.1	251.7	203.8	22.0	15.1	10.7
Q3	1,578.2	611.6	145.6	821.0	661.9	63.3	63.4	32.4	608.0	252.8	61.0	294.2	245.5	23.1	13.8	11.8
Q4	1,550.8	590.9	126.8	833.2	684.3	53.1	65.7	30.1	588.6	254.1	64.0	270.5	225.5	20.5	12.3	12.2
<i>Euro area enlargement</i>																
2001 Q1	1,781.6	698.5	142.6	940.5	776.8	66.4	65.8	31.5	666.4	295.7	70.6	300.1	255.9	17.6	14.2	12.4
Q2	1,817.3	690.0	133.8	993.5	815.3	72.9	73.1	32.2	681.9	286.7	73.2	322.0	274.1	19.3	13.6	14.9
Q3 ³⁾	1,717.7	667.7	136.5	913.2	748.3	59.2	76.2	29.5	675.6	294.4	68.9	312.3	263.0	18.4	15.9	15.0

3. Debt securities and money market paper issued by euro area MFIs

	Debt securities								Money market paper							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ³⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q1	2,425.6	2,139.7	43.1	242.8	136.3	53.8	33.8	18.8	250.5	226.0	1.8	22.7	14.5	4.6	2.0	1.7
Q2	2,482.6	2,185.5	40.6	256.6	145.5	58.9	33.6	18.6	262.8	234.9	1.4	26.4	17.2	5.4	2.5	1.4
Q3	2,554.8	2,226.6	47.7	280.5	158.2	65.3	37.4	19.7	272.2	233.6	2.2	36.4	26.6	5.7	2.8	1.3
Q4	2,566.9	2,246.0	46.5	274.4	157.3	62.1	35.4	19.7	262.2	215.8	2.4	44.1	34.0	5.6	2.9	1.5
<i>Euro area enlargement</i>																
2001 Q1	2,667.6	2,327.9	48.3	291.4	172.0	61.5	37.5	20.5	278.5	227.8	2.1	48.6	41.6	3.0	2.6	1.5
Q2	2,731.2	2,358.2	53.9	319.1	189.2	69.4	39.6	20.8	275.5	227.0	4.3	44.2	35.8	4.7	2.5	1.1
Q3 ³⁾	2,746.5	2,380.3	54.0	312.2	184.4	67.4	39.3	21.1	265.1	217.9	4.3	42.9	34.9	4.5	2.4	1.1

Source: ECB.

- 1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.
- 2) Including items expressed in the national denominations of the euro.
- 3) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.

Table 2.8 (cont'd)
Currency analysis of certain liabilities and assets of the euro area MFIs ¹⁾
(EUR billions (not seasonally adjusted; end of period))
Assets outstanding
4. Loans to euro area residents

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q1	3,935.1	-	-	-	-	-	-	-	6,528.3	6,261.4	33.9	233.0	128.2	35.1	65.9	3.7
Q2	4,025.6	-	-	-	-	-	-	-	6,681.9	6,388.6	35.4	257.9	144.7	38.4	70.5	4.3
Q3	3,935.6	-	-	-	-	-	-	-	6,796.5	6,485.5	34.8	276.3	155.8	44.4	72.1	4.0
Q4	3,938.0	-	-	-	-	-	-	-	6,926.6	6,622.4	32.4	271.8	151.6	41.2	74.3	4.7
<i>Euro area enlargement</i>																
2001 Q1	4,081.4	-	-	-	-	-	-	-	7,125.6	6,782.4	35.1	308.1	182.3	45.4	74.9	5.6
Q2	4,089.3	-	-	-	-	-	-	-	7,223.0	6,856.8	29.4	336.9	204.6	51.7	74.0	6.5
Q3 ³⁾	4,086.7	-	-	-	-	-	-	-	7,249.3	6,905.6	29.6	314.2	180.9	51.7	75.6	5.9

5. Holdings of securities other than shares issued by euro area residents

	Issued by MFIs								Issued by non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q1	871.9	834.7	11.6	25.5	16.4	5.0	2.4	1.7	1,449.6	1,417.1	4.8	27.6	14.2	11.3	1.2	0.8
Q2	897.5	858.2	12.5	26.9	17.8	4.9	2.6	1.7	1,411.0	1,377.3	6.0	27.6	14.7	10.5	1.6	0.9
Q3	943.4	898.7	10.6	34.1	24.5	5.3	2.5	1.9	1,386.6	1,353.3	3.6	29.7	16.6	11.0	1.2	0.9
Q4	935.3	895.0	10.8	29.5	19.7	5.9	2.1	1.7	1,354.6	1,320.7	5.6	28.2	16.7	9.7	1.0	0.9
<i>Euro area enlargement</i>																
2001 Q1	971.2	931.2	9.5	30.4	20.6	6.3	1.7	1.8	1,452.7	1,413.1	3.6	36.0	21.2	13.1	1.1	0.6
Q2	993.4	950.7	10.7	32.0	22.1	6.5	1.6	1.8	1,506.3	1,464.7	4.7	36.9	21.7	13.3	1.1	0.8
Q3 ³⁾	1,000.9	961.1	9.9	30.0	20.6	6.2	1.6	1.6	1,517.7	1,478.8	4.2	34.7	20.3	12.5	1.2	0.7

6. Loans to non-residents of the euro area

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q1	943.8	422.9	95.5	425.4	306.9	49.3	33.0	36.2	485.1	154.7	40.8	289.6	248.9	13.9	20.4	6.3
Q2	977.7	462.7	92.2	422.8	308.2	44.9	33.2	36.4	480.0	149.6	41.6	288.8	246.6	14.1	21.4	6.8
Q3	979.4	445.9	90.9	442.6	331.9	42.1	33.8	34.8	520.7	156.0	46.1	318.5	273.9	14.5	23.3	6.9
Q4	945.4	410.0	89.2	446.2	337.8	44.1	32.6	31.7	524.5	163.3	45.3	315.8	271.2	11.5	25.9	7.2
<i>Euro area enlargement</i>																
2001 Q1	1,051.5	468.3	98.6	484.5	365.8	46.3	34.5	37.0	594.2	198.2	48.6	347.4	301.2	11.9	26.2	8.0
Q2	1,071.3	473.2	103.0	495.2	376.1	47.3	36.7	35.0	598.2	184.4	47.7	366.0	318.4	12.1	26.9	8.6
Q3 ³⁾	1,082.0	485.9	102.8	493.2	377.2	42.7	39.8	33.5	602.9	201.9	46.8	354.2	306.7	12.6	26.0	8.9

7. Holdings of securities other than shares issued by non-residents of the euro area

	Issued by banks ³⁾								Issued by non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
2000 Q1	129.4	53.2	8.6	67.6	51.7	7.8	3.0	5.1	443.7	94.9	27.8	321.1	279.3	27.1	5.6	9.1
Q2	153.0	64.8	8.3	79.8	63.7	7.9	2.7	5.5	464.1	95.7	28.3	340.1	299.4	26.9	4.5	9.3
Q3	168.2	62.4	15.3	90.4	75.1	8.2	2.7	4.4	496.9	109.1	32.2	355.6	312.0	30.3	4.2	9.0
Q4	171.1	61.1	19.7	90.3	75.6	7.7	2.4	4.6	474.3	111.5	31.7	331.0	290.6	27.1	3.6	9.7
<i>Euro area enlargement</i>																
2001 Q1	188.8	64.8	22.7	101.3	87.1	7.3	2.3	4.6	490.4	120.8	24.4	345.3	306.8	25.7	2.7	10.1
Q2	205.1	71.9	25.1	108.1	94.1	6.8	2.5	4.8	502.3	121.0	25.7	355.7	315.8	26.9	3.0	9.9
Q3 ³⁾	204.1	77.9	24.7	101.5	89.5	5.9	2.3	3.7	485.0	127.2	26.0	331.6	293.9	26.1	3.8	7.7

3 Financial markets and interest rates in the euro area

Table 3.1

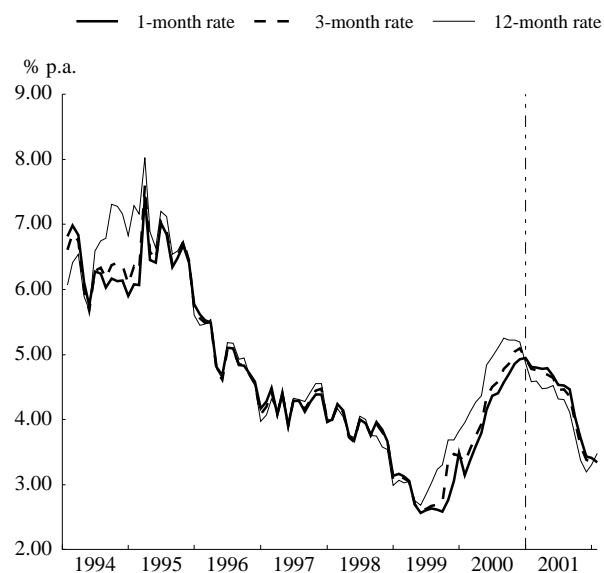
Money market interest rates ¹⁾

(percentages per annum)

	Euro area ⁴⁾					United States ⁶⁾	Japan ⁶⁾
	Overnight deposits ^{2) 3)} 1	1-month deposits ⁵⁾ 2	3-month deposits ⁵⁾ 3	6-month deposits ⁵⁾ 4	12-month deposits ⁵⁾ 5	3-month deposits ⁶⁾ 6	3-month deposits ⁷⁾ 7
1997	3.98	4.23	4.24	4.25	4.28	5.76	0.62
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.06	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
<i>Euro area enlargement</i>							
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2001 Jan.	4.75	4.81	4.77	4.68	4.58	5.73	0.50
Feb.	4.99	4.80	4.76	4.67	4.59	5.35	0.41
Mar.	4.78	4.78	4.71	4.58	4.47	4.96	0.19
Apr.	5.06	4.79	4.69	4.57	4.49	4.63	0.10
May	4.65	4.67	4.64	4.57	4.53	4.11	0.07
June	4.54	4.53	4.45	4.35	4.31	3.83	0.07
July	4.51	4.52	4.47	4.39	4.31	3.75	0.08
Aug.	4.49	4.46	4.35	4.22	4.11	3.56	0.08
Sep.	3.99	4.05	3.98	3.88	3.77	3.03	0.06
Oct.	3.97	3.72	3.60	3.46	3.37	2.40	0.08
Nov.	3.51	3.43	3.39	3.26	3.20	2.10	0.08
Dec.	3.34	3.42	3.34	3.26	3.30	1.92	0.08
2002 Jan.	3.29	3.35	3.34	3.34	3.48	1.82	0.09
2002 4 Jan.	3.45	3.36	3.29	3.27	3.37	1.87	0.09
11	3.34	3.35	3.35	3.35	3.50	1.83	0.09
18	3.31	3.35	3.35	3.35	3.48	1.77	0.09
25	3.31	3.35	3.38	3.42	3.61	1.87	0.09
1 Feb.	3.32	3.35	3.38	3.42	3.63	1.92	0.09

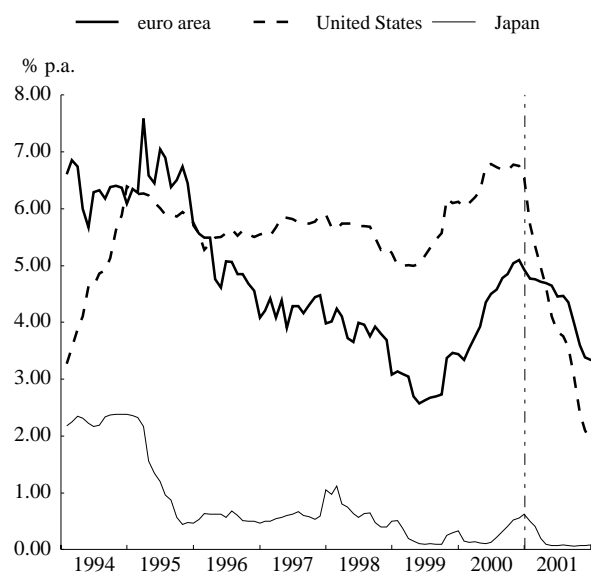
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

1) With the exception of the overnight rate to December 1998, monthly and yearly values are period averages.

2) Interbank deposit bid rates to December 1998. From January 1999 column 1 shows the euro overnight index average (EONIA).

3) End-of-period rates to December 1998; period averages thereafter.

4) Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP.

5) From January 1999, euro interbank offered rates (EURIBOR). Up to December 1998, London interbank offered rates (LIBOR) where available.

6) London interbank offered rates (LIBOR).

Table 3.2

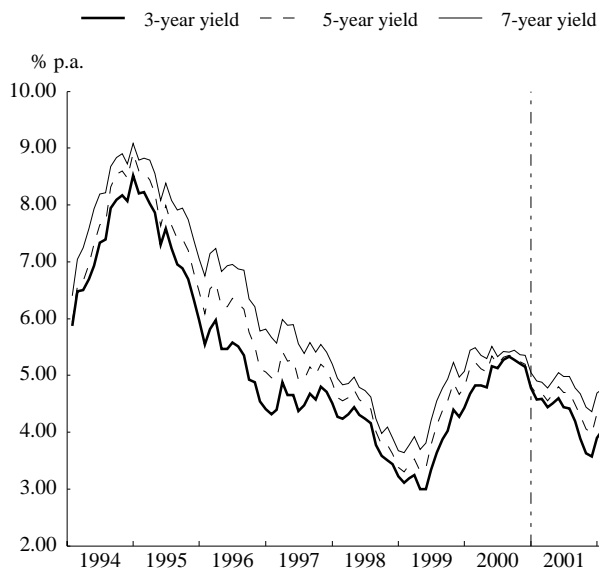
Government bond yields ¹⁾

(percentages per annum)

	Euro area ²⁾					United States	Japan
	2 years ¹	3 years ²	5 years ³	7 years ⁴	10 years ⁵	10 years ⁶	10 years ⁷
1997	4.33	4.51	4.87	5.20	5.99	6.45	2.15
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
<i>Euro area enlargement</i>							
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2001 Jan.	4.55	4.57	4.67	4.90	5.01	5.14	1.54
Feb.	4.56	4.59	4.69	4.88	5.02	5.10	1.43
Mar.	4.44	4.44	4.56	4.78	4.94	4.89	1.19
Apr.	4.49	4.51	4.66	4.90	5.10	5.13	1.36
May	4.56	4.60	4.80	5.05	5.26	5.37	1.28
June	4.39	4.44	4.70	4.99	5.21	5.26	1.19
July	4.33	4.42	4.70	4.99	5.25	5.23	1.33
Aug.	4.11	4.19	4.49	4.78	5.06	4.97	1.36
Sep.	3.77	3.89	4.29	4.67	5.04	4.76	1.40
Oct.	3.44	3.63	4.05	4.44	4.82	4.55	1.36
Nov.	3.36	3.58	3.98	4.37	4.67	4.61	1.33
Dec.	3.66	3.90	4.33	4.68	4.96	5.07	1.35
2002 Jan.	3.84	4.04	4.48	4.76	5.02	5.00	1.42
2002 4 Jan.	3.73	4.00	4.46	4.80	5.09	5.16	1.40
11	3.83	4.01	4.44	4.71	4.97	4.92	1.40
18	3.82	4.00	4.43	4.71	4.97	4.93	1.43
25	4.05	4.24	4.66	4.91	5.14	5.11	1.47
1 Feb.	3.98	4.16	4.57	4.82	5.03	5.00	1.50

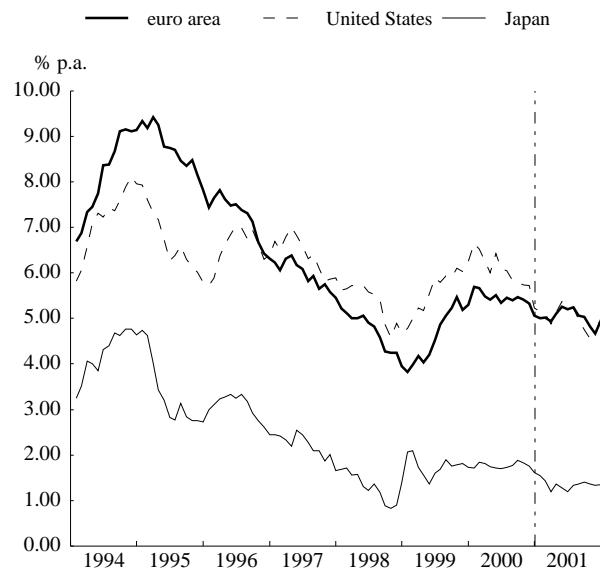
Euro area government bond yields

(monthly)



10-year government bond yields

(monthly)



Sources: Reuters, ECB, Federal Reserve and Bank of Japan.

1) To December 1998, 2, 3, 5 and 7-year euro area yields are end-of-period values and 10-year yields are period averages. Thereafter, all yields are period averages.

2) To December 1998, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band.

Table 3.3

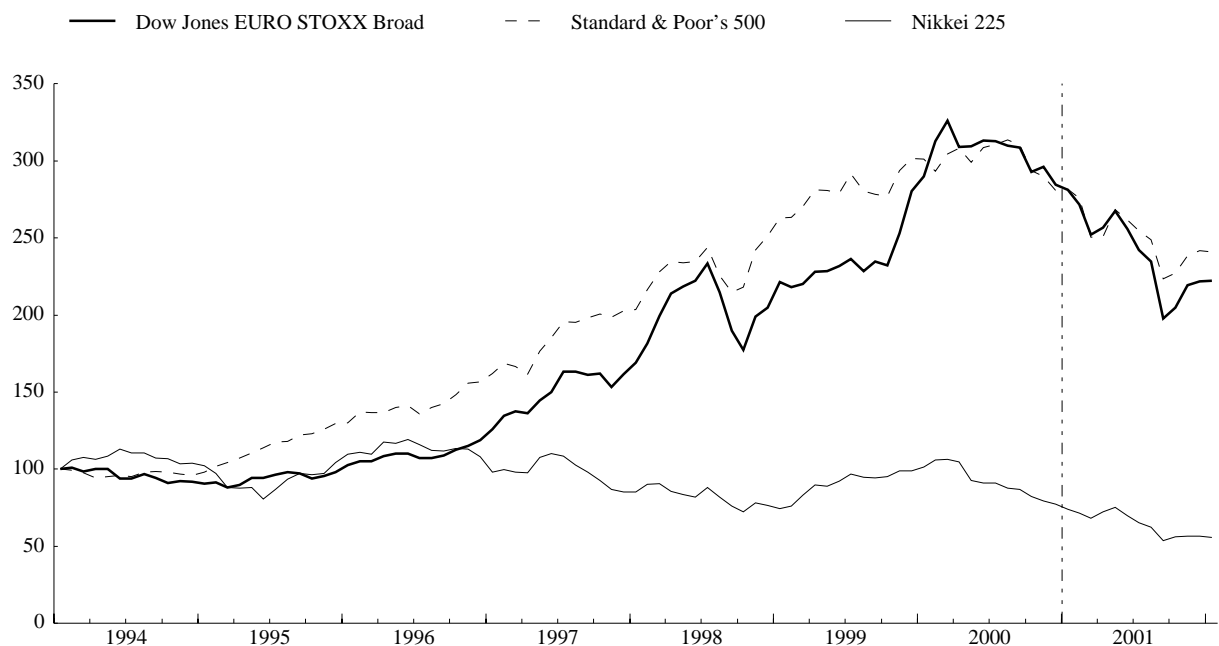
Stock market indices

(index levels, in points)¹⁾

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main economic sector indices											
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Industrial	Technology	Utilities	Telecommunications	Health-care			Standard & Poor's 500	Nikkei 225
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1997	207.6	2,319.6	233.4	191.9	231.9	227.3	184.4	168.0	227.7	205.5	324.1	301.7	873.9	18,373.4
1998	280.5	3,076.3	257.9	245.0	295.5	249.3	281.3	218.4	333.6	282.4	488.1	348.9	1,085.3	15,338.4
1999	325.8	3,787.3	279.2	262.9	327.7	286.0	295.7	285.1	470.4	306.2	717.7	392.6	1,327.8	16,829.9
2000	423.9	5,075.5	299.1	292.9	324.3	342.3	350.7	378.0	963.1	341.7	1,072.5	476.0	1,426.7	17,162.7
<i>Euro area enlargement</i>														
2001	336.3	4,049.4	296.0	228.2	303.3	341.4	321.6	310.0	530.5	309.6	541.2	540.1	1,193.8	12,114.8
2001 Jan.	390.2	4,729.7	317.3	261.6	314.4	339.7	371.9	354.0	792.1	318.7	727.8	524.3	1,334.2	13,739.7
Feb.	377.1	4,525.9	320.2	260.4	319.0	349.5	364.5	355.7	656.6	317.8	654.4	549.5	1,305.5	13,274.1
Mar.	349.9	4,199.2	311.0	241.7	305.7	340.6	334.5	334.5	567.8	300.6	602.9	524.7	1,186.8	12,684.9
Apr.	356.3	4,305.2	308.4	242.6	304.8	352.5	339.4	329.9	587.4	311.5	635.0	534.6	1,189.2	13,436.7
May	370.8	4,481.8	316.5	258.9	312.0	371.8	345.9	345.9	662.4	311.0	623.9	553.2	1,270.7	14,014.3
June	355.1	4,289.7	306.4	241.8	316.9	379.2	341.0	328.6	553.5	320.9	538.3	580.1	1,238.7	12,974.9
July	336.2	4,037.8	302.7	233.8	316.6	349.9	328.2	306.5	449.5	324.2	512.0	565.7	1,205.9	12,140.1
Aug.	325.8	3,884.7	287.9	226.3	309.0	346.6	322.4	303.6	426.5	324.2	453.6	549.3	1,178.3	11,576.2
Sep.	274.3	3,277.0	253.2	176.7	284.2	315.8	265.9	253.2	325.4	298.7	366.5	509.2	1,058.7	9,974.7
Oct.	284.4	3,440.9	260.5	180.4	281.1	322.5	269.9	253.7	373.4	302.7	418.9	539.7	1,076.6	10,428.8
Nov.	304.2	3,674.4	281.3	202.1	286.7	313.7	287.5	270.6	464.5	297.0	473.2	528.8	1,130.3	10,519.7
Dec.	308.0	3,708.4	286.2	209.9	288.8	313.0	285.6	282.2	496.4	286.4	480.9	520.9	1,144.9	10,490.8
2002 Jan.	308.5	3,690.1	293.2	210.8	287.8	320.2	286.3	281.8	494.5	291.1	459.7	524.8	1,140.5	10,338.5
2002 4 Jan.	317.5	3,820.4	298.1	220.4	290.5	322.2	290.7	290.4	530.6	288.0	497.9	521.9	1,172.5	10,871.5
11	309.5	3,696.7	294.0	213.7	283.7	319.0	285.1	286.2	507.4	288.5	462.1	521.8	1,145.6	10,441.6
18	305.2	3,639.3	289.9	207.8	285.3	314.2	285.0	278.8	481.2	293.7	450.9	528.1	1,138.9	10,293.3
25	309.4	3,701.3	297.2	207.2	288.3	328.8	289.4	277.3	490.1	295.2	454.5	528.9	1,133.3	10,144.1
1 Feb.	308.6	3,682.7	299.9	207.1	291.9	337.1	285.8	281.0	494.8	296.5	435.2	511.9	1,122.2	9,791.4

Dow Jones EURO STOXX Broad, Standard & Poor's 500 and Nikkei 225

(base month: January 1994 = 100; monthly)



Source: Reuters.

1) Monthly and yearly values are period averages.

Table 3.4

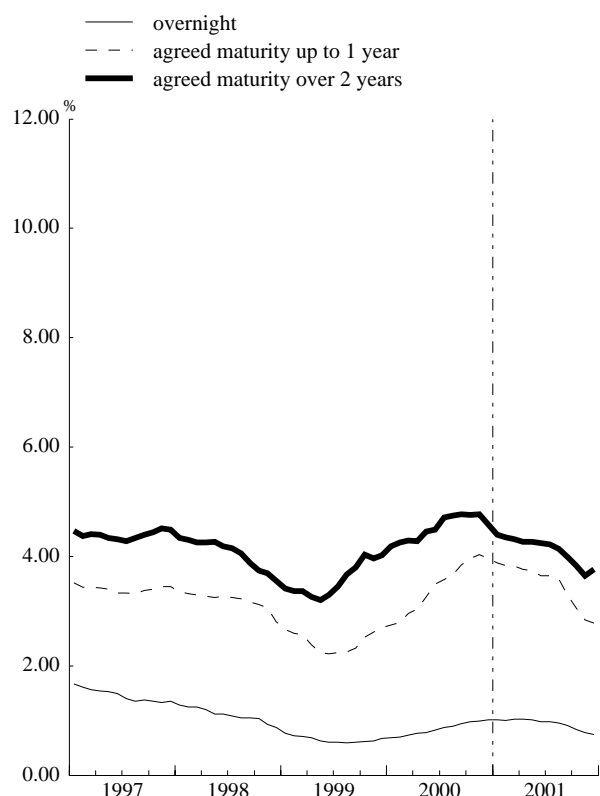
Retail bank interest rates

(percentages per annum; period averages)

	Deposit interest rates						Lending interest rates			
	Overnight 1	With agreed maturity			Redeemable at notice		To enterprises		To households	
		Up to 1 year 2	Up to 2 years 3	Over 2 years 4	Up to 3 months 5	Over 3 months 6	Up to 1 year 7	Over 1 year 8	Consumer lending 9	For house purchase 10
1998	1.10	3.20	3.22	4.06	2.61	3.25	6.73	5.80	10.05	5.87
1999	0.65	2.44	2.45	3.57	2.15	2.76	5.65	5.10	9.40	5.29
2000	0.85	3.45	3.45	4.52	2.25	3.79	6.60	6.23	9.86	6.34
2000 Dec.	1.01	3.96	3.96	4.58	2.49	4.21	7.18	6.45	10.19	6.43
<i>Euro area enlargement</i>										
2001 Jan.	1.01	3.88	3.88	4.39	2.52	4.01	7.19	6.40	10.32	6.29
Feb.	1.01	3.84	3.83	4.35	2.50	3.99	7.11	6.44	10.26	6.24
Mar.	1.02	3.82	3.82	4.32	2.50	3.99	7.04	6.32	10.22	6.18
Apr.	1.03	3.76	3.76	4.26	2.50	3.91	7.07	6.34	10.24	6.14
May	1.01	3.75	3.74	4.27	2.48	3.91	7.03	6.34	10.22	6.17
June	0.98	3.65	3.65	4.25	2.45	3.85	6.97	6.25	10.17	6.13
July	0.97	3.65	3.65	4.22	2.44	3.80	6.90	6.20	10.10	6.05
Aug.	0.96	3.59	3.59	4.14	2.40	3.68	6.89	6.19	10.16	5.96
Sep.	0.91	3.28	3.28	3.98	2.36	3.33	6.71	6.07	10.08	5.86
Oct.	0.84	3.06	3.06	3.84	2.29	3.01	6.46	5.82	9.99	5.65
Nov.	0.78	2.84	2.83	3.65	2.19	2.75	6.31	5.71	9.86	5.48
Dec.	0.75	2.78	2.78	3.77	2.15	2.79	6.16	5.69	9.82	5.52

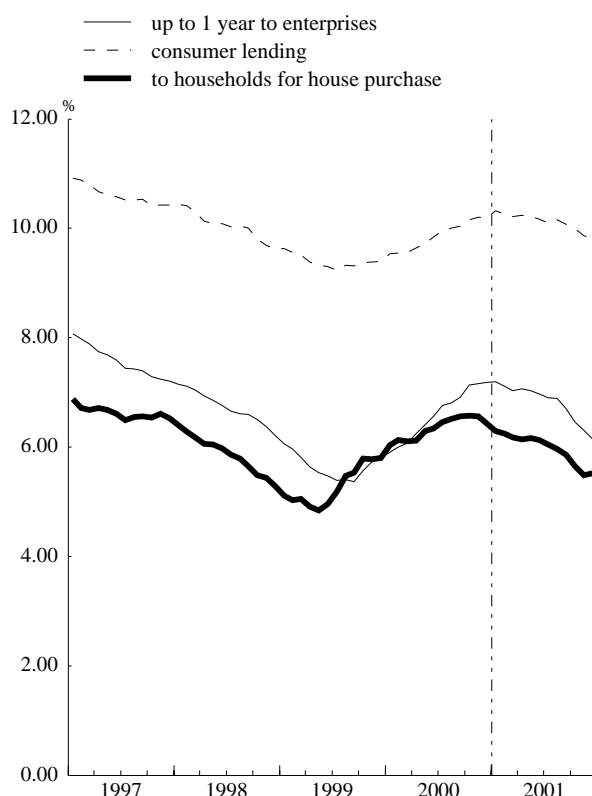
Deposit interest rates

(monthly)



Lending interest rates

(monthly)



Source: ECB.

These euro area retail bank interest rates should be used with caution and for statistical purposes only, primarily to analyse their development over time rather than their level. They are calculated as the weighted average of national interest rates provided by the national central banks. The national rates represent those rates that are currently available from national sources and which are judged to fit the standard categories. These national rates have been aggregated to derive information for the euro area, in some cases relying on proxies and working assumptions due to the heterogeneity observed in the national financial instruments across MU Member States. Furthermore, the national interest rates are not harmonised in terms of their coverage (new business and/or outstanding amounts), the nature of the data (nominal or effective) or the compilation method. The country weights for the euro area retail bank interest rates are derived from MFI balance sheet statistics or close proxies. The weights reflect the country-specific proportions of the relevant instruments within the euro area, measured as outstanding amounts. The weights are adjusted monthly, so that interest rates and weights always refer to the same month.

Table 3.5**Securities issues other than shares by original maturity, residency of the issuer and currency denomination***(EUR billions; transactions during the month and end-of-period stocks; nominal values)***1. Short-term**

	By euro area residents									
					In euro ¹⁾				In other	
					Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
2000 Nov.	302.1	302.4	-0.3	686.5	283.8	290.2	-6.4	612.8	18.4	12.2
Dec.	246.0	278.8	-32.8	653.6	229.7	264.5	-34.8	578.8	16.3	14.3
	<i>Euro area enlargement</i>									
2001 Jan.	376.4	346.8	29.6	687.5	358.6	326.2	32.4	616.0	17.7	20.6
Feb.	404.6	390.7	13.9	702.7	383.9	373.5	10.4	626.0	20.7	17.2
Mar.	452.8	436.5	16.3	722.9	432.7	417.8	14.9	643.3	20.1	18.7
Apr.	441.9	431.8	10.1	733.8	424.2	412.8	11.5	654.5	17.6	19.0
May	478.1	480.7	-2.6	735.8	456.9	460.2	-3.3	652.5	21.2	20.5
June	410.7	418.8	-8.1	726.9	388.1	395.7	-7.6	643.3	22.7	23.2
July	393.5	385.8	7.7	735.0	370.3	365.3	5.0	649.7	23.2	20.5
Aug.	423.1	418.1	5.0	738.5	404.6	400.0	4.6	655.2	18.4	18.1
Sep.	396.3	399.8	-3.5	734.9	374.1	376.3	-2.2	653.5	22.2	23.5
Oct.	498.1	494.1	4.1	742.0	480.1	470.9	9.2	663.0	18.0	23.2
Nov.	486.8	489.7	-2.9	740.7	460.3	466.5	-6.2	656.7	26.4	23.1

2. Long-term

	By euro area residents									
					In euro ¹⁾				In other	
					Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
2000 Nov.	107.3	79.7	27.6	6,460.7	92.7	67.3	25.3	5,895.4	14.7	12.4
Dec.	102.0	103.6	-1.6	6,437.6	88.4	87.8	0.6	5,898.8	13.6	15.9
	<i>Euro area enlargement</i>									
2001 Jan.	153.4	144.5	8.9	6,535.8	136.1	132.2	4.0	5,993.7	17.2	12.3
Feb.	139.6	85.6	53.9	6,590.5	117.1	70.5	46.5	6,042.3	22.5	15.1
Mar.	155.9	102.2	53.7	6,654.7	127.8	87.1	40.6	6,085.0	28.1	15.0
Apr.	114.9	74.1	40.8	6,694.3	98.2	64.6	33.6	6,118.2	16.7	9.5
May	134.9	80.9	54.0	6,765.6	117.4	68.0	49.4	6,167.8	17.5	12.8
June	137.6	78.5	59.1	6,820.0	116.5	58.8	57.7	6,223.9	21.1	19.7
July	140.1	98.5	41.6	6,852.1	123.9	85.5	38.5	6,262.5	16.2	13.1
Aug.	89.2	74.0	15.2	6,855.5	75.7	62.8	12.9	6,274.1	13.5	11.2
Sep.	128.4	110.1	18.2	6,875.7	112.6	92.3	20.3	6,294.9	15.8	17.8
Oct.	142.8	106.1	36.8	6,915.0	122.6	91.4	31.2	6,326.4	20.2	14.6
Nov.	133.0	95.4	37.6	6,956.3	106.8	86.0	20.8	6,347.4	26.2	9.4

3. Total

	By euro area residents									
					In euro ¹⁾				In other	
					Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
2000 Nov.	409.4	382.1	27.3	7,147.2	376.4	357.5	18.9	6,508.2	33.0	24.6
Dec.	348.0	382.4	-34.4	7,091.2	318.0	352.2	-34.2	6,477.6	30.0	30.1
	<i>Euro area enlargement</i>									
2001 Jan.	529.7	491.3	38.5	7,223.3	494.8	458.4	36.4	6,609.7	35.0	32.9
Feb.	544.2	476.3	67.8	7,293.2	501.0	444.0	56.9	6,668.3	43.2	32.3
Mar.	608.6	538.7	69.9	7,377.6	560.5	504.9	55.5	6,728.3	48.2	33.7
Apr.	556.8	505.9	50.9	7,428.1	522.5	477.4	45.1	6,772.7	34.3	28.5
May	613.0	561.6	51.4	7,501.4	574.3	528.3	46.1	6,820.3	38.6	33.3
June	548.3	497.3	51.0	7,546.9	504.5	454.4	50.1	6,867.2	43.8	42.9
July	533.7	484.3	49.3	7,587.1	494.3	450.8	43.4	6,912.3	39.4	33.5
Aug.	512.2	492.0	20.2	7,594.1	480.3	462.8	17.5	6,929.3	31.9	29.2
Sep.	524.6	509.9	14.7	7,610.6	486.6	468.6	18.1	6,948.3	38.0	41.4
Oct.	641.0	600.1	40.8	7,657.0	602.7	562.3	40.4	6,989.3	38.2	37.8
Nov.	619.8	585.1	34.7	7,697.1	567.2	552.5	14.7	7,004.1	52.6	32.5

Sources: ECB and BIS (for issues by non-residents of the euro area).

1) Including items expressed in the national denominations of the euro.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions		Net issues	Amounts outstanding
11	12	13	14	15	16	17	18	19	20	
6.1	73.7	16.6	8.5	8.1	60.8	300.3	298.6	1.7	673.5	2000 Nov.
2.0	74.8	21.1	7.0	14.0	74.8	250.7	271.5	-20.8	653.6	Dec.
<i>Euro area enlargement</i>										
-2.8	71.5	12.9	29.3	-16.4	58.5	371.6	355.5	16.0	674.5	2001 Jan.
3.5	76.7	12.5	13.1	-0.5	57.9	396.4	386.6	9.9	684.0	Feb.
1.4	79.6	26.3	6.3	20.0	78.0	459.0	424.1	34.9	721.3	Mar.
-1.4	79.3	7.2	29.2	-22.0	55.9	431.4	441.9	-10.5	710.4	Apr.
0.7	83.3	11.8	13.5	-1.7	54.2	468.8	473.7	-5.0	706.7	May
-0.5	83.6	25.1	9.8	15.2	69.5	413.1	405.5	7.6	712.8	June
2.7	85.3	6.2	25.5	-19.3	50.2	376.6	390.8	-14.3	699.9	July
0.3	83.3	9.9	14.7	-4.8	45.4	414.6	414.7	-0.2	700.6	Aug.
-1.3	81.4	22.0	12.0	10.0	55.4	396.1	388.3	7.8	708.9	Sep.
-5.2	79.1	.	.	.	.	.	.	.	.	Oct.
3.3	84.0	.	.	.	.	.	.	.	.	Nov.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions		Net issues	Amounts outstanding
11	12	13	14	15	16	17	18	19	20	
2.3	565.3	17.2	6.8	10.4	706.2	109.9	74.1	35.7	6,601.6	2000 Nov.
-2.2	538.9	17.0	7.1	10.0	716.1	105.4	94.8	10.6	6,614.9	Dec.
<i>Euro area enlargement</i>										
4.9	542.1	16.3	6.7	9.6	713.0	152.5	138.9	13.6	6,706.7	2001 Jan.
7.4	548.3	36.3	13.0	23.2	736.0	153.3	83.6	69.8	6,778.2	Feb.
13.0	569.7	37.0	8.1	29.0	764.9	164.8	95.2	69.6	6,849.9	Mar.
7.2	576.2	20.0	6.7	13.3	778.1	118.2	71.4	46.9	6,896.2	Apr.
4.7	597.8	27.0	10.4	16.6	794.5	144.4	78.4	65.9	6,962.3	May
1.4	596.1	33.6	8.7	24.8	819.5	150.1	67.5	82.5	7,043.5	June
3.2	589.5	14.8	5.8	9.0	828.8	138.7	91.3	47.5	7,091.4	July
2.3	581.4	12.9	6.0	6.9	835.9	88.6	68.8	19.8	7,110.0	Aug.
-2.0	580.9	8.4	9.0	-0.6	835.3	121.0	101.3	19.7	7,130.1	Sep.
5.6	588.6	.	.	.	.	.	.	.	.	Oct.
16.8	608.9	.	.	.	.	.	.	.	.	Nov.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
		Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions		Net issues	Amounts outstanding
11	12	13	14	15	16	17	18	19	20	
8.4	639.0	33.8	15.3	18.5	766.9	410.2	372.8	37.4	7,275.1	2000 Nov.
-0.2	613.6	38.1	14.1	24.0	790.9	356.1	366.3	-10.2	7,268.5	Dec.
<i>Euro area enlargement</i>										
2.1	613.6	29.3	36.0	-6.7	771.4	524.0	494.4	29.6	7,381.1	2001 Jan.
10.9	625.0	48.8	26.1	22.7	793.9	549.8	470.1	79.6	7,462.2	Feb.
14.4	649.3	63.4	14.4	49.0	842.9	623.8	519.3	104.5	7,571.2	Mar.
5.8	655.4	27.2	35.9	-8.7	834.0	549.6	513.3	36.3	7,606.6	Apr.
5.3	681.1	38.8	23.9	14.9	848.8	613.1	552.1	61.0	7,669.0	May
0.9	679.7	58.6	18.5	40.1	889.0	563.2	473.0	90.2	7,756.2	June
5.9	674.8	21.0	31.3	-10.2	879.0	515.3	482.1	33.2	7,791.3	July
2.7	664.7	22.8	20.7	2.1	881.3	503.1	483.5	19.6	7,810.6	Aug.
-3.3	662.2	30.4	21.0	9.4	890.7	517.1	489.6	27.5	7,839.1	Sep.
0.4	667.7	.	.	.	.	.	.	.	.	Oct.
20.1	692.9	.	.	.	.	.	.	.	.	Nov.

Table 3.6**Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ¹⁾***(EUR billions; end of period; nominal values)***Amounts outstanding****1. Short-term**

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	612.8	254.4	4.6	87.0	263.9	3.0	60.8	28.1	20.3	11.0
Dec.	578.8	244.0	4.5	86.0	241.4	2.9	74.8	34.9	23.7	14.2
<i>Euro area enlargement</i>										
2001 Jan.	616.0	257.1	5.0	89.5	261.5	2.9	58.5	30.0	17.0	10.1
Feb.	626.0	260.3	4.9	93.2	265.4	2.2	57.9	30.6	16.0	10.0
Mar.	643.3	265.0	5.1	94.5	276.5	2.2	78.0	37.9	25.8	12.6
Apr.	654.5	269.2	5.5	92.4	285.3	2.2	55.9	26.8	18.5	9.7
May	652.5	261.0	5.5	99.4	284.1	2.4	54.2	26.5	18.0	8.8
June	643.3	261.7	5.3	97.5	276.9	2.0	69.5	32.1	24.7	11.5
July	649.7	259.4	5.1	100.8	280.8	3.6	50.2	25.3	17.3	6.7
Aug.	655.2	255.0	4.4	106.4	285.9	3.6	45.4	23.1	15.7	5.8
Sep.	653.5	252.2	4.1	105.9	287.5	3.7	55.4	27.1	22.2	5.5
Oct.	663.0	262.0	3.8	109.8	284.0	3.4	.	.	.	.
Nov.	656.7	251.4	3.9	106.7	291.2	3.6	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	5,895.4	2,175.6	239.7	285.4	3,089.2	105.5	706.2	169.1	220.4	64.6
Dec.	5,898.8	2,175.8	252.9	288.3	3,075.3	106.5	716.1	171.3	221.9	67.2
<i>Euro area enlargement</i>										
2001 Jan.	5,993.7	2,200.0	251.7	285.2	3,149.8	107.1	713.0	172.4	227.8	65.9
Feb.	6,042.3	2,230.0	257.8	289.2	3,156.5	108.8	736.0	183.5	233.3	75.4
Mar.	6,085.0	2,241.0	265.5	299.8	3,168.2	110.5	764.9	195.9	238.6	80.5
Apr.	6,118.2	2,247.7	271.2	303.8	3,182.7	112.7	778.1	198.7	246.1	82.8
May	6,167.8	2,255.7	281.2	312.8	3,204.6	113.4	794.5	204.6	252.3	88.5
June	6,223.9	2,270.7	288.9	320.2	3,230.8	113.4	819.5	212.9	259.0	90.7
July	6,262.5	2,289.5	306.0	322.7	3,228.8	115.5	828.8	215.5	264.5	92.7
Aug.	6,274.1	2,289.4	307.4	329.2	3,229.7	118.3	835.9	216.6	271.4	93.4
Sep.	6,294.9	2,296.1	311.3	327.7	3,237.3	122.5	835.3	217.4	272.2	92.8
Oct.	6,326.4	2,311.5	322.1	324.4	3,240.9	127.5	.	.	.	.
Nov.	6,347.4	2,315.2	329.6	332.4	3,241.0	129.3	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	6,508.2	2,429.9	244.3	372.4	3,353.1	108.5	766.9	197.2	240.7	75.6
Dec.	6,477.6	2,419.8	257.3	374.4	3,316.7	109.4	790.9	206.2	245.6	81.4
<i>Euro area enlargement</i>										
2001 Jan.	6,609.7	2,457.2	256.7	374.6	3,411.2	110.0	771.4	202.4	244.9	76.0
Feb.	6,668.3	2,490.3	262.7	382.4	3,421.9	111.0	793.9	214.2	249.3	85.4
Mar.	6,728.3	2,506.1	270.6	394.3	3,444.7	112.7	842.9	233.8	264.4	93.1
Apr.	6,772.7	2,516.9	276.7	396.2	3,467.9	114.8	834.0	225.5	264.6	92.5
May	6,820.3	2,516.7	286.8	412.2	3,488.7	115.8	848.8	231.0	270.3	97.3
June	6,867.2	2,532.3	294.1	417.7	3,507.7	115.4	889.0	245.0	283.6	102.2
July	6,912.3	2,548.9	311.1	423.5	3,509.7	119.1	879.0	240.8	281.7	99.4
Aug.	6,929.3	2,544.4	311.8	435.6	3,515.6	121.9	881.3	239.7	287.1	99.2
Sep.	6,948.3	2,548.3	315.4	433.7	3,524.8	126.2	890.7	244.5	294.3	98.3
Oct.	6,989.3	2,573.5	325.9	434.1	3,524.9	130.9	.	.	.	.
Nov.	7,004.1	2,566.6	333.4	439.0	3,532.2	132.9	.	.	.	.

*Sources: ECB and BIS (for issues by non-residents of the euro area).**1) Including items expressed in the national denominations of the euro.*

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.2	0.9	0.3	673.5	282.5	24.9	97.9	264.1	3.9	0.3	2000 Nov.
0.1	1.1	0.8	653.6	278.9	28.2	100.2	241.5	4.0	0.8	Dec.
<i>Euro area enlargement</i>										
0.1	1.0	0.2	674.5	287.2	22.1	99.6	261.6	3.9	0.2	2001 Jan.
0.1	1.1	0.1	684.0	290.9	20.9	103.2	265.5	3.3	0.1	Feb.
0.2	1.0	0.4	721.3	303.0	30.9	107.1	276.7	3.2	0.4	Mar.
0.1	0.8	0.1	710.4	296.0	23.9	102.1	285.3	2.9	0.1	Apr.
0.1	0.8	0.1	706.7	287.5	23.5	108.2	284.2	3.2	0.1	May
0.2	0.8	0.2	712.8	293.7	29.9	109.0	277.1	2.8	0.2	June
0.2	0.7	0.0	699.9	284.7	22.3	107.5	281.0	4.3	0.0	July
0.1	0.6	0.0	700.6	278.1	20.1	112.2	286.0	4.2	0.0	Aug.
0.1	0.5	0.1	708.9	279.3	26.3	111.4	287.7	4.2	0.1	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
100.9	32.9	118.3	6,601.6	2,344.6	460.1	350.0	3,190.2	138.4	118.3	2000 Nov.
100.5	37.9	117.2	6,614.9	2,347.1	474.8	355.5	3,175.8	144.4	117.2	Dec.
<i>Euro area enlargement</i>										
90.2	35.6	121.1	6,706.7	2,372.4	479.5	351.0	3,240.0	142.7	121.1	2001 Jan.
88.3	36.5	118.9	6,778.2	2,413.5	491.1	364.6	3,244.8	145.3	118.9	Feb.
90.8	41.7	117.5	6,849.9	2,436.9	504.1	380.3	3,258.9	152.3	117.5	Mar.
91.6	41.9	116.9	6,896.2	2,446.4	517.4	386.7	3,274.3	154.6	116.9	Apr.
92.6	40.9	115.7	6,962.3	2,460.3	533.5	401.3	3,297.1	154.3	115.7	May
94.5	47.4	115.1	7,043.5	2,483.6	547.8	410.8	3,325.3	160.8	115.1	June
94.0	47.4	114.7	7,091.4	2,505.0	570.5	415.4	3,322.8	162.9	114.7	July
93.8	47.3	113.4	7,110.0	2,506.0	578.8	422.6	3,323.5	165.7	113.4	Aug.
92.0	47.3	113.6	7,130.1	2,513.5	583.5	420.5	3,329.2	169.8	113.6	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
101.1	33.8	118.6	7,275.1	2,627.1	485.0	448.0	3,454.2	142.3	118.6	2000 Nov.
100.7	39.0	118.0	7,268.5	2,626.1	503.0	455.8	3,417.3	148.4	118.0	Dec.
<i>Euro area enlargement</i>										
90.4	36.6	121.3	7,381.1	2,659.6	501.5	450.6	3,501.6	146.6	121.3	2001 Jan.
88.4	37.6	119.1	7,462.2	2,704.5	512.0	467.8	3,510.3	148.6	119.1	Feb.
90.9	42.7	117.9	7,571.2	2,739.9	535.0	487.4	3,535.6	155.4	117.9	Mar.
91.7	42.7	117.0	7,606.6	2,742.5	541.3	488.7	3,559.6	157.5	117.0	Apr.
92.6	41.7	115.8	7,669.0	2,747.8	557.1	509.5	3,581.4	157.5	115.8	May
94.7	48.2	115.3	7,756.2	2,777.3	577.7	519.8	3,602.4	163.7	115.3	June
94.2	48.2	114.8	7,791.3	2,789.7	592.8	522.9	3,603.8	167.2	114.8	July
93.9	47.9	113.5	7,810.6	2,784.1	598.9	534.8	3,609.5	169.8	113.5	Aug.
92.1	47.8	113.7	7,839.1	2,792.7	609.8	532.0	3,616.9	174.0	113.7	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

Table 3.6 (cont'd)
Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ¹⁾
(EUR billions; transactions during the month; nominal values)
Gross issues
1. Short-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	283.8	189.7	3.0	55.9	33.6	1.5	16.6	7.4	7.1	1.9
Dec.	229.7	162.1	2.1	45.9	18.0	1.6	21.1	9.3	6.9	4.2
<i>Euro area enlargement</i>										
2001 Jan.	358.6	238.7	3.4	67.0	47.7	1.9	12.9	6.7	4.7	1.2
Feb.	383.9	275.9	2.2	62.9	41.4	1.5	12.5	6.1	4.5	1.7
Mar.	432.7	312.8	3.1	67.0	48.1	1.6	26.3	10.1	12.3	3.5
Apr.	424.2	301.7	3.2	69.4	48.5	1.4	7.2	2.7	3.3	1.1
May	456.9	341.6	2.8	71.3	39.2	1.9	11.8	5.7	5.0	0.8
June	388.1	282.1	2.7	64.7	37.4	1.1	25.1	9.8	11.5	3.3
July	370.3	245.3	2.3	75.3	44.9	2.6	6.2	2.8	2.8	0.6
Aug.	404.6	287.5	1.6	68.7	45.3	1.5	9.9	4.8	4.1	0.9
Sep.	374.1	269.6	2.2	66.2	34.3	1.8	22.0	8.0	11.4	2.2
Oct.	480.1	346.1	2.0	85.7	45.1	1.1	.	.	.	.
Nov.	460.3	347.5	2.3	67.1	42.2	1.3	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	92.7	34.2	8.4	8.1	39.0	3.0	17.2	3.7	10.1	1.0
Dec.	88.4	38.8	19.9	4.5	23.1	2.0	17.0	5.1	3.2	3.3
<i>Euro area enlargement</i>										
2001 Jan.	136.1	56.4	4.0	0.8	72.1	2.8	16.3	3.8	7.5	0.4
Feb.	117.1	57.6	10.0	5.0	42.1	2.4	36.3	12.7	8.8	10.0
Mar.	127.8	45.2	12.0	14.4	53.3	2.8	37.0	14.3	7.3	5.6
Apr.	98.2	40.9	8.5	7.1	39.1	2.6	20.0	5.3	9.1	2.5
May	117.4	38.7	13.2	11.7	52.9	0.9	27.0	8.9	9.7	6.5
June	116.5	44.5	11.0	10.9	49.6	0.5	33.6	11.7	8.7	3.8
July	123.9	52.0	20.7	6.1	42.6	2.5	14.8	4.8	7.1	2.2
Aug.	75.7	29.2	6.1	7.6	29.6	3.1	12.9	3.4	8.5	0.8
Sep.	112.6	35.7	6.7	2.3	63.2	4.6	8.4	4.8	3.0	0.2
Oct.	122.6	58.4	13.1	4.6	40.8	5.7	.	.	.	.
Nov.	106.8	49.2	10.5	8.6	35.8	2.7	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	376.4	223.9	11.4	64.0	72.6	4.5	33.8	11.2	17.3	2.9
Dec.	318.0	200.9	22.0	50.4	41.1	3.7	38.1	14.4	10.1	7.5
<i>Euro area enlargement</i>										
2001 Jan.	494.8	295.0	7.4	67.8	119.8	4.7	29.3	10.5	12.2	1.6
Feb.	501.0	333.5	12.1	67.9	83.5	3.9	48.8	18.9	13.4	11.7
Mar.	560.5	358.0	15.1	81.4	101.5	4.4	63.4	24.4	19.6	9.1
Apr.	522.5	342.6	11.7	76.5	87.6	4.0	27.2	7.9	12.4	3.7
May	574.3	380.3	16.0	83.0	92.1	2.9	38.8	14.7	14.8	7.3
June	504.5	326.6	13.7	75.5	87.0	1.6	58.6	21.6	20.2	7.0
July	494.3	297.3	23.0	81.3	87.5	5.1	21.0	7.6	9.9	2.9
Aug.	480.3	316.7	7.7	76.3	74.9	4.6	22.8	8.2	12.6	1.7
Sep.	486.6	305.4	8.9	68.5	97.5	6.4	30.4	12.7	14.4	2.4
Oct.	602.7	404.5	15.1	90.3	86.0	6.9	.	.	.	.
Nov.	567.2	396.7	12.8	75.7	78.0	4.0	.	.	.	.

Sources: ECB and BIS (for issues by non-residents of the euro area).
1) Including items expressed in the national denominations of the euro.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.1	0.0	0.0	300.3	197.1	10.1	57.9	33.6	1.5	0.0	2000 Nov.
0.0	0.2	0.4	250.7	171.4	9.0	50.1	18.0	1.8	0.4	Dec.
<i>Euro area enlargement</i>										
0.1	0.0	0.1	371.6	245.4	8.1	68.2	47.8	1.9	0.1	2001 Jan.
0.0	0.1	0.0	396.4	282.0	6.7	64.6	41.4	1.6	0.0	Feb.
0.1	0.1	0.3	459.0	322.9	15.4	70.5	48.2	1.7	0.3	Mar.
0.0	0.1	0.0	431.4	304.3	6.5	70.5	48.5	1.5	0.0	Apr.
0.0	0.2	0.0	468.8	347.4	7.9	72.1	39.3	2.1	0.0	May
0.1	0.1	0.2	413.1	291.9	14.3	67.9	37.5	1.2	0.2	June
0.0	0.0	0.0	376.6	248.0	5.1	75.9	44.9	2.6	0.0	July
0.1	0.0	0.0	414.6	292.3	5.7	69.6	45.4	1.5	0.0	Aug.
0.1	0.4	0.0	396.1	277.6	13.5	68.4	34.3	2.1	0.0	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
1.7	0.1	0.6	109.9	37.9	18.5	9.1	40.8	3.1	0.6	2000 Nov.
0.2	5.0	0.1	105.4	43.9	23.2	7.8	23.3	7.1	0.1	Dec.
<i>Euro area enlargement</i>										
1.2	0.3	3.1	152.5	60.2	11.5	1.2	73.4	3.1	3.1	2001 Jan.
2.8	1.7	0.2	153.3	70.4	18.8	15.0	44.8	4.1	0.2	Feb.
3.2	5.5	1.1	164.8	59.5	19.3	20.0	56.6	8.3	1.1	Mar.
1.3	0.6	1.2	118.2	46.2	17.6	9.7	40.4	3.2	1.2	Apr.
1.7	0.0	0.1	144.4	47.6	22.9	18.2	54.6	1.0	0.1	May
2.0	6.7	0.8	150.1	56.3	19.6	14.6	51.6	7.2	0.8	June
0.5	0.1	0.0	138.7	56.8	27.8	8.3	43.2	2.6	0.0	July
0.1	0.0	0.0	88.6	32.6	14.6	8.5	29.7	3.2	0.0	Aug.
0.1	0.0	0.4	121.0	40.5	9.7	2.5	63.3	4.6	0.4	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
1.8	0.1	0.6	410.2	235.0	28.6	66.9	74.4	4.6	0.6	2000 Nov.
0.2	5.3	0.6	356.1	215.3	32.1	57.9	41.3	8.9	0.6	Dec.
<i>Euro area enlargement</i>										
1.3	0.3	3.3	524.0	305.6	19.6	69.4	121.1	5.1	3.3	2001 Jan.
2.8	1.9	0.2	549.8	352.4	25.5	79.6	86.3	5.7	0.2	Feb.
3.3	5.6	1.5	623.8	382.4	34.7	90.5	104.8	10.0	1.5	Mar.
1.3	0.6	1.2	549.6	350.5	24.1	80.2	88.9	4.6	1.2	Apr.
1.7	0.2	0.1	613.1	395.0	30.8	90.3	93.9	3.1	0.1	May
2.1	6.8	1.0	563.2	348.2	33.9	82.6	89.1	8.4	1.0	June
0.6	0.1	0.1	515.3	304.9	32.9	84.2	88.1	5.2	0.1	July
0.2	0.0	0.1	503.1	324.9	20.3	78.0	75.1	4.7	0.1	Aug.
0.2	0.4	0.4	517.1	318.1	23.2	70.9	97.6	6.7	0.4	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

Table 3.6 (cont'd)
Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ¹⁾
(EUR billions; transactions during the month; nominal values)
Net issues
1. Short-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	-6.4	-5.6	0.1	0.6	-1.8	0.3	8.1	4.0	3.6	0.9
Dec.	-34.8	-11.1	-0.1	-1.1	-22.5	0.0	14.0	6.9	3.4	3.2
<i>Euro area enlargement</i>										
2001 Jan.	32.4	13.0	0.6	3.5	14.9	0.5	-16.4	-4.9	-6.6	-4.2
Feb.	10.4	3.6	-0.1	3.6	3.9	-0.7	-0.5	0.6	-1.1	-0.1
Mar.	14.9	2.7	0.2	1.0	11.1	-0.1	20.0	7.3	9.8	2.6
Apr.	11.5	4.4	0.4	-2.0	8.8	0.0	-22.0	-11.1	-7.3	-3.0
May	-3.3	-9.4	0.1	7.0	-1.1	0.2	-1.7	-0.4	-0.5	-0.9
June	-7.6	2.1	-0.3	-1.8	-7.3	-0.4	15.2	5.6	6.7	2.7
July	5.0	-3.6	-0.2	3.2	4.0	1.6	-19.3	-6.7	-7.4	-4.8
Aug.	4.6	-5.3	-0.7	5.6	5.0	0.0	-4.8	-2.2	-1.6	-0.9
Sep.	-2.2	-3.2	-0.3	-0.5	1.7	0.1	10.0	4.0	6.5	-0.3
Oct.	9.2	9.7	-0.4	3.7	-3.5	-0.3	.	.	.	.
Nov.	-6.2	-10.6	0.1	-3.0	7.1	0.2	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	25.3	2.8	2.7	4.6	13.6	1.6	10.4	1.5	9.3	0.8
Dec.	0.6	-2.5	13.1	2.9	-13.9	1.0	10.0	2.2	1.6	2.6
<i>Euro area enlargement</i>										
2001 Jan.	4.0	22.4	-1.2	-3.2	-14.8	0.8	9.6	0.8	6.4	0.1
Feb.	46.5	28.1	6.1	3.9	6.8	1.7	23.2	11.2	5.5	9.8
Mar.	40.6	9.4	7.2	10.6	11.7	1.8	29.0	12.3	5.3	5.1
Apr.	33.6	7.4	5.5	4.0	14.5	2.1	13.3	2.9	7.6	2.4
May	49.4	7.8	9.9	9.0	21.9	0.7	16.6	5.9	6.2	5.7
June	57.7	16.5	7.6	7.3	26.2	0.0	24.8	8.3	6.6	2.2
July	38.5	19.0	17.1	2.6	-2.2	2.0	9.0	2.5	5.4	2.0
Aug.	12.9	1.2	1.4	6.5	0.9	2.9	6.9	1.1	6.8	0.7
Sep.	20.3	6.2	3.9	-1.5	7.5	4.2	-0.6	0.8	0.8	-0.6
Oct.	31.2	15.1	10.8	-3.4	3.7	5.0	.	.	.	.
Nov.	20.8	3.4	7.6	8.0	0.1	1.8	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Nov.	18.9	-2.8	2.8	5.2	11.9	1.9	18.5	5.6	13.0	1.7
Dec.	-34.2	-13.6	13.0	1.9	-36.4	0.9	24.0	9.1	5.0	5.8
<i>Euro area enlargement</i>										
2001 Jan.	36.4	35.4	-0.6	0.3	0.1	1.2	-6.7	-4.1	-0.3	-4.1
Feb.	56.9	31.7	6.0	7.4	10.7	1.0	22.7	11.8	4.4	9.7
Mar.	55.5	12.1	7.3	11.6	22.8	1.7	49.0	19.6	15.1	7.7
Apr.	45.1	11.8	5.8	2.0	23.2	2.2	-8.7	-8.2	0.3	-0.6
May	46.1	-1.6	10.0	15.9	20.7	1.0	14.9	5.5	5.7	4.8
June	50.1	18.6	7.4	5.5	18.9	-0.4	40.1	13.9	13.2	4.9
July	43.4	15.4	17.0	5.8	1.7	3.6	-10.2	-4.2	-2.0	-2.8
Aug.	17.5	-4.1	0.8	12.1	5.9	2.8	2.1	-1.1	5.2	-0.2
Sep.	18.1	3.0	3.6	-2.0	9.2	4.3	9.4	4.7	7.3	-0.9
Oct.	40.4	24.8	10.4	0.3	0.2	4.7	.	.	.	.
Nov.	14.7	-7.2	7.6	5.0	7.2	2.0	.	.	.	.

Sources: ECB and BIS (for issues by non-residents of the euro area).
1) Including items expressed in the national denominations of the euro.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.0	-0.2	-0.3	1.7	-1.6	3.8	1.5	-1.8	0.1	-0.3	2000 Nov.
-0.1	0.2	0.4	-20.8	-4.3	3.3	2.2	-22.6	0.1	0.4	Dec.
<i>Euro area enlargement</i>										
0.0	-0.1	-0.6	16.0	8.1	-6.1	-0.7	14.9	0.3	-0.6	2001 Jan.
0.0	0.1	-0.1	9.9	4.2	-1.2	3.5	3.9	-0.5	-0.1	Feb.
0.1	-0.1	0.3	34.9	10.0	10.0	3.6	11.2	-0.1	0.3	Mar.
-0.1	-0.2	-0.3	-10.5	-6.7	-7.0	-5.0	8.6	-0.2	-0.3	Apr.
0.0	0.0	0.0	-5.0	-9.8	-0.4	6.1	-1.1	0.2	0.0	May
0.1	0.0	0.1	7.6	7.7	6.4	0.9	-7.2	-0.3	0.1	June
0.0	-0.1	-0.2	-14.3	-10.3	-7.6	-1.6	3.9	1.5	-0.2	July
0.0	-0.1	0.0	-0.2	-7.5	-2.2	4.7	5.0	-0.2	0.0	Aug.
0.0	-0.1	0.0	7.8	0.7	6.2	-0.8	1.7	0.0	0.0	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.3	-0.3	-1.2	35.7	4.3	12.0	5.4	14.0	1.3	-1.2	2000 Nov.
-0.4	5.0	-1.0	10.6	-0.2	14.7	5.5	-14.3	6.0	-1.0	Dec.
<i>Euro area enlargement</i>										
1.0	0.0	1.4	13.6	23.2	5.2	-3.1	-13.8	0.8	1.4	2001 Jan.
-2.0	0.9	-2.2	69.8	39.3	11.6	13.6	4.8	2.6	-2.2	Feb.
2.5	5.2	-1.5	69.6	21.8	12.4	15.7	14.2	7.0	-1.5	Mar.
0.9	0.2	-0.6	46.9	10.3	13.1	6.4	15.3	2.3	-0.6	Apr.
1.0	-1.0	-1.1	65.9	13.7	16.1	14.7	22.8	-0.3	-1.1	May
1.9	6.5	-0.6	82.5	24.8	14.2	9.5	28.2	6.5	-0.6	June
-0.5	0.0	-0.4	47.5	21.5	22.5	4.6	-2.8	2.0	-0.4	July
-0.2	-0.1	-1.3	19.8	2.3	8.2	7.2	0.7	2.8	-1.3	Aug.
-1.8	0.0	0.2	19.7	7.0	4.7	-2.0	5.7	4.2	0.2	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
0.3	-0.5	-1.5	37.4	2.8	15.8	6.9	12.2	1.4	-1.5	2000 Nov.
-0.5	5.2	-0.6	-10.2	-4.5	18.0	7.7	-36.9	6.1	-0.6	Dec.
<i>Euro area enlargement</i>										
1.0	-0.1	0.8	29.6	31.3	-0.9	-3.8	1.1	1.2	0.8	2001 Jan.
-2.0	1.0	-2.2	79.6	43.5	10.5	17.1	8.8	2.0	-2.2	Feb.
2.6	5.2	-1.1	104.5	31.8	22.4	19.3	25.3	6.9	-1.1	Mar.
0.7	-0.1	-0.9	36.3	3.6	6.2	1.5	24.0	2.1	-0.9	Apr.
1.0	-1.0	-1.1	61.0	3.9	15.7	20.8	21.7	-0.1	-1.1	May
2.0	6.5	-0.5	90.2	32.5	20.6	10.5	21.0	6.1	-0.5	June
-0.6	0.0	-0.6	33.2	11.2	14.9	3.0	1.2	3.6	-0.6	July
-0.3	-0.2	-1.3	19.6	-5.2	6.0	11.9	5.6	2.6	-1.3	Aug.
-1.8	-0.1	0.2	27.5	7.7	10.9	-2.9	7.4	4.2	0.2	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.

4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices ¹⁾

(not seasonally adjusted, annual percentage changes, unless otherwise indicated)

1. Total index and goods and services

	Total		Goods			Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100	
Weight in the total (%) ²⁾	100.0	100.0	61.9	61.9	38.1	38.1	100.0	100.0	61.9	38.1	
	1	2	3	4	5	6	7	8	9	10	
1998	102.7	1.1	101.8	0.7	104.4	1.9	-	-	-	-	
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-	
2000	106.3	2.3	105.5	2.7	107.8	1.7	-	-	-	-	
<i>Euro area enlargement</i>											
2001	109.0	2.6	108.3	2.7	110.5	2.5	-	-	-	-	
2001 Q1	107.8	2.5	107.1	2.7	109.3	2.2	107.9	0.5	107.2	109.4	
Q2	109.2	3.1	108.9	3.5	110.1	2.5	109.1	1.1	108.6	110.2	
Q3	109.5	2.7	108.6	2.7	111.2	2.5	109.4	0.3	108.7	110.8	
Q4	109.6	2.2	108.7	1.8	111.3	2.8	109.7	0.3	108.7	111.6	
2001 Feb.	107.9	2.6	107.1	2.8	109.5	2.2	107.9	0.3	107.2	109.3	
Mar.	108.3	2.6	107.7	2.8	109.5	2.2	108.2	0.3	107.6	109.5	
Apr.	108.8	2.9	108.3	3.4	109.9	2.4	108.7	0.5	108.1	110.2	
May	109.4	3.4	109.1	3.8	110.0	2.5	109.2	0.4	108.8	110.2	
June	109.5	3.0	109.1	3.4	110.4	2.5	109.3	0.1	108.9	110.4	
July	109.4	2.8	108.4	3.0	111.3	2.5	109.2	-0.1	108.6	110.6	
Aug.	109.4	2.7	108.4	2.7	111.4	2.5	109.3	0.1	108.6	110.8	
Sep.	109.7	2.5	108.9	2.3	111.1	2.6	109.7	0.3	109.0	111.0	
Oct.	109.6	2.4	108.8	2.1	111.1	2.8	109.7	0.0	108.9	111.4	
Nov.	109.5	2.1	108.6	1.6	111.2	2.7	109.6	-0.1	108.6	111.5	
Dec.	109.7	2.1	108.6	1.7	111.5	2.8	109.8	0.1	108.7	111.8	
2002 Jan. ³⁾	.	2.5	.	.	.	.	.	.	.	.

2. Breakdown of goods and services

	Goods						Services				
	Food ⁴⁾			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscellan- eous
	Total	Processed food ⁴⁾	Unprocessed food	Total	Non-energy industrial goods	Energy					
Weight in the total (%) ²⁾	20.3	12.3	8.0	41.6	32.1	9.5	10.0	6.2	2.4	13.9	5.6
	11	12	13	14	15	16	17	18	19	20	21
1998	1.6	1.4	2.0	0.2	0.9	-2.6	2.3	1.7	-1.0	2.2	1.8
1999	0.6	0.9	0.0	1.0	0.7	2.4	1.8	2.1	-4.4	2.0	1.8
2000	1.4	1.1	1.7	3.4	0.7	13.3	1.6	2.6	-4.2	2.3	2.4
<i>Euro area enlargement</i>											
2001	4.6	2.9	7.2	1.7	1.4	2.8	1.8	3.6	-2.9	3.4	2.7
2001 Q1	3.2	1.9	5.3	2.5	1.1	7.2	1.9	3.2	-4.2	3.1	2.4
Q2	5.0	2.8	8.5	2.8	1.5	7.3	1.8	3.6	-2.8	3.3	2.6
Q3	5.2	3.4	8.1	1.4	1.5	1.2	1.8	3.7	-2.5	3.3	2.8
Q4	4.9	3.5	6.9	0.3	1.6	-4.1	1.9	3.8	-1.8	3.7	3.0
2001 Feb.	3.1	2.0	4.7	2.6	1.1	8.2	1.9	3.2	-4.2	3.1	2.4
Mar.	3.9	2.2	6.7	2.2	1.3	5.6	1.8	3.1	-4.0	3.1	2.5
Apr.	4.4	2.5	7.3	2.8	1.4	7.8	1.8	3.6	-2.8	3.1	2.5
May	5.3	2.8	9.2	3.1	1.5	8.6	1.8	3.6	-2.8	3.5	2.5
June	5.4	3.0	9.0	2.4	1.5	5.5	1.8	3.5	-2.7	3.4	2.6
July	5.4	3.3	8.7	1.8	1.4	2.9	1.8	3.8	-2.4	3.2	2.7
Aug.	5.1	3.4	7.7	1.6	1.4	2.1	1.8	3.7	-2.7	3.3	2.7
Sep.	5.2	3.5	7.7	0.9	1.6	-1.3	1.8	3.6	-2.3	3.5	2.9
Oct.	5.2	3.6	7.7	0.6	1.6	-2.7	1.9	3.8	-1.8	3.7	3.0
Nov.	4.7	3.5	6.5	0.0	1.5	-5.0	1.9	3.7	-2.1	3.6	3.0
Dec.	4.7	3.6	6.5	0.2	1.6	-4.5	1.9	4.0	-1.7	3.7	3.0
2002 Jan.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

1) Extended coverage from January 2000 and January 2001. The change affects annual percentage changes during 2000 and 2001, in particular services (miscellaneous). See the general notes for a brief explanation.

2) Referring to the index period 2001.

3) Estimate based on first releases by Germany and Italy (and, when available, by other Member States), as well as on early information on energy prices.

4) Including alcoholic beverages and tobacco.

Table 4.2
Selected other price indicators
1. Industry and commodity prices
(annual percentage changes, unless otherwise indicated)

	Industrial producer prices											World market prices of raw materials ¹⁾		Oil prices ²⁾ (EUR per barrel)		
	Industry excluding construction ³⁾									Construction ⁴⁾	Manufacturing	Total excluding energy				
	Total		Industry excluding construction and energy						Energy							
	Index 1995 = 100		Total	Intermediate goods	Capital goods	Consumer goods										
1	2	3	4	5	Total	Durable consumer goods	Non-durable consumer goods	6	7	8	9	10	11	12	13	14
1996	100.3	0.3	0.3	-1.8	1.4	1.7	2.0	1.7	0.9	1.4	0.9	6.0	-7.5	16.0		
1997	101.4	1.1	0.6	0.2	0.3	1.1	0.6	1.2	3.2	1.2	0.8	10.7	14.6	17.0		
1998	100.6	-0.8	0.2	-0.4	0.6	0.5	0.7	0.5	-5.2	0.3	-0.6	-21.0	-12.5	12.0		
1999	100.2	-0.4	-0.6	-1.5	0.2	-0.1	0.7	-0.2	0.5	1.1	0.2	15.8	-5.9	17.1		
2000	105.7	5.5	2.6	5.0	0.6	1.5	1.4	1.5	19.0	2.3	5.2	50.8	16.7	31.0		
2000 Q4	108.0	6.2	3.1	5.3	0.8	2.3	1.7	2.4	20.1	3.0	5.4	36.8	14.2	34.5		
<i>Euro area enlargement</i>																
2001	107.9	2.2	1.9	1.3	1.1	3.0	2.0	3.2	2.7	.	1.2	-8.8	-7.6	27.8		
2001 Q1	108.3	4.6	3.0	4.0	0.9	3.2	2.0	3.3	10.9	2.3	3.2	4.1	-0.8	28.4		
Q2	108.9	3.7	2.4	2.0	1.0	3.5	2.2	3.7	8.9	2.3	2.6	4.6	-3.0	31.7		
Q3	108.3	1.5	1.6	0.3	1.1	3.1	2.1	3.2	0.7	2.3	0.6	-11.3	-10.4	29.0		
Q4	107.1	-1.0	0.8	-1.1	1.2	2.4	1.7	2.4	-8.2	.	-1.5	-28.8	-15.6	22.4		
2001 Jan.	108.0	4.9	3.1	4.5	0.9	2.9	1.9	3.0	12.4	-	3.6	7.5	0.7	27.3		
Feb.	108.3	4.6	3.0	4.1	0.9	3.1	2.0	3.3	11.2	-	3.3	5.9	-0.1	29.9		
Mar.	108.5	4.2	2.9	3.5	0.9	3.5	2.2	3.7	9.1	-	2.8	-0.8	-3.0	28.1		
Apr.	108.7	4.2	2.7	2.6	1.0	3.6	2.2	3.8	10.6	-	3.0	10.1	-3.7	29.8		
May	109.0	3.7	2.3	1.9	1.0	3.5	2.2	3.6	9.3	-	2.7	1.4	-5.9	32.7		
June	109.0	3.2	2.2	1.5	1.1	3.4	2.2	3.6	7.0	-	2.1	3.0	0.9	32.5		
July	108.3	2.1	1.8	0.7	1.1	3.2	2.1	3.3	2.8	-	1.2	-1.3	-1.8	29.4		
Aug.	108.2	1.7	1.6	0.3	1.1	3.1	2.1	3.3	1.4	-	0.8	-10.4	-10.7	28.7		
Sep.	108.3	0.7	1.3	-0.2	1.2	2.9	1.9	3.0	-2.1	-	-0.1	-20.7	-18.1	28.8		
Oct.	107.6	-0.7	1.0	-0.8	1.2	2.7	1.8	2.8	-7.3	-	-1.2	-30.2	-19.3	23.8		
Nov.	107.1	-1.3	0.8	-1.1	1.2	2.3	1.7	2.4	-9.6	-	-1.8	-34.1	-15.1	21.7		
Dec.	106.8	-1.1	0.6	-1.3	1.2	2.1	1.8	2.1	-7.8	-	-1.5	-20.6	-12.3	21.5		
2002 Jan.	.	.	.	.	.	.	.	.	.	-	.	-14.3	-6.2	22.6

2. Deflators of gross domestic product ⁵⁾
(annual percentage changes, unless otherwise indicated; seasonally adjusted)

	Total		Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports ⁶⁾	Imports ⁶⁾
	Index 1995 = 100							
	15	16	17	18	19	20	21	22
1996	102.0	2.0	2.1	2.4	2.2	0.9	0.8	0.8
1997	103.6	1.5	1.7	2.0	1.3	1.0	1.8	2.6
1998	105.3	1.7	1.3	1.4	1.4	0.9	-0.1	-1.4
1999	106.4	1.1	1.2	1.1	1.8	0.9	-0.5	-0.1
2000	107.8	1.3	2.5	2.2	1.9	2.6	4.8	8.3
1999 Q4	106.8	0.9	1.7	1.5	2.1	1.4	1.8	4.3
2000 Q1	107.3	1.1	2.3	2.0	2.0	2.3	3.8	7.7
Q2	107.6	1.1	2.2	1.8	1.8	2.6	4.7	8.2
Q3	108.1	1.5	2.6	2.3	1.9	2.5	5.1	8.4
Q4	108.5	1.6	2.7	2.5	2.0	3.0	5.5	8.8
<i>Euro area enlargement</i>								
2001	110.7	2.7	2.6	2.7	2.7	2.4	2.0	1.7
2001 Q1	109.8	2.1	2.4	2.3	2.0	2.3	3.5	4.4
Q2	110.6	2.5	2.6	2.7	2.3	2.1	2.7	3.1
Q3	110.7	2.0	2.0	2.3	1.7	2.1	0.8	0.7

Sources: Eurostat, except columns 12 and 13 (HWWA - Hamburg Institute of International Economics), column 14 (Thomson Financial Datastream) and columns 15 to 22 (ECB calculations based on Eurostat data).

1) To December 1998, in ECU; from January 1999, in euro.

2) Brent Blend (for one-month forward delivery). To December 1998, in ECU; from January 1999, in euro.

3) Breakdown in accordance with the harmonised definition of Main Industrial Groupings.

4) Residential buildings, based on non-harmonised data.

5) Data to end-1998 are based on national data expressed in domestic currency.

6) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.

5 Real economy indicators in the euro area

Table 5.1

National accounts ¹⁾

GDP and expenditure components

1. Current prices

(EUR billions (ECU billions to end-1998), seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
1	2	3	4	5	6	7	8	9	
1996	5,534.9	5,409.3	3,143.5	1,142.4	1,121.8	1.6	125.7	1,655.2	1,529.5
1997	5,649.4	5,500.8	3,201.1	1,150.7	1,138.4	10.6	148.5	1,827.2	1,678.7
1998	5,882.9	5,743.6	3,330.8	1,176.9	1,202.3	33.5	139.3	1,948.8	1,809.5
1999	6,139.7	6,035.5	3,495.4	1,230.7	1,286.7	22.6	104.1	2,053.0	1,948.9
2000	6,429.6	6,358.2	3,661.5	1,277.9	1,376.7	42.0	71.4	2,408.4	2,337.0
2000 Q2	1,601.3	1,583.8	912.4	318.0	342.8	10.6	17.5	588.6	571.1
Q3	1,615.5	1,597.6	920.1	320.3	347.2	10.0	17.9	616.2	598.3
Q4	1,630.2	1,615.3	927.3	324.1	349.6	14.2	14.9	638.4	623.5
				<i>Euro area enlargement</i>					
2001 Q1	1,686.1	1,659.5	962.8	332.9	356.6	7.1	26.6	644.1	617.5
Q2	1,698.8	1,675.7	975.9	336.6	355.5	7.8	23.1	644.1	621.0
Q3	1,702.1	1,676.4	980.4	337.4	356.8	1.8	25.7	634.4	608.7

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
10	11	12	13	14	15	16	17	18	
1996	5,384.3	5,263.4	3,045.7	1,112.0	1,106.1	-0.4	120.9	1,635.7	1,514.9
1997	5,509.4	5,354.4	3,093.0	1,126.1	1,132.0	3.3	155.0	1,806.3	1,651.2
1998	5,667.3	5,544.2	3,186.3	1,140.0	1,190.3	27.6	123.0	1,938.6	1,815.6
1999	5,816.5	5,723.7	3,288.1	1,164.6	1,254.4	16.5	92.8	2,039.5	1,946.7
2000	6,011.8	5,883.9	3,372.0	1,186.3	1,308.3	17.3	127.8	2,283.1	2,155.2
2000 Q2	1,500.9	1,471.7	843.8	296.2	326.4	5.3	29.2	561.3	532.0
Q3	1,507.1	1,473.4	844.7	296.5	329.2	3.0	33.6	581.1	547.5
Q4	1,515.8	1,480.6	846.1	298.7	329.2	6.6	35.3	594.9	559.6
				<i>Euro area enlargement</i>					
2001 Q1	1,551.4	1,512.4	873.3	304.5	334.0	0.7	39.0	599.8	560.8
Q2	1,552.4	1,516.3	878.1	305.7	331.2	1.3	36.1	596.5	560.4
Q3	1,554.3	1,514.8	879.6	306.4	331.1	-2.3	39.5	592.1	552.5

(annual percentage changes)

1996	1.4	1.0	1.6	1.7	1.2	-	-	4.5	3.2
1997	2.3	1.7	1.6	1.3	2.3	-	-	10.4	9.0
1998	2.9	3.5	3.0	1.2	5.1	-	-	7.3	10.0
1999	2.6	3.2	3.2	2.2	5.4	-	-	5.2	7.2
2000	3.4	2.8	2.6	1.9	4.3	-	-	11.9	10.7
2000 Q2	3.9	3.5	3.3	2.2	4.9	-	-	11.7	10.9
Q3	3.2	2.7	2.4	1.6	3.8	-	-	12.3	11.4
Q4	2.8	2.2	1.9	1.6	3.2	-	-	12.0	10.7
				<i>Euro area enlargement</i>					
2001 Q1	2.5	1.7	2.0	2.0	1.4	-	-	8.8	7.0
Q2	1.6	1.0	1.8	2.0	-0.4	-	-	5.2	3.7
Q3	1.4	0.8	1.8	2.1	-1.3	-	-	0.8	-0.6

Source: Eurostat.

1) See the first section of the general notes for a brief explanation of features of current price data expressed in ECU up to end-1998.

2) Including acquisitions less disposals of valuables.

3) Exports and imports cover goods and services and include cross-border trade within the euro area. They are not fully consistent with Tables 8 and 9.

Value added by activity

3. Current prices

(EUR billions (ECU billions to end-1998), seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	1	2	3	4	5	6	7	8	9
1996	5,173.4	139.7	1,207.3	300.7	1,059.3	1,334.5	1,131.9	200.5	562.1
1997	5,266.5	138.6	1,227.1	291.8	1,086.9	1,377.7	1,144.4	199.4	582.2
1998	5,467.1	138.7	1,273.5	295.0	1,139.5	1,441.2	1,179.3	199.8	615.5
1999	5,675.7	135.4	1,295.0	311.3	1,183.4	1,526.0	1,224.7	201.0	665.0
2000	5,949.8	137.0	1,373.8	325.9	1,235.8	1,612.1	1,265.2	212.4	692.1
2000 Q2	1,480.9	34.0	342.2	81.2	307.7	400.5	315.3	53.2	173.6
Q3	1,496.4	34.8	346.3	81.3	310.1	406.0	317.9	53.4	172.4
Q4	1,508.5	34.6	349.1	82.1	314.0	409.3	319.4	53.3	175.0
<i>Euro area enlargement</i>									
2001 Q1	1,561.4	37.0	360.6	85.3	327.3	421.3	329.9	54.9	179.6
Q2	1,572.8	37.7	359.4	85.4	330.9	426.6	332.7	55.4	181.5
Q3	1,579.2	37.7	357.8	86.2	334.2	428.4	335.0	56.4	179.3

4. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	10	11	12	13	14	15	16	17	18
1996	5,041.2	139.6	1,178.3	295.5	1,039.5	1,289.5	1,098.9	200.0	543.1
1997	5,160.6	140.2	1,216.9	290.2	1,072.1	1,331.1	1,110.0	207.1	556.0
1998	5,309.3	142.2	1,253.6	292.0	1,113.7	1,381.8	1,126.0	213.8	571.8
1999	5,443.0	145.1	1,263.7	298.9	1,162.6	1,432.6	1,140.1	221.8	595.2
2000	5,636.2	145.2	1,321.9	304.4	1,211.0	1,495.3	1,158.6	232.4	607.9
2000 Q2	1,405.3	36.2	329.6	75.9	301.9	372.2	289.6	57.7	153.3
Q3	1,413.7	36.6	332.1	75.9	303.5	375.7	289.9	58.4	151.8
Q4	1,422.7	36.4	334.1	75.8	307.0	378.6	290.9	59.1	152.3
<i>Euro area enlargement</i>									
2001 Q1	1,458.1	38.3	341.9	77.4	317.2	386.9	296.5	60.6	153.9
Q2	1,458.6	38.3	338.4	76.4	318.0	389.9	297.5	61.2	155.1
Q3	1,462.1	38.6	337.1	76.4	319.1	392.4	298.4	61.9	154.2
<i>(annual percentage changes)</i>									
1996	1.5	5.5	-0.3	-1.8	1.0	3.7	1.7	2.5	1.4
1997	2.4	0.4	3.3	-1.8	3.1	3.2	1.0	3.5	2.4
1998	2.9	1.4	3.0	0.6	3.9	3.8	1.4	3.2	2.8
1999	2.5	2.1	0.8	2.4	4.4	3.7	1.3	3.7	4.1
2000	3.5	0.0	4.6	1.8	4.2	4.4	1.6	4.8	2.1
2000 Q2	3.9	-0.2	5.0	2.4	4.7	4.5	1.9	5.2	4.5
Q3	3.4	0.5	4.5	1.0	3.7	4.3	1.6	4.3	1.8
Q4	3.2	-0.5	4.2	0.5	4.1	4.0	1.4	4.5	-0.5
<i>Euro area enlargement</i>									
2001 Q1	2.8	0.3	3.7	-1.4	3.7	3.4	1.4	4.3	0.3
Q2	2.0	0.0	1.5	-1.5	2.8	3.3	1.2	4.5	-0.7
Q3	1.7	-0.3	0.4	-1.5	2.6	3.0	1.4	4.3	-0.3

Source: Eurostat.

1) The use of financial intermediation services indirectly measured (FISIM) is treated as intermediate consumption which is not allocated among branches.

Table 5.2
Selected other real economy indicators ¹⁾
1. Industrial production
(annual percentage changes, unless otherwise indicated)

	Total	Industry excluding construction ²⁾									Construction	Manufacturing
		Total			Industry excluding construction and energy					Energy		
		Index (s.a.) 1995 = 100		Total	Inter- mediate goods	Capital goods	Consumer goods					
							Total	Durable consumer goods	Non-durable consumer goods			
1	2	3	4	5	6	7	8	9	10	11	12	
1998	3.5	109.3	4.3	4.4	3.5	7.5	2.8	4.6	2.4	1.2	0.3	4.7
1999	1.9	111.4	2.0	1.8	1.5	2.4	1.7	1.3	1.8	1.4	2.9	2.0
2000	5.0	117.5	5.5	5.7	5.9	8.6	2.2	5.9	1.5	1.8	2.1	5.9
2000 Q4	4.5	120.1	5.2	5.5	5.2	8.9	2.0	4.3	1.6	0.0	1.1	5.8
<i>Euro area enlargement</i>												
2001	.	.	.	.	.	.	.	.	.	.	.	.
2001 Q1	3.1	119.5	4.2	4.4	2.8	8.0	3.0	3.0	3.1	-1.7	-2.1	5.1
Q2	0.2	118.3	0.9	0.5	-0.2	1.8	0.4	-1.8	0.8	1.1	-2.5	0.9
Q3	-1.2	117.6	-0.5	-0.7	-1.8	0.1	0.1	-4.2	1.0	0.8	-0.8	-0.7
Q4	.	.	.	.	.	.	.	.	.	.	.	.
2001 Feb.	3.3	119.9	4.6	4.6	2.9	8.3	3.4	2.0	3.8	-1.5	-1.1	5.4
Mar.	1.8	119.5	3.1	3.3	1.6	6.3	2.8	3.2	2.8	-2.4	-4.3	3.9
Apr.	0.0	118.3	0.9	0.4	-0.2	1.4	0.2	-2.0	0.6	0.8	-4.1	0.9
May	-0.5	117.7	-0.1	-0.4	-1.1	0.8	-0.5	-3.8	0.2	1.9	-3.4	-0.3
June	1.2	118.8	1.8	1.6	0.6	3.1	1.4	0.2	1.6	0.5	-0.9	2.0
July	-1.2	116.8	-1.4	-1.6	-1.8	-1.9	-0.9	-6.9	0.4	0.3	-1.1	-1.7
Aug.	-1.1	118.3	0.9	0.6	-1.4	2.9	1.4	0.2	1.6	1.3	-2.4	0.9
Sep.	-1.3	117.6	-0.7	-0.9	-2.1	-0.1	0.1	-4.3	1.1	0.8	-4.1	-0.9
Oct.	-1.9	115.9	-2.6	-2.8	-3.8	-1.8	-1.8	-7.8	-0.6	-0.4	-1.6	-2.9
Nov.	-3.3	115.1	-4.2	-4.7	-5.8	-4.3	-3.2	-7.9	-2.2	1.3	-4.1	-4.9
Dec.	.	.	.	.	.	.	.	.	.	.	.	.

2. Retail sales and car registrations
(annual percentage changes, unless otherwise indicated)

	Retail sales (s.a.)									New passenger car registrations		
	Current prices			Constant prices						Thousands ³⁾ (s.a.)		
	Total		Index 1995 = 100	Total		Food, beverages, tobacco	Non-food		Textiles, clothing, footwear			Household equipment
	Index 1995 = 100			Index 1995 = 100								
13	14	15	16	17	18	19	20	21	22			
1998	107.9	3.6	104.5	3.0	2.0	3.6	2.1	4.5	923	7.2		
1999	111.5	3.3	107.2	2.6	3.1	2.5	1.4	3.0	973	5.4		
2000	116.0	4.1	109.7	2.4	1.9	2.3	1.7	4.8	952	-2.1		
2000 Q4	118.1	3.7	110.5	1.6	1.4	1.6	0.6	3.8	924	-3.8		
<i>Euro area enlargement</i>												
2001	.	.	.	.	.	.	.	.	970	-0.7
2001 Q1	119.3	4.5	111.1	2.4	1.6	2.7	2.7	1.2	950	-5.1		
Q2	120.9	3.9	111.2	1.0	1.0	1.1	0.7	-0.6	1,005	1.8		
Q3	121.8	4.3	111.6	1.6	1.3	1.5	2.2	-0.8	952	-1.1		
Q4	.	.	.	.	.	.	.	.	972	2.5
2001 Feb.	119.1	3.3	111.0	1.5	1.5	1.4	0.1	0.1	953	-6.2		
Mar.	119.0	4.8	110.7	2.4	1.4	3.1	2.2	0.0	952	-3.7		
Apr.	120.4	3.8	111.3	1.2	1.1	1.2	0.8	-0.5	969	-1.8		
May	120.9	2.8	111.0	0.0	0.8	0.0	-0.4	-1.8	992	0.0		
June	121.5	5.1	111.4	1.7	1.3	2.1	1.6	0.4	1,053	7.3		
July	121.7	4.3	111.5	1.6	1.4	1.4	0.5	-1.9	936	-1.5		
Aug.	121.8	4.5	111.6	1.7	1.4	1.5	0.4	0.9	961	-0.5		
Sep.	121.9	3.9	111.8	1.6	1.3	1.7	5.9	-1.2	960	-1.2		
Oct.	121.2	2.3	110.7	-0.1	1.0	0.3	-3.8	0.0	966	3.2		
Nov.	122.5	3.0	112.0	1.2	1.1	1.1	2.3	-0.9	975	3.3		
Dec.	.	.	.	.	.	.	.	.	976	0.8

Sources: Eurostat, except columns 21 and 22 (ECB calculation based on data from the ACEA/A.A.A., European Automobile Manufacturers' Association).
1) Adjusted for variations in the number of working days.
2) Breakdown in accordance with the harmonised definition of Main Industrial Groupings.
3) Monthly averages.

Table 5.3

European Commission Business and Consumer Surveys

1. Economic sentiment indicator, manufacturing industry and consumer surveys

(percentage balances, seasonally adjusted, unless otherwise indicated)

	Economic sentiment indicator ¹⁾²⁾ (index 1995 = 100)	Manufacturing industry					Consumer confidence indicator ¹⁾				
		Industrial confidence indicator				Capacity utilisation ³⁾ (percentages)	Total	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
1998	101.4	-1	-5	9	11	83.0	-5	2	-4	16	-2
1999	101.2	-7	-17	11	7	81.8	-4	3	-4	12	-1
2000	103.8	5	3	5	17	83.8	1	4	1	1	0
<i>Euro area enlargement</i>											
2001	100.9	-8	-13	13	3	83.2	-5	2	-9	13	0
2001 Q1	103.0	1	-1	8	12	84.4	1	4	-2	-1	1
Q2	101.6	-5	-8	13	5	83.6	-2	3	-5	6	1
Q3	100.3	-10	-17	15	2	83.0	-8	1	-12	18	-2
Q4	98.9	-17	-27	17	-8	81.8	-11	1	-16	29	0
2002 Q1	.	.	.	.	.	80.8	.	.	.	.	.
2001 Jan.	103.4	3	0	6	14	-	1	4	-1	-3	-1
Feb.	103.1	1	0	8	12	-	1	4	-2	1	2
Mar.	102.5	-1	-3	10	9	-	1	4	-3	0	2
Apr.	102.1	-4	-6	12	6	-	0	4	-3	3	2
May	101.6	-5	-9	13	6	-	-2	3	-4	8	1
June	101.1	-7	-10	14	3	-	-3	2	-7	8	1
July	100.7	-9	-16	15	5	-	-6	2	-10	14	-1
Aug.	100.1	-10	-16	15	2	-	-8	1	-12	19	-3
Sep.	100.1	-11	-18	15	-1	-	-9	1	-13	21	-1
Oct.	99.1	-16	-25	16	-8	-	-10	2	-17	27	1
Nov.	98.6	-18	-28	18	-9	-	-12	1	-17	31	-1
Dec.	98.9	-17	-28	16	-7	-	-10	1	-14	28	0
2002 Jan.	99.0	-14	-28	14	-1	-	-11	0	-13	28	-1

2. Construction industry, retail trade and services surveys

(percentage balances, seasonally adjusted)

	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator ¹⁾			
	Total	Order books	Employment expectations	Total	Present business situation	Volume of stocks	Expected business situation	Total	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
1998	-19	-25	-12	-3	-3	13	8	32	32	30	32
1999	-7	-14	1	-5	-5	15	4	26	24	24	30
2000	1	-6	8	-1	4	16	9	30	36	22	32
<i>Euro area enlargement</i>											
2001	-5	-10	1	-6	-4	16	3	15	17	8	21
2001 Q1	-1	-7	5	-2	4	18	9	26	30	16	34
Q2	-3	-9	4	-6	-5	16	3	24	24	16	31
Q3	-7	-10	-3	-6	-5	16	3	14	18	6	19
Q4	-9	-14	-4	-9	-11	15	-2	-4	-5	-8	0
2002 Q1	.	.	.	.	.	.	.	.	.	.	.
2001 Jan.	1	-8	9	0	5	19	14	28	32	20	33
Feb.	-2	-7	4	0	10	19	10	26	29	17	33
Mar.	-2	-7	3	-5	-3	15	2	25	28	10	36
Apr.	-2	-8	4	-4	-1	16	4	25	23	17	34
May	-2	-9	5	-7	-9	15	3	23	24	15	30
June	-5	-11	2	-7	-6	17	3	23	24	16	29
July	-7	-10	-3	-4	0	16	3	17	21	10	21
Aug.	-8	-10	-6	-8	-6	17	-1	14	16	4	21
Sep.	-5	-9	0	-6	-8	15	6	12	17	5	15
Oct.	-8	-12	-4	-9	-11	14	-1	-2	-4	-6	3
Nov.	-10	-14	-5	-9	-10	14	-3	-6	-7	-7	-4
Dec.	-9	-16	-2	-10	-12	17	-1	-5	-5	-11	1
2002 Jan.	-12	-19	-4	-12	-15	15	-5	1	1	-16	18

Source: European Commission Business and Consumer Surveys.

1) Data for all periods refer to the Euro 12.

2) The economic sentiment indicator is composed of the industrial, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40% and the three other indicators have a weight of 20% each.

3) Data on capacity utilisation are collected in January, April, July and October. Annual data are averages of the four quarterly surveys.

Table 5.4
Labour market indicators
1. Employment and unemployment in the whole economy ¹⁾
(annual percentage changes, seasonally adjusted, unless otherwise indicated)

	Employment						Unemployment			
	Total		By employment status		By selected sector		Total		Adult ²⁾	Youth ²⁾
	Index 1995 = 100		Employees	Self- employed	Industry excluding construction	Services	Millions	% of labour force	% of labour force	% of labour force
	1	2	3	4	5	6	7	8	9	10
1997	101.3	0.8	0.9	0.1	-0.4	1.5	14.823	11.5	9.9	23.2
1998	102.9	1.6	1.8	0.4	1.1	2.2	14.076	10.9	9.4	21.2
1999	104.6	1.6	2.2	-0.6	0.0	2.6	12.964	9.9	8.6	19.1
2000	106.8	2.1	2.4	0.2	0.8	2.8	11.711	8.9	7.7	17.1
2000 Q4	107.6	2.2	2.3	1.2	1.1	2.7	11.305	8.5	7.5	16.5
2000 Dec.	-	-	-	-	-	-	11.249	8.5	7.4	16.4
<i>Euro area enlargement</i>										
2001	.	.	.	.	.	.	11.611	8.5	7.4	16.7
2001 Q1	108.0	1.9	2.2	0.5	1.2	2.4	11.621	8.5	7.4	16.7
Q2	108.2	1.6	1.7	0.6	0.8	2.0	11.564	8.4	7.3	16.7
Q3	108.4	1.3	1.5	0.0	0.2	1.8	11.577	8.4	7.3	16.7
Q4	.	.	.	.	.	.	11.681	8.5	7.4	16.9
2001 Jan.	-	-	-	-	-	-	11.681	8.5	7.4	16.8
Feb.	-	-	-	-	-	-	11.615	8.5	7.4	16.7
Mar.	-	-	-	-	-	-	11.569	8.5	7.3	16.6
Apr.	-	-	-	-	-	-	11.548	8.4	7.3	16.7
May	-	-	-	-	-	-	11.567	8.4	7.3	16.7
June	-	-	-	-	-	-	11.577	8.5	7.3	16.7
July	-	-	-	-	-	-	11.573	8.4	7.3	16.7
Aug.	-	-	-	-	-	-	11.568	8.4	7.3	16.7
Sep.	-	-	-	-	-	-	11.590	8.5	7.3	16.7
Oct.	-	-	-	-	-	-	11.638	8.5	7.4	16.8
Nov.	-	-	-	-	-	-	11.689	8.5	7.4	16.9
Dec.	-	-	-	-	-	-	11.716	8.5	7.4	16.9

2. Labour costs and productivity
(annual percentage changes)

	Unit labour cost in the whole economy, and components (s.a.)			Labour cost indices ³⁾					Earnings per employee in manufacturing	
	Unit labour cost	Compensation per employee	Labour productivity	Total	By component		By selected sector			
					Wages and salaries	Employers' social contributions and other costs	Industry excluding construction	Services		
	11	12	13	14	15	16	17	18	19	
1996	1.9	3.0	1.1	3.5	3.0	4.5	3.6	4.0	3.7	
1997	0.7	2.2	1.6	2.5	2.6	2.5	2.2	2.7	2.3	
1998	0.2	1.4	1.3	1.7	2.1	0.8	1.6	1.5	2.2	
1999	1.3	2.2	0.9	2.2	2.4	1.4	2.5	1.9	2.7	
2000	1.1	2.5	1.4	3.4	3.7	2.4	3.3	3.0	2.7	
1999 Q3	1.2	2.1	0.9	2.3	2.5	1.6	2.7	2.0	2.9	
Q4	0.4	2.2	1.8	2.5	2.7	1.5	2.8	1.8	2.5	
2000 Q1	0.4	2.5	2.1	3.6	3.9	2.8	3.8	3.4	3.0	
Q2	0.5	2.1	1.7	3.5	3.8	2.6	3.4	2.9	2.8	
Q3	1.4	2.4	1.0	3.4	3.8	2.4	3.2	2.6	2.5	
Q4	1.7	2.2	0.4	3.1	3.5	1.9	2.8	3.0	2.3	
<i>Euro area enlargement</i>										
2001 Q1	2.2	2.4	0.2	3.2	3.6	1.9	3.0	3.1	3.2	
Q2	2.5	2.5	0.0	2.9	3.3	1.6	3.1	2.1	2.8	
Q3	2.5	2.5	0.0	3.4	3.7	2.3	3.3	3.4	2.9	

Sources: ECB calculations based on Eurostat data (columns 1 to 6 and 18), Eurostat (columns 7 to 10 and 14 to 17) and ECB calculations based on national data (columns 11 to 13 and 19).

1) Data for employment are based on the ESA 95. Due to differences in coverage, quarterly data are not fully consistent with annual data. Data for unemployment follow ILO recommendations.

2) Adult: 25 years and over; youth: below 25 years; expressed as a percentage of the labour force for the relevant age group.

3) Hourly labour costs for the whole economy, excluding the agriculture, public administration, education and health sectors. Owing to differences in coverage, components are not consistent with the total.

6 Saving, investment and financing in the euro area

Table 6.1

Financial investment and financing of non-financial sectors ¹⁾

(EUR billions (ECU billions to end-1998); not seasonally adjusted; end of period)

Amounts outstanding

1. Main financial assets ²⁾

	Currency and deposits									Memo: deposits of non-banks with banks outside the euro area ³⁾
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs ⁴⁾	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
	1	2	3	4	5	6	7	8	9	10
1997 Q4	4,685.3	320.6	4,072.2	1,158.1	1,466.3	1,322.5	125.3	153.9	138.7	215.8
1998 Q1	4,642.4	311.8	4,050.9	1,133.2	1,457.0	1,342.7	118.0	139.4	140.2	247.2
Q2	4,699.1	315.5	4,100.3	1,204.9	1,452.7	1,341.9	100.8	147.4	135.8	239.7
Q3	4,677.5	311.8	4,074.2	1,184.2	1,451.1	1,341.4	97.4	156.4	135.1	237.6
Q4	4,826.0	323.4	4,211.1	1,282.9	1,463.3	1,386.3	78.6	149.8	141.6	215.3
1999 Q1	4,675.3	317.8	4,075.8	1,239.1	1,464.5	1,306.2	66.0	133.4	148.4	243.9
Q2	4,701.5	324.0	4,114.1	1,321.8	1,418.3	1,315.6	58.4	125.0	138.4	242.7
Q3	4,712.8	327.5	4,112.6	1,324.5	1,416.4	1,313.0	58.7	133.3	139.4	238.6
Q4	4,858.9	350.0	4,214.8	1,370.8	1,457.6	1,323.4	63.0	142.0	152.1	229.7
2000 Q1	4,836.8	334.7	4,222.0	1,379.5	1,462.5	1,303.2	76.8	130.2	150.0	260.6
Q2	4,893.7	341.2	4,256.5	1,409.6	1,485.6	1,282.5	78.9	146.0	150.1	247.2
Q3	4,913.5	339.0	4,265.6	1,396.7	1,523.5	1,263.5	81.9	159.2	149.7	254.1
Q4	5,030.2	347.6	4,361.5	1,464.5	1,542.4	1,269.1	85.6	164.5	156.6	230.3
<i>Euro area enlargement</i>										
2001 Q1	5,145.3	335.5	4,502.3	1,446.2	1,625.7	1,314.5	115.9	150.3	157.1	260.0
Q2	.	332.2	4,587.8	1,526.2	1,621.1	1,321.0	119.6	164.3	.	269.0
Q3	.	308.9	4,617.0	1,549.5	1,608.7	1,333.3	125.5	153.7	.	.

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1997 Q4	1,580.9	202.9	1,378.0	2,735.9	1,573.4	1,162.4	184.9	2,384.1	2,129.4	254.7
1998 Q1	1,599.3	194.5	1,404.8	3,260.9	1,937.6	1,323.3	186.5	2,463.8	2,199.6	264.2
Q2	1,549.4	169.2	1,380.2	3,487.4	2,058.5	1,428.9	186.7	2,522.3	2,255.9	266.4
Q3	1,537.3	158.1	1,379.2	3,187.4	1,744.2	1,443.2	187.9	2,567.8	2,298.7	269.1
Q4	1,533.9	157.5	1,376.4	3,513.3	1,991.3	1,522.0	172.8	2,631.5	2,362.4	269.1
1999 Q1	1,574.3	136.7	1,437.5	3,734.8	2,096.4	1,638.4	194.8	2,706.9	2,428.2	278.7
Q2	1,506.5	127.6	1,378.9	3,980.3	2,238.9	1,741.4	211.5	2,774.8	2,494.1	280.7
Q3	1,506.9	116.5	1,390.4	4,068.7	2,317.3	1,751.4	209.2	2,841.0	2,557.5	283.4
Q4	1,550.3	146.5	1,403.8	4,589.6	2,751.4	1,838.2	199.9	2,956.0	2,669.1	286.9
2000 Q1	1,544.6	147.0	1,397.6	4,862.3	2,928.4	1,934.0	209.8	3,086.9	2,786.5	300.3
Q2	1,583.7	147.2	1,436.6	4,796.7	2,884.3	1,912.5	199.0	3,137.7	2,834.7	303.0
Q3	1,643.3	163.1	1,480.2	4,922.5	2,989.6	1,932.9	203.5	3,196.7	2,890.5	306.2
Q4	1,710.9	178.4	1,532.5	5,011.4	3,089.5	1,921.9	205.8	3,208.8	2,900.1	308.7
<i>Euro area enlargement</i>										
2001 Q1	1,767.8	217.6	1,550.1	4,743.8	2,875.3	1,868.6	228.3	3,254.3	2,932.6	321.7
Q2	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.

3) BIS international banking statistics. The BIS definition of banks is close to that of MFIs.

4) Covering deposits with euro area central government (S.1311), other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).

5) Excluding unquoted shares.

Table 6.1 (cont'd)
Financial investment and financing of non-financial sectors ¹⁾
(EUR billions (ECU billions to end-1998); not seasonally adjusted; end of period)
Amounts outstanding
2. Main liabilities ²⁾

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks ³⁾
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households ⁴⁾			
			Total	Short-term	Long-term ⁵⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
	1	2	3	4	5	6	7	8	9	10	11	12
1997 Q4	5,834.8	5,315.1	923.5	54.2	869.3	2,404.9	837.2	1,567.7	2,506.4	224.2	2,282.2	141.6
1998 Q1	5,893.7	5,357.3	907.2	35.5	871.7	2,450.3	853.8	1,596.5	2,536.2	223.5	2,312.7	146.9
Q2	6,005.4	5,453.0	902.0	31.8	870.2	2,504.8	878.0	1,626.8	2,598.6	233.1	2,365.5	151.3
Q3	6,080.3	5,524.1	903.1	33.3	869.9	2,528.8	865.0	1,663.7	2,648.4	233.7	2,414.7	147.4
Q4	6,226.8	5,663.4	911.3	36.0	875.2	2,601.1	903.0	1,698.1	2,714.4	240.5	2,473.9	151.3
1999 Q1	6,261.9	5,682.7	903.1	36.1	867.0	2,594.4	920.0	1,674.4	2,764.4	251.5	2,512.9	156.8
Q2	6,424.9	5,817.3	900.5	38.7	861.8	2,686.6	962.4	1,724.2	2,837.7	255.1	2,582.6	183.3
Q3	6,491.0	5,886.3	885.9	37.7	848.2	2,701.3	941.7	1,759.6	2,903.8	255.0	2,648.8	191.4
Q4	6,668.2	6,039.1	900.7	42.1	858.7	2,796.4	980.0	1,816.4	2,971.1	263.8	2,707.3	201.4
2000 Q1	6,813.2	6,155.8	891.3	41.1	850.3	2,895.2	1,037.8	1,857.4	3,026.6	265.3	2,761.2	221.1
Q2	6,961.5	6,261.6	885.6	42.0	843.6	2,997.9	1,090.2	1,907.6	3,078.1	273.9	2,804.2	219.7
Q3	7,098.5	6,378.1	865.7	39.9	825.9	3,101.1	1,145.8	1,955.2	3,131.7	275.7	2,856.0	252.2
Q4	7,270.3	6,500.3	883.0	42.0	841.0	3,198.6	1,160.2	2,038.4	3,188.7	281.6	2,907.1	253.5
	<i>Euro area enlargement</i>											
2001 Q1	7,445.8	6,671.8	896.0	41.6	854.4	3,315.5	1,238.7	2,076.7	3,234.3	279.7	2,954.6	257.3
Q2	.	6,762.0	.	.	.	.	.	.	.	.	.	278.8
Q3	.	6,805.0	.	.	.	.	.	.	.	.	.	.
	Securities other than shares issued by								Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations	
	Total	General government			Non-financial corporations							
	13	Total	Short-term	Long-term	Total	Short-term	Long-term	19	20	21	22	
1997 Q4	3,638.0	3,335.1	499.0	2,836.0	302.9	45.8	257.1	1,997.7	135.2	236.2		
1998 Q1	3,762.1	3,442.3	492.5	2,949.8	319.8	55.8	263.9	2,465.0	136.3	239.1		
Q2	3,826.3	3,504.1	491.7	3,012.3	322.2	54.0	268.2	2,705.7	134.2	242.1		
Q3	3,920.1	3,587.1	494.5	3,092.6	333.0	55.6	277.4	2,317.1	133.8	245.1		
Q4	3,927.6	3,594.0	466.5	3,127.5	333.6	55.1	278.5	2,641.8	140.3	248.2		
1999 Q1	3,981.0	3,633.3	462.3	3,171.0	347.7	66.0	281.7	2,734.6	146.9	251.2		
Q2	3,964.6	3,609.6	451.8	3,157.8	355.0	67.1	287.9	2,975.3	136.6	254.3		
Q3	3,950.8	3,581.5	444.8	3,136.7	369.3	75.3	294.0	3,081.5	137.6	257.4		
Q4	3,914.7	3,534.6	419.9	3,114.7	380.1	78.5	301.6	3,947.8	149.8	260.8		
2000 Q1	3,980.8	3,600.9	425.2	3,175.8	379.8	79.2	300.6	4,414.5	147.6	263.6		
Q2	4,019.5	3,621.7	425.4	3,196.4	397.8	89.0	308.8	4,165.7	147.6	266.6		
Q3	4,057.7	3,638.7	421.8	3,216.9	419.0	95.9	323.1	4,044.3	147.2	269.0		
Q4	4,113.6	3,666.1	401.8	3,264.3	447.5	102.4	345.0	3,830.1	153.7	271.4		
	<i>Euro area enlargement</i>											
2001 Q1	4,262.3	3,797.4	429.8	3,367.6	464.9	112.2	352.7	3,441.4	154.7	273.8		
Q2	.	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.

3) BIS international banking statistics. The BIS definition of banks is close to that of MFIs.

4) Including non-profit institutions serving households.

5) Including all loans taken by central government from MFIs in the euro area.

Transactions

1. Main financial assets ¹⁾

	Currency and deposits									Memo: deposits of non-banks with banks outside the euro area ²⁾
	Total	Currency	Deposits of non-financial sectors ³⁾ other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs ⁴⁾	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
	1	2	3	4	5	6	7	8	9	10
1997 Q4	130.5	9.4	111.5	73.9	5.1	37.6	-5.1	3.2	6.4	-13.6
1998 Q1	-45.7	-8.8	-24.1	-25.7	-11.1	20.1	-7.3	-14.5	1.6	29.5
Q2	52.1	3.6	44.8	68.0	-5.9	-0.5	-16.7	8.0	-4.4	-4.9
Q3	-14.7	-3.7	-19.2	-18.0	2.3	-0.3	-3.3	9.0	-0.7	2.8
Q4	148.1	11.6	136.6	98.0	12.7	44.8	-18.9	-6.6	6.5	-24.4
1999 Q1	-39.4	-5.2	-36.8	-19.2	-15.1	10.2	-12.7	-4.2	6.8	22.0
Q2	22.3	6.3	34.4	81.3	-48.7	9.3	-7.6	-8.4	-9.9	-4.4
Q3	13.2	3.4	0.4	3.6	-0.9	-2.6	0.3	8.3	1.0	-2.6
Q4	139.4	22.2	95.8	44.4	36.9	10.3	4.2	8.7	12.7	-14.5
2000 Q1	-28.2	-15.3	1.1	6.4	1.4	-20.4	13.7	-11.9	-2.1	26.0
Q2	51.2	6.7	28.6	31.5	16.9	-21.8	2.1	15.8	0.0	-12.8
Q3	7.4	-2.2	-3.3	-17.0	29.3	-18.5	2.9	13.3	-0.4	-2.1
Q4	128.9	8.6	108.1	71.4	27.2	5.8	3.8	5.3	6.9	-16.5
<i>Euro area enlargement</i>										
2001 Q1	-19.8	-19.8	15.0	-34.3	41.9	-6.1	13.4	-15.6	0.6	13.5
Q2	.	-3.3	82.7	77.3	-4.4	6.3	3.6	13.9	.	4.4
Q3	.	-23.4	47.1	26.6	1.8	12.7	6.0	-10.6	.	.

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1997 Q4	5.8	-7.7	13.5	68.7	51.7	17.0	-12.3	53.6	51.8	1.8
1998 Q1	-27.8	-8.4	-19.5	92.7	-6.1	98.9	7.3	66.9	54.6	12.4
Q2	-70.2	-25.0	-45.2	117.4	24.2	93.2	0.0	46.9	44.9	2.0
Q3	-6.0	-11.0	5.0	97.9	12.0	85.8	1.0	43.2	40.6	2.6
Q4	-9.9	-1.6	-8.2	87.4	68.5	18.9	-16.1	50.2	48.2	1.9
1999 Q1	23.8	-13.0	36.7	105.0	3.3	101.7	0.2	70.5	58.1	12.5
Q2	-35.8	-11.2	-24.6	146.6	58.3	88.4	16.7	54.3	51.7	2.7
Q3	-6.2	-9.9	3.6	91.7	53.1	38.6	-2.1	56.6	53.4	3.2
Q4	55.6	25.4	30.2	6.7	39.8	-33.1	-9.4	74.1	71.8	2.4
2000 Q1	-20.4	3.9	-24.3	-8.9	-43.3	34.4	5.4	83.7	70.9	12.8
Q2	47.7	-0.8	48.5	82.6	68.9	13.7	-14.0	53.6	50.9	2.7
Q3	67.7	16.6	51.1	151.8	139.2	12.6	1.2	52.6	49.4	3.2
Q4	13.2	7.8	5.4	253.0	185.9	67.1	-0.8	61.5	59.0	2.5
<i>Euro area enlargement</i>										
2001 Q1	91.0	47.0	44.0	61.6	6.7	54.9	22.1	66.4	53.3	13.1
Q2	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.

2) BIS international banking statistics. The BIS definition of banks is close to that of MFIs.

3) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).

4) Covering deposits with euro area central government (S.1311), other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).

5) Excluding unquoted shares.

Table 6.1 (cont'd)
Financial investment and financing of non-financial sectors ¹⁾
(EUR billions (ECU billions to end-1998); not seasonally adjusted)
Transactions
2. Main liabilities ²⁾

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by non-banks ³⁾
	Total	Taken from euro area MFIs	General government			Non-financial corporations			Households ⁴⁾			
			Total	Short-term	Long-term ⁵⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
	1	2	3	4	5	6	7	8	9	10	11	12
1997 Q4	155.8	146.2	21.1	4.4	16.7	68.4	27.7	40.8	66.2	6.7	59.5	-16.6
1998 Q1	67.2	43.9	-15.7	-18.5	2.8	55.0	27.1	27.9	27.9	-0.7	28.7	3.9
Q2	116.8	110.6	-5.5	-3.7	-1.9	54.5	22.1	32.3	67.9	9.5	58.4	6.4
Q3	77.4	81.0	2.6	1.4	1.2	24.8	-15.9	40.7	50.0	0.6	49.5	-0.7
Q4	161.5	150.8	8.8	2.8	6.1	76.3	37.5	38.8	76.4	6.8	69.5	3.5
1999 Q1	85.1	77.0	-7.0	0.1	-7.1	19.6	22.3	-2.8	72.5	9.1	63.4	0.8
Q2	159.7	133.2	-4.3	2.6	-6.9	89.2	40.4	48.8	74.8	3.6	71.2	23.9
Q3	69.9	71.7	-14.7	-1.0	-13.7	17.6	-16.9	34.5	67.1	-0.2	67.3	8.5
Q4	169.3	147.3	15.0	4.3	10.8	87.9	35.8	52.1	66.3	8.9	57.5	-7.1
2000 Q1	140.2	109.6	-8.0	-0.9	-7.1	90.8	55.1	35.7	57.4	1.6	55.7	15.0
Q2	157.2	116.6	-6.3	0.8	-7.1	109.6	57.4	52.1	53.9	8.5	45.4	-0.8
Q3	123.3	93.3	-16.2	-2.1	-14.1	91.3	48.2	43.1	48.3	0.2	48.1	22.9
Q4	187.7	139.8	17.7	2.1	15.6	110.4	18.9	91.5	59.6	6.1	53.5	10.9
	<i>Euro area enlargement</i>											
2001 Q1	92.6	78.6	-4.9	-0.5	-4.4	66.1	45.9	20.2	31.3	-5.4	36.7	0.9
Q2	.	87.9	.	.	.	.	.	.	.	.	.	16.4
Q3	.	59.7	.	.	.	.	.	.	.	.	.	.
	Securities other than shares issued by								Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations	
	Total	General government			Non-financial corporations							
	13	Total	Short-term	Long-term	Total	Short-term	Long-term	19	20	21	22	
1997 Q4	-8.8	-4.6	-33.5	28.9	-4.2	-7.5	3.3	44.1	6.9	2.3		
1998 Q1	70.4	59.8	-4.9	64.7	10.5	9.7	0.9	11.0	1.1	2.4		
Q2	54.1	51.2	-0.6	51.7	2.9	-1.8	4.7	37.3	-2.1	2.4		
Q3	62.3	55.1	3.1	51.9	7.3	1.4	5.8	10.7	-0.4	2.4		
Q4	-9.4	-14.8	-30.4	15.6	5.4	0.8	4.7	40.6	6.4	2.2		
1999 Q1	72.8	58.3	1.3	57.1	14.5	10.7	3.8	10.8	6.6	2.5		
Q2	43.5	34.4	-7.7	42.1	9.1	0.9	8.3	36.0	-10.3	2.5		
Q3	52.5	33.9	-10.0	43.9	18.5	8.1	10.4	34.4	1.0	2.5		
Q4	-8.0	-14.9	-27.9	13.0	6.9	3.1	3.8	41.9	12.1	2.6		
2000 Q1	61.2	60.9	11.1	49.8	0.3	0.5	-0.2	-34.9	-2.2	2.4		
Q2	44.0	24.2	-1.2	25.4	19.8	10.1	9.7	29.9	0.0	2.4		
Q3	52.2	27.2	-2.2	29.4	25.0	7.2	17.8	72.4	-0.4	2.4		
Q4	12.1	-16.5	-26.2	9.6	28.6	6.8	21.8	51.9	6.4	2.4		
	<i>Euro area enlargement</i>											
2001 Q1	53.2	30.6	31.9	-1.4	22.6	9.7	12.9	51.0	1.1	2.5		
Q2	.	.	.	.	.	.	.	.	.	.
Q3	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.

3) BIS international banking statistics. The BIS definition of banks is close to that of MFIs.

4) Including non-profit institutions serving households.

5) Including all loans taken by central government from MFIs in the euro area.

Table 6.2

Saving, investment and financing

(as a percentage of GDP, unless otherwise indicated)

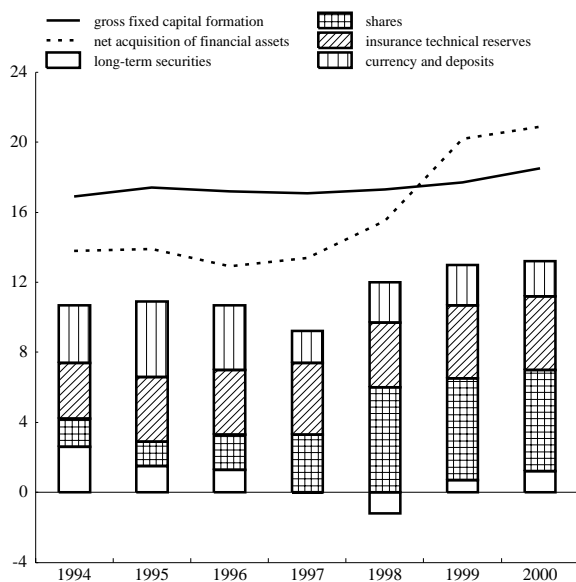
	Euro area saving and investment ¹⁾			Investment of private non-financial sectors ¹⁾²⁾								
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other than shares	Long-term securities	Shares	Insurance technical reserves	
												1	2	3	4	5	6	7	8	9	10	11
1993	20.2	20.3	0.5	16.8	10.6	13.0	5.5	0.4	0.9	0.5	3.0	
1994	20.6	20.1	0.2	16.9	10.3	13.8	3.3	2.4	2.6	1.6	3.2	
1995	21.6	20.6	0.2	17.4	10.6	13.9	4.3	1.8	1.5	1.4	3.7	
1996	21.2	20.3	0.6	17.2	10.5	12.9	3.7	0.2	1.3	2.0	3.7	
1997	21.8	20.1	1.2	17.1	10.5	13.4	1.8	-0.6	0.0	3.3	4.1	
1998	21.8	20.3	0.6	17.3	10.8	15.5	2.3	-2.0	-1.2	6.0	3.7	
1999	21.7	20.7	-0.1	17.7	11.1	20.2	2.3	0.8	0.7	5.8	4.2	
2000	21.9	21.2	-0.5	18.5	11.8	20.9	2.0	1.9	1.2	5.8	4.2	

	Financing of private non-financial sectors ¹⁾²⁾									Net financial investment ³⁾	Financial investment as a % of gross investment ⁴⁾	Net incurrence of liabilities as a % of financing ⁵⁾
	Gross saving	Households	Net incurrence of liabilities	Securities other than shares	Long-term securities	Shares	Loans	Long-term loans				
									12				13	14	15	16	17	18	19
1993	20.8	12.8	7.7	1.2	1.4	1.4	3.7	4.5	5.3	43.6	27.0	
1994	20.7	11.8	9.6	1.0	1.1	1.6	3.7	3.8	4.2	45.0	31.7	
1995	21.9	12.1	7.4	-1.8	-1.7	1.4	4.8	3.6	6.5	44.4	25.3	
1996	21.4	11.8	8.8	0.2	0.0	1.6	5.7	4.8	4.1	42.9	29.1	
1997	20.6	11.3	9.5	0.1	0.1	1.3	5.9	4.7	3.9	43.9	31.6	
1998	20.2	10.5	12.5	0.4	0.3	2.4	7.6	5.9	3.0	47.3	38.2	
1999	19.2	10.0	17.5	0.8	0.4	3.1	10.0	7.6	2.7	53.3	47.7	
2000	18.8	9.5	20.9	1.2	0.7	3.7	10.6	6.9	0.0	53.0	52.6	

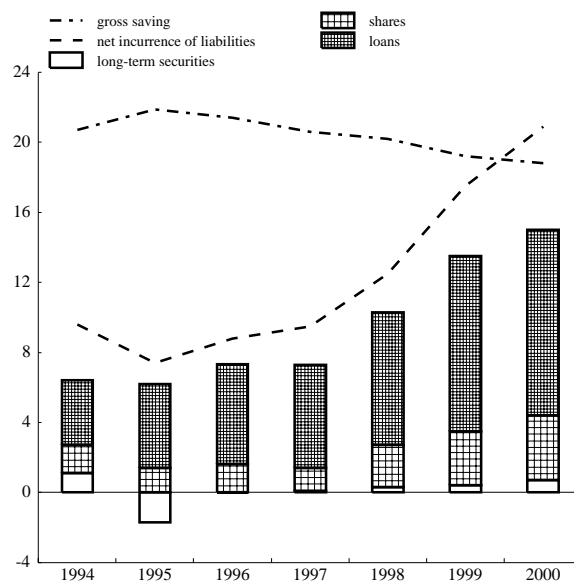
Investment and financing of private non-financial sectors ¹⁾²⁾

(as a percentage of GDP)

Investment



Financing



Source: ECB.

1) Selected items of investment and financing.

2) Private non-financial sectors comprise non-financial corporations, households and non-profit institutions serving households.

3) Column 6 - column 14.

4) Column 6 ÷ (column 4 + column 6).

5) Column 14 ÷ (column 12 + column 14).

7 General government fiscal position in the euro area and in the euro area countries

Table 7.1

Revenue, expenditure and deficit / surplus ¹⁾

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue					Indirect taxes	Received by EU institutions	Social contributions		Sales	Capital revenue		Memo: fiscal burden ²⁾
		Direct taxes	Households	Corporations	Employers	Employees			Capital taxes					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	46.4	46.0	11.8	9.5	2.2	13.0	0.9	16.7	8.5	5.1	2.3	0.4	0.2	41.7
1992	47.4	46.7	11.9	9.8	2.0	13.0	0.9	17.1	8.6	5.2	2.4	0.7	0.6	42.5
1993	48.0	47.5	12.1	10.0	2.1	13.2	0.8	17.4	8.6	5.3	2.5	0.5	0.3	43.0
1994	47.5	47.1	11.6	9.5	2.0	13.5	0.8	17.5	8.5	5.4	2.5	0.4	0.2	42.7
1995	47.2	46.6	11.6	9.5	2.0	13.3	0.9	17.3	8.4	5.6	2.5	0.5	0.3	42.6
1996	48.0	47.5	12.0	9.6	2.3	13.4	0.8	17.6	8.7	5.6	2.5	0.5	0.3	43.3
1997	48.3	47.6	12.2	9.6	2.6	13.5	0.7	17.6	8.8	5.5	2.5	0.7	0.4	43.7
1998	47.7	47.2	12.4	9.9	2.5	14.1	0.7	16.5	8.5	4.9	2.5	0.5	0.3	43.3
1999	48.3	47.7	12.8	10.1	2.6	14.4	0.6	16.5	8.5	5.0	2.4	0.6	0.3	43.9
2000	47.9	47.4	13.0	10.1	2.7	14.2	0.6	16.3	8.5	4.9	2.4	0.5	0.3	43.7

2. Euro area – expenditure

	Total	Current expenditure							Capital expenditure	Investment	Capital transfers	Paid by EU institutions	Memo: primary expenditure ⁴⁾	
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments ³⁾	Subsidies						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	51.1	46.3	11.2	5.0	5.3	24.9	21.0	2.4	0.6	4.8	3.2	1.6	0.0	45.8
1992	52.2	47.5	11.4	5.0	5.6	25.5	21.9	2.3	0.5	4.7	3.2	1.5	0.0	46.6
1993	53.6	49.0	11.6	5.2	5.8	26.5	22.8	2.4	0.6	4.6	3.1	1.6	0.1	47.8
1994	52.6	48.3	11.3	5.0	5.5	26.5	22.9	2.3	0.5	4.4	2.9	1.5	0.1	47.1
1995	52.2	47.7	11.2	4.8	5.7	26.1	22.8	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.2	48.3	11.2	4.8	5.7	26.6	23.2	2.2	0.6	4.0	2.6	1.4	0.0	46.6
1997	50.8	47.1	11.0	4.8	5.1	26.2	23.1	2.1	0.5	3.7	2.4	1.3	0.1	45.8
1998	49.9	46.0	10.7	4.7	4.7	25.9	22.6	2.0	0.5	3.9	2.4	1.5	0.1	45.2
1999	49.6	45.5	10.7	4.7	4.2	25.9	22.6	2.0	0.5	4.1	2.5	1.6	0.1	45.4
2000	48.7	44.7	10.5	4.7	4.0	25.5	22.2	1.9	0.5	3.9	2.5	1.4	0.1	44.6

3. Euro area – deficit / surplus, primary deficit / surplus and government consumption

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+)	Government consumption ⁵⁾							
	Total	Central government	State government	Local government	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	-4.7	-4.6	-0.3	-0.1	0.3	0.6	20.3	11.2	5.0	4.8	1.8	-2.3	8.6	11.7
1992	-4.8	-4.2	-0.3	-0.2	0.0	0.8	20.7	11.4	5.0	4.9	1.8	-2.4	8.7	12.0
1993	-5.7	-5.0	-0.4	-0.2	-0.1	0.2	21.1	11.6	5.2	5.0	1.9	-2.5	8.9	12.2
1994	-5.1	-4.4	-0.5	-0.2	0.0	0.4	20.8	11.3	5.0	5.1	1.8	-2.5	8.6	12.1
1995	-5.0	-4.2	-0.5	-0.1	-0.3	0.7	20.5	11.2	4.8	5.1	1.8	-2.5	8.4	12.0
1996	-4.3	-3.6	-0.4	-0.1	-0.2	1.4	20.6	11.2	4.8	5.2	1.8	-2.5	8.5	12.1
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.3	11.0	4.8	5.1	1.8	-2.5	8.4	12.0
1998	-2.2	-2.2	-0.2	0.2	0.1	2.5	20.0	10.7	4.7	5.1	1.7	-2.5	8.1	11.8
1999	-1.3	-1.6	-0.1	0.1	0.4	2.9	20.0	10.7	4.7	5.1	1.7	-2.4	8.2	11.8
2000	-0.8	-1.3	-0.1	0.2	0.5	3.2	19.8	10.5	4.7	5.1	1.7	-2.4	8.1	11.8

4. Euro area countries – deficit (-) / surplus (+)

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1997	-2.0	-2.7	-4.0	-3.2	-3.0	1.2	-2.7	3.4	-1.1	-1.9	-2.7	-1.5
1998	-0.8	-2.2	-2.4	-2.6	-2.7	2.3	-2.8	3.5	-0.8	-2.4	-2.4	1.3
1999	-0.6	-1.6	-1.8	-1.1	-1.6	2.3	-1.8	3.7	0.4	-2.2	-2.1	1.9
2000	0.1	1.2	-1.1	-0.3	-1.3	4.5	-0.3	6.1	2.2	-1.1	-1.5	6.9

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit / surplus (including proceeds from sales of UMTS licences).

- 1) Revenue, expenditure and deficit / surplus based on the ESA 95, but the figures exclude proceeds from sales of UMTS licences in 2000 (the euro area deficit / surplus including those proceeds is equal to 0.3). Data before 1995 are partially estimated. Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.
- 2) The fiscal burden comprises taxes and social contributions.
- 3) Comprises social benefits, social transfers in kind via market producers and transfers to non-profit institutions serving households.
- 4) Comprises total expenditure minus interest expenditure.
- 5) Corresponds to final consumption expenditure (P.3) of the general government in the ESA 95.

Table 7.2**Debt ¹⁾***(as a percentage of GDP)***1. Euro area – government debt by financial instrument and sector of the holder**

	Total	Financial instrument				Holder				
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ²⁾				Other creditors ³⁾
						Total	MFI's	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1991	57.4	2.6	16.1	9.6	29.1	48.1	24.7	7.4	16.1	9.2
1992	60.9	2.6	16.8	10.1	31.5	50.2	26.4	7.6	16.2	10.7
1993	67.2	2.7	17.6	9.9	37.0	52.5	27.6	8.7	16.2	14.8
1994	69.9	2.9	16.8	10.3	40.0	56.2	29.8	9.9	16.4	13.8
1995	74.2	2.9	18.3	9.8	43.1	58.6	30.5	10.9	17.2	15.6
1996	75.4	2.9	17.8	9.9	44.8	59.2	30.3	13.2	15.8	16.2
1997	74.8	2.8	17.0	8.9	46.1	57.2	29.0	14.4	13.7	17.7
1998	73.1	2.8	15.8	7.9	46.6	53.5	27.0	16.2	10.4	19.6
1999	72.0	2.9	14.8	6.9	47.5	50.1	25.3	14.9	9.9	22.0
2000	69.5	2.7	13.6	6.3	47.0	46.3	22.9	13.4	10.0	23.2

2. Euro area – government debt by issuer, maturity and currency denomination

	Total	Issued by ⁴⁾				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency ⁵⁾	Non-domestic currency	Other currencies
1991	57.4	46.6	4.5	6.0	0.3	11.8	45.6	4.8	17.7	18.8	20.9	56.2	1.9	1.1
1992	60.9	49.7	4.7	6.1	0.4	12.2	48.7	6.3	17.8	20.9	22.1	59.6	2.2	1.3
1993	67.2	55.2	5.2	6.3	0.6	11.9	55.3	6.7	18.5	24.3	24.5	65.5	2.9	1.7
1994	69.9	57.9	5.4	6.1	0.5	11.2	58.7	7.4	16.6	26.6	26.8	68.1	3.0	1.9
1995	74.2	61.7	5.7	6.0	0.8	10.6	63.6	6.9	17.6	26.2	30.3	72.3	2.9	1.9
1996	75.4	62.9	6.1	5.9	0.5	10.2	65.2	6.3	19.2	25.3	30.9	73.5	2.7	1.9
1997	74.8	62.3	6.3	5.6	0.6	8.8	66.0	6.0	18.6	25.2	31.0	72.8	2.8	2.0
1998	73.1	61.0	6.3	5.4	0.3	7.7	65.4	5.5	16.3	25.9	30.9	71.4	3.2	1.7
1999	72.0	60.2	6.2	5.3	0.3	7.0	65.1	5.0	14.4	26.8	30.8	70.2	-	1.8
2000	69.5	58.1	6.1	5.1	0.3	5.6	63.9	4.4	14.5	27.4	27.7	67.7	-	1.8

3. Euro area countries – government debt

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1997	125.3	61.0	108.2	66.7	59.3	65.1	120.2	6.1	69.9	64.7	58.9	54.1
1998	119.7	60.9	105.0	64.7	59.5	54.8	116.4	6.4	66.8	63.9	54.7	48.8
1999	115.9	61.3	103.9	63.4	58.5	49.3	114.6	6.0	63.1	64.7	54.5	47.3
2000	110.3	60.3	102.7	60.7	57.6	38.6	110.5	5.3	56.1	63.1	53.7	44.0

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' debt.

1) Data are partially estimated. General government gross consolidated debt at nominal value at the end of the year.

Holdings by other governments are not consolidated.

2) Holders resident in the country whose government has issued the debt.

3) Includes residents of euro area countries other than the country whose government has issued the debt.

4) Excludes debt held by general government in the country whose government has issued it.

5) Before 1999, comprises debt in ECU, in domestic currency and in the currencies of other Member States which have adopted the euro.

Table 7.3**Change in debt ¹⁾***(as a percentage of GDP)***1. Euro area – change in government debt by source, financial instrument and sector of the holder**

	Total	Source of change				Financial instrument				Holder			
		Borrowing requirement ²⁾	Valuation effects ³⁾	Other changes in volume ⁴⁾	Aggregation effect ⁵⁾	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ⁶⁾	MFIs	Other financial corporations	Other creditors ⁷⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1991	5.2	5.1	0.0	0.2	-0.1	0.2	1.2	0.0	3.9	.	.	.	.
1992	6.8	5.6	0.4	0.7	0.1	0.1	1.6	1.0	4.0	4.8	3.1	0.7	1.9
1993	8.1	7.5	0.3	0.1	0.1	0.2	1.3	0.1	6.4	3.7	2.0	1.3	4.4
1994	6.1	5.2	0.2	0.7	0.0	0.4	0.0	0.9	4.8	6.3	3.6	1.7	-0.3
1995	7.7	5.5	0.2	2.2	-0.2	0.2	2.4	0.0	5.2	5.2	2.2	1.5	2.5
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.2	0.4	3.2	2.7	0.8	2.6	1.1
1997	2.3	2.4	0.2	-0.2	0.0	0.0	-0.1	-0.6	3.0	0.2	-0.1	1.8	2.1
1998	1.6	1.9	-0.2	0.0	0.0	0.1	-0.4	-0.6	2.6	-1.1	-0.8	2.4	2.7
1999	1.6	1.3	0.3	0.0	0.0	0.2	-0.5	-0.7	2.6	-1.5	-0.7	-0.7	3.1
2000	0.8	0.8	0.1	-0.1	0.0	-0.1	-0.5	-0.3	1.7	-1.5	-1.3	-0.7	2.3

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) ⁸⁾	Deficit-debt adjustment ⁹⁾											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other ¹¹⁾
				Total	Currency and deposits	Securities ¹⁰⁾	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	5.2	-4.7	0.5	1.1	0.3	0.1	0.4	0.2	-0.1	0.2	0.0	0.1	0.2	-0.8
1992	6.8	-4.8	2.0	0.8	0.2	0.1	0.3	0.2	-0.1	0.2	0.4	0.3	0.7	0.1
1993	8.1	-5.7	2.4	1.3	1.0	0.2	0.3	-0.2	-0.3	0.1	0.3	0.3	0.1	0.6
1994	6.1	-5.1	1.0	0.2	0.0	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	-0.1
1995	7.7	-5.0	2.7	0.6	0.0	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.4	-0.1	-0.1	0.0	0.0	-0.1	-0.3	0.2	-0.2	-0.1	0.1	-0.3
1997	2.3	-2.6	-0.3	-0.5	0.2	-0.1	-0.1	-0.5	-0.8	0.3	0.2	0.2	-0.2	0.3
1998	1.6	-2.2	-0.6	-0.6	0.2	0.0	-0.2	-0.6	-0.8	0.1	-0.2	0.0	0.0	0.3
1999	1.6	-1.3	0.3	0.0	0.4	0.2	0.1	-0.7	-0.8	0.1	0.3	0.2	0.0	0.0
2000	0.8	0.3	1.1	1.0	0.9	0.2	0.1	-0.2	-0.4	0.1	0.1	0.0	-0.1	0.1

Source: ECB.

- 1) Data are partially estimated. Annual change in gross nominal consolidated debt expressed as a percentage of GDP [$debt(t) - debt(t-1) \div GDP(t)$].
- 2) The borrowing requirement is by definition equal to transactions in government debt.
- 3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
- 4) Comprises, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 5) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt, due to variations in the exchange rates used for aggregation before 1999.
- 6) Holders resident in the country whose government has issued the debt.
- 7) Includes residents of euro area countries other than the country whose government has issued the debt.
- 8) Including proceeds from sales of UMTS licences.
- 9) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 10) Excluding financial derivatives.
- 11) Comprises mainly transactions in other assets and liabilities (trade credit, other receivables/payables and financial derivatives).

8 Balance of payments and international investment position of the euro area (including reserves)

Table 8.1

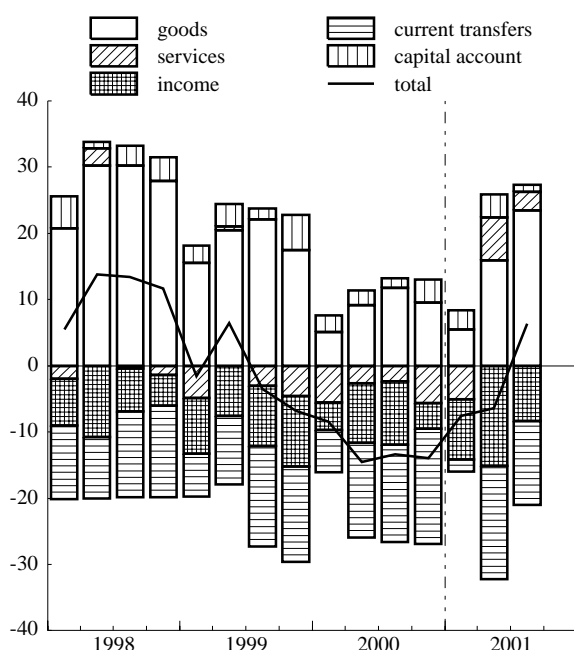
Summary balance of payments ^{1) 2)}

(EUR billions (ECU billions to end-1998); net flows)

	Current account					Capital account	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers		Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	62.1	116.4	3.1	-15.2	-42.2	13.0	.	-44.5	-24.3	.	.	.	.
1998	31.9	109.0	-1.1	-28.8	-47.2	12.4	-68.4	-81.3	-110.0	-8.2	123.0	8.2	24.1
1999	-18.3	75.6	-11.9	-35.7	-46.3	12.9	10.9	-118.1	-45.7	4.5	160.1	10.1	-5.5
2000	-59.9	35.6	-16.1	-26.7	-52.6	9.7	93.4	17.6	-111.5	-1.7	171.5	17.6	-43.2
2000 Q3	-14.8	11.8	-2.3	-9.6	-14.6	1.5	-5.3	-87.2	0.3	-0.3	77.2	4.7	18.6
Q4	-17.4	9.5	-5.6	-3.9	-17.4	3.5	25.7	-13.5	12.7	-8.5	24.4	10.7	-11.8
2000 Sep.	-3.0	2.8	-1.2	-1.8	-2.8	0.8	-7.6	-32.6	-4.0	1.9	23.0	4.0	9.8
Oct.	-5.4	4.3	-1.6	-2.0	-6.2	0.3	0.8	-18.4	0.5	-2.1	19.9	0.7	4.4
Nov.	-5.0	1.9	-0.8	-0.8	-5.2	1.4	3.7	1.4	2.2	-2.5	-5.1	7.7	-0.2
Dec.	-7.0	3.3	-3.2	-1.1	-5.9	1.8	21.2	3.4	9.9	-4.0	9.6	2.3	-16.0
<i>Euro area enlargement</i>													
2001 Q1	-10.5	5.5	-5.0	-9.1	-1.9	2.9	30.6	-40.6	-38.5	-2.0	102.2	9.5	-23.0
Q2	-9.9	15.9	6.5	-15.1	-17.2	3.5	-12.0	-51.7	25.7	0.7	10.8	2.5	18.4
Q3	5.3	23.4	2.9	-8.4	-12.7	1.0	-67.1	-15.3	53.6	-12.3	-95.6	2.5	60.8
2001 Jan.	-11.1	-3.9	-2.4	-7.5	2.7	1.3	2.3	-9.9	-42.8	-4.6	57.2	2.4	7.5
Feb.	1.2	3.3	-1.1	-0.6	-0.5	1.5	7.7	2.4	-2.3	-0.7	3.8	4.5	-10.4
Mar.	-0.6	6.0	-1.5	-1.0	-4.0	0.1	20.6	-33.2	6.6	3.3	41.2	2.7	-20.1
Apr.	-6.7	3.1	1.6	-7.0	-4.5	2.2	11.7	0.8	-19.2	1.7	21.4	7.0	-7.1
May	-2.2	4.4	2.8	-3.9	-5.4	0.5	-9.6	-41.5	15.1	3.6	16.8	-3.6	11.3
June	-1.0	8.4	2.1	-4.2	-7.3	0.8	-14.0	-11.0	29.8	-4.6	-27.4	-0.8	14.2
July	-0.8	10.7	1.7	-7.5	-5.7	0.4	-20.1	1.1	4.1	-7.5	-17.9	0.0	20.5
Aug.	6.0	7.3	1.1	0.4	-2.8	0.6	-13.9	-0.7	4.9	-3.7	-18.5	4.1	7.3
Sep.	0.0	5.4	0.1	-1.3	-4.2	0.0	-33.0	-15.7	44.6	-1.1	-59.1	-1.6	33.0
Oct.	0.1	9.6	0.2	-4.3	-5.4	0.3	-14.6	5.3	0.3	-3.8	-13.8	-2.6	14.2
Nov.	2.8	9.3	-1.9	0.4	-4.9	0.4	-15.4	7.8	11.5	-4.0	-30.7	0.0	12.1

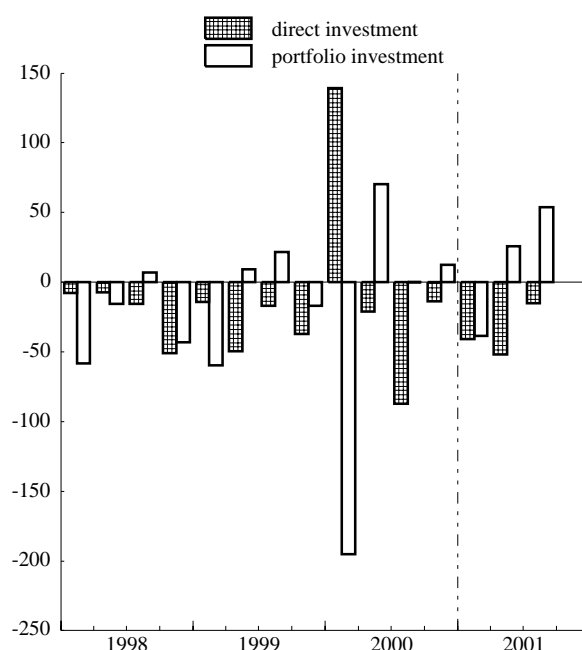
Current and capital accounts

(EUR billions (ECU billions to end-1998); net flows)



Direct and portfolio investment

(EUR billions (ECU billions to end-1998); net flows)



Source: ECB.

1) Inflows (+); outflows (-). Reserve assets: increase (-); decrease (+).

2) For the comparability of recent and some earlier data, see the general notes.

Table 8.2**Balance of payments: current and capital accounts ¹⁾***(EUR billions (ECU billions to end-1998))***1. Main items**

	Current account											Capital account	
	Total			Goods		Services		Income		Current transfers		Credit ₁₂	Debit ₁₃
	Credit ₁	Debit ₂	Net ₃	Credit ₄	Debit ₅	Credit ₆	Debit ₇	Credit ₈	Debit ₉	Credit ₁₀	Debit ₁₁		
1997	1,218.5	1,156.3	62.1	754.6	638.3	214.2	211.0	189.5	204.7	60.1	102.3	18.9	5.9
1998	1,277.7	1,245.8	31.9	784.4	675.4	231.9	233.0	198.5	227.3	63.0	110.1	17.7	5.3
1999	1,334.5	1,352.7	-18.3	818.1	742.5	244.5	256.4	207.0	242.7	64.8	111.1	19.1	6.3
2000	1,597.6	1,657.5	-59.9	986.8	951.3	279.5	295.7	264.0	290.7	67.2	119.9	18.3	8.7
2000 Q3	400.2	415.0	-14.8	246.6	234.8	75.5	77.9	65.7	75.3	12.3	27.0	4.4	2.9
Q4	437.4	454.8	-17.4	274.6	265.1	75.1	80.8	72.7	76.6	14.9	32.3	5.9	2.5
2000 Sep.	140.1	143.1	-3.0	86.1	83.3	25.0	26.2	24.5	26.2	4.5	7.3	1.7	0.9
Oct.	146.0	151.5	-5.4	94.2	89.8	25.3	26.9	22.9	24.9	3.6	9.8	0.9	0.6
Nov.	145.2	150.2	-5.0	93.9	92.0	24.3	25.1	21.9	22.7	5.1	10.3	2.2	0.8
Dec.	146.2	153.1	-7.0	86.6	83.3	25.5	28.7	27.9	29.0	6.2	12.2	2.9	1.1
<i>Euro area enlargement</i>													
2001 Q1	423.3	433.9	-10.5	254.5	249.0	68.7	73.7	70.6	79.6	29.6	31.5	4.4	1.5
Q2	435.1	444.9	-9.9	262.7	246.8	83.0	76.5	74.4	89.5	15.0	32.2	5.3	1.8
Q3	420.6	415.3	5.3	252.6	229.2	85.3	82.5	68.3	76.7	14.3	27.0	2.7	1.6
2001 Jan.	140.4	151.5	-11.1	79.8	83.7	22.4	24.8	22.6	30.1	15.6	12.9	1.8	0.5
Feb.	135.1	133.9	1.2	82.3	78.9	22.4	23.5	22.5	23.1	7.9	8.4	1.9	0.4
Mar.	147.8	148.5	-0.6	92.4	86.4	23.9	25.4	25.4	26.4	6.1	10.2	0.7	0.5
Apr.	138.7	145.4	-6.7	83.6	80.5	26.3	24.6	23.0	30.0	5.8	10.3	2.6	0.4
May	148.3	150.5	-2.2	89.0	84.7	28.3	25.6	26.0	29.9	4.9	10.3	1.4	1.0
June	148.1	149.1	-1.0	90.0	81.6	28.4	26.3	25.4	29.6	4.3	11.6	1.3	0.4
July	151.8	152.5	-0.8	90.8	80.1	30.6	28.9	25.5	32.9	4.9	10.6	1.0	0.6
Aug.	136.0	130.0	6.0	81.5	74.2	29.0	27.9	21.0	20.7	4.5	7.2	1.1	0.5
Sep.	132.8	132.8	0.0	80.3	74.9	25.8	25.7	21.8	23.1	4.9	9.2	0.6	0.5
Oct.	146.6	146.5	0.1	95.1	85.5	25.9	25.7	21.1	25.4	4.4	9.8	1.0	0.6
Nov.	138.1	135.3	2.8	90.2	80.9	22.3	24.2	20.7	20.4	4.9	9.8	1.0	0.6

2. Main current account items (seasonally adjusted)

	Current account										
	Total			Goods		Services		Income		Current transfers	
	Credit ₁	Debit ₂	Net ₃	Credit ₄	Debit ₅	Credit ₆	Debit ₇	Credit ₈	Debit ₉	Credit ₁₀	Debit ₁₁
1999 Q3	334.8	340.7	-6.0	209.0	190.0	61.1	64.3	48.7	57.6	15.9	28.8
Q4	353.1	365.0	-11.9	217.5	203.7	64.0	68.3	53.9	64.1	17.8	28.9
2000 Q1	371.1	378.7	-7.6	229.3	217.2	65.6	68.7	59.8	65.4	16.4	27.4
Q2	387.3	407.2	-19.8	241.5	231.8	67.3	72.6	60.9	70.0	17.7	32.7
Q3	410.5	426.4	-16.0	252.9	245.0	71.6	74.2	70.2	79.0	15.8	28.2
Q4	431.7	449.5	-17.8	264.8	259.8	75.5	80.9	73.8	76.8	17.5	32.1
2000 Sep.	142.2	143.3	-1.1	86.9	83.3	24.8	25.9	24.9	26.4	5.6	7.7
Oct.	141.8	146.8	-5.0	87.1	84.8	24.7	26.3	24.7	25.4	5.3	10.3
Nov.	144.6	149.7	-5.0	88.4	86.8	25.4	26.3	24.7	25.8	6.1	10.8
Dec.	145.3	153.1	-7.8	89.4	88.2	25.4	28.3	24.5	25.6	6.1	11.0
<i>Euro area enlargement</i>											
2001 Q1	428.6	436.1	-7.5	260.8	247.6	76.4	77.0	72.1	82.0	19.2	29.4
Q2	431.2	441.6	-10.3	263.5	247.5	80.7	78.1	69.1	82.1	17.9	34.0
Q3	428.7	427.5	1.2	257.5	239.2	79.9	79.4	72.9	80.0	18.4	28.9
2001 Jan.	144.1	147.1	-3.0	87.5	83.1	25.4	25.4	24.6	29.6	6.5	9.0
Feb.	143.4	143.5	0.0	87.2	82.7	26.0	25.8	24.0	25.4	6.3	9.5
Mar.	141.1	145.6	-4.5	86.1	81.9	25.0	25.8	23.6	26.9	6.3	10.9
Apr.	143.7	148.1	-4.3	86.9	82.8	27.3	25.9	22.8	28.3	6.7	11.0
May	145.5	146.3	-0.8	88.4	82.0	27.1	25.8	24.4	27.4	5.6	11.1
June	142.0	147.2	-5.2	88.2	82.7	26.4	26.3	21.9	26.4	5.6	11.8
July	145.1	149.8	-4.7	85.9	81.7	27.1	26.8	26.0	30.4	6.1	10.9
Aug.	146.3	141.9	4.4	88.5	81.0	26.9	26.8	24.8	26.2	6.0	7.9
Sep.	137.2	135.8	1.5	83.0	76.6	25.8	25.8	22.0	23.4	6.4	10.1
Oct.	139.0	139.1	-0.1	85.3	78.1	24.6	24.4	22.6	26.5	6.5	10.1
Nov.	136.7	133.4	3.2	85.0	75.6	23.3	25.0	22.5	23.0	5.9	9.8

Source: ECB.

¹⁾ For the comparability of recent and some earlier data, see the general notes.

Table 8.3**Balance of payments: income account***(EUR billions; gross flows)*

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	207.0	242.7	12.6	5.0	194.4	237.7	42.7	50.3	64.1	101.5	87.7	85.9
2000	264.0	290.7	13.2	5.4	250.8	285.2	57.4	59.3	74.6	106.9	118.7	119.0
2000 Q3	65.7	75.3	3.3	1.5	62.4	73.8	14.3	15.2	18.9	28.7	29.3	29.8
Q4	72.7	76.6	3.4	1.3	69.3	75.3	16.7	17.0	18.9	24.2	33.7	34.1
<i>Euro area enlargement</i>												
2001 Q1	70.6	79.6	3.3	1.1	67.2	78.5	15.6	15.4	17.8	26.3	33.8	36.8
Q2	74.4	89.5	3.4	1.5	71.0	88.0	18.8	15.4	21.5	39.4	30.7	33.3
Q3	68.3	76.7	3.3	1.5	65.0	75.1	14.7	15.9	22.0	28.2	28.3	31.1

	Income on direct investment				Income on portfolio investment			
	Equity		Debt		Equity		Debt	
	Credit 13	Debit 14	Credit 15	Debit 16	Credit 17	Debit 18	Credit 19	Debit 20
1999	36.2	46.1	6.4	4.2	9.5	34.0	54.6	67.5
2000	47.4	52.2	10.0	7.1	14.2	30.6	60.5	76.3
2000 Q3	11.9	13.2	2.4	2.0	3.4	7.6	15.5	21.1
Q4	13.3	14.8	3.3	2.3	3.0	5.5	16.0	18.7
<i>Euro area enlargement</i>								
2001 Q1	13.1	13.0	2.5	2.4	2.4	7.0	15.4	19.4
Q2	16.2	13.0	2.6	2.4	5.3	17.1	16.2	22.3
Q3	12.4	14.1	2.2	1.7	3.6	8.3	18.5	19.9

Source: ECB.

Table 8.4**Balance of payments: direct investment account ¹⁾***(EUR billions (ECU billions to end-1998); net flows)*

	Abroad			In the euro area			
	Total 1	Equity capital and reinvested earnings 2	Other capital, mostly inter-company loans 3	Total 4	Equity capital and reinvested earnings 5	Other capital, mostly inter-company loans 6	
1997	-93.1	.	.	48.6	.	.	
1998	-172.8	.	.	91.5	.	.	
1999	-315.6	-234.7	-81.0	197.5	144.2	53.3	
2000	-382.4	-283.6	-98.7	400.0	296.4	103.6	
2000 Q3	-124.8	-117.8	-7.0	37.6	28.6	9.0	
Q4	-93.3	-67.9	-25.4	79.7	32.7	47.1	
2000 Sep.	-47.1	-26.4	-20.6	14.4	5.5	8.9	
Oct.	-35.9	-31.7	-4.2	17.5	11.1	6.4	
Nov.	-35.6	-25.7	-9.9	37.0	24.4	12.6	
Dec.	-21.8	-10.5	-11.3	25.2	-2.8	28.0	
		<i>Euro area enlargement</i>					
2001 Q1	-65.4	-26.5	-38.9	24.7	28.7	-4.0	
Q2	-80.6	-59.2	-21.4	28.9	16.4	12.4	
Q3	-37.8	-25.9	-12.0	22.6	18.5	4.0	
2001 Jan.	-17.4	-11.6	-5.8	7.5	5.1	2.4	
Feb.	-15.0	-1.9	-13.1	17.4	15.3	2.1	
Mar.	-33.0	-13.0	-20.0	-0.2	8.4	-8.5	
Apr.	-6.8	-9.4	2.6	7.6	2.8	4.9	
May	-51.8	-41.3	-10.5	10.3	10.2	0.1	
June	-21.9	-8.5	-13.4	10.9	3.4	7.5	
July	-13.9	-15.4	1.5	15.1	10.4	4.7	
Aug.	-4.1	-5.5	1.4	3.4	1.9	1.5	
Sep.	-19.8	-5.0	-14.9	4.1	6.3	-2.2	
Oct.	-2.0	-4.6	2.6	7.3	3.0	4.3	
Nov.	-13.8	-6.5	-7.3	21.6	11.7	9.9	

Source: ECB.

1) Inflows (+); outflows (-).

Table 8.5
Balance of payments: portfolio investment account ¹⁾
(EUR billions (ECU billions to end-1998); net flows)
1. By instrument ²⁾

	Total		Equity		Debt instruments					
	Assets	Liabilities	Assets	Liabilities	Assets			Liabilities		
					Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
	1	2	3	4	5	6	7	8	9	10
1998	-363.3	253.3	-116.2	104.0	-247.1	-238.9	-8.2	149.3	121.6	27.7
1999	-311.4	265.7	-156.3	92.4	-155.1	-154.4	-0.7	173.4	117.4	55.9
2000	-412.8	301.2	-288.5	44.9	-124.3	-102.7	-21.6	256.3	229.6	26.7
2000 Q3	-98.4	98.7	-56.9	37.3	-41.4	-34.8	-6.6	61.4	71.8	-10.4
Q4	-78.4	91.1	-59.9	38.4	-18.5	-15.6	-2.9	52.7	59.4	-6.7
2000 Sep.	-35.9	31.9	-11.1	7.9	-24.8	-23.0	-1.8	24.0	27.1	-3.1
Oct.	-19.5	20.0	-9.1	2.7	-10.4	-10.4	0.0	17.4	25.0	-7.6
Nov.	-25.9	28.1	-16.4	7.6	-9.5	-7.5	-2.0	20.6	23.8	-3.2
Dec.	-33.0	42.9	-34.4	28.2	1.4	2.3	-0.9	14.7	10.6	4.1
<i>Euro area enlargement</i>										
2001 Q1	-82.9	44.4	-29.1	18.7	-53.8	-37.2	-16.6	25.7	24.5	1.2
Q2	-75.5	101.3	-42.5	108.7	-33.0	-46.6	13.6	-7.5	-1.6	-5.9
Q3	-8.4	62.0	0.7	48.3	-9.1	-12.3	3.2	13.6	30.4	-16.7
2001 Jan.	-36.9	-5.9	-20.7	-0.4	-16.2	-6.9	-9.3	-5.5	-9.1	3.6
Feb.	-29.2	26.9	-12.6	12.5	-16.6	-16.4	-0.2	14.4	16.2	-1.8
Mar.	-16.7	23.3	4.3	6.5	-21.0	-13.9	-7.1	16.8	17.4	-0.6
Apr.	-20.7	1.5	-16.4	11.0	-4.3	-11.8	7.5	-9.5	-3.1	-6.4
May	-28.1	43.2	-14.5	58.8	-13.6	-17.0	3.5	-15.7	-12.8	-2.8
June	-26.8	56.6	-11.6	38.9	-15.2	-17.8	2.6	17.7	14.3	3.3
July	-13.6	17.7	-9.9	15.6	-3.7	-7.4	3.8	2.1	3.9	-1.8
Aug.	-22.7	27.5	-4.7	16.8	-18.0	-15.4	-2.6	10.7	21.4	-10.7
Sep.	27.9	16.8	15.4	15.9	12.5	10.5	2.0	0.8	5.2	-4.3
Oct.	-36.4	36.7	-5.8	25.6	-30.6	-20.6	-10.1	11.1	9.0	2.1
Nov.	-38.0	49.5	-12.4	22.3	-25.6	-14.4	-11.2	27.1	32.0	-4.9

2. Assets by instrument and sector of holder

	Equity				Debt instruments							
	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Bonds and notes				Money market instruments			
					Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors
	1	2	3	4	5	6	7	8	9	10	11	12
1999	0.1	-2.1	-1.5	-152.8	0.1	-1.7	-15.4	-137.4	0.9	-0.1	-8.1	6.7
2000	0.0	-2.5	-4.4	-281.6	-1.7	-1.2	-72.7	-27.2	2.2	-0.7	-11.5	-11.5
2000 Q3	-0.1	-0.4	-2.4	-54.1	-2.3	-0.4	-14.8	-17.4	0.5	-1.4	-7.5	1.8
Q4	0.0	-0.6	-5.0	-54.3	0.9	0.0	2.7	-19.2	0.6	0.9	0.8	-5.1
<i>Euro area enlargement</i>												
2001 Q1	-0.1	-0.4	-11.0	-17.6	1.0	-0.6	-16.3	-21.4	-1.3	-1.2	-18.0	4.0
Q2	0.0	-0.7	6.3	-48.0	0.7	0.0	-22.3	-25.0	-0.7	-0.1	2.1	12.3
Q3	-0.1	-0.4	-1.1	2.3	1.0	-0.2	2.1	-15.2	0.1	-0.6	-12.2	15.9

Source: ECB.
1) Inflows (+); outflows (-).
2) For the comparability of recent and some earlier data, see the general notes.

Table 8.6**Balance of payments: other investment account and reserve assets**

(EUR billions (ECU billions to end-1998); net flows)

1. Other investment by sector ^{1) 2)}

	Total		Eurosystem		General government		MFIs (excluding the Eurosystem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-81.9	204.9	-0.7	3.5	-1.0	-6.1	-22.6	192.4	-37.6	40.4	15.0	152.0	-57.6	15.2
1999	-32.5	192.6	-2.0	6.6	3.3	-13.0	18.1	161.1	-47.2	53.8	65.3	107.3	-51.8	37.8
2000	-178.9	350.5	-1.1	0.9	-2.5	1.0	-131.3	289.6	-49.3	53.0	-82.0	236.6	-44.0	58.9
2000 Q3	-31.7	108.9	0.2	-2.0	-5.4	2.7	-17.2	74.9	-12.0	8.4	-5.2	66.5	-9.3	33.3
Q4	-49.5	74.0	-0.9	2.9	5.7	3.4	-63.9	59.5	-22.7	11.8	-41.1	47.6	9.6	8.3
2000 Sep.	-7.0	30.0	0.0	1.7	-5.6	-0.7	-5.3	33.0	-2.8	2.4	-2.5	30.6	3.9	-4.0
Oct.	-8.5	28.4	-0.4	0.7	8.1	1.7	-18.4	25.0	-3.2	6.3	-15.2	18.7	2.1	1.1
Nov.	-51.0	45.9	-0.3	0.9	-2.9	0.6	-50.6	48.0	-6.4	8.1	-44.2	39.9	2.8	-3.7
Dec.	10.0	-0.4	-0.2	1.2	0.4	1.2	5.1	-13.5	-13.2	-2.5	18.3	-11.0	4.6	10.8
<i>Euro area enlargement</i>														
2001 Q1	-136.1	238.3	0.8	-2.6	2.4	-8.2	-135.0	261.7	-7.4	1.8	-127.6	259.9	-4.3	-12.6
Q2	8.1	2.6	-0.8	4.3	-0.3	2.8	12.0	-9.1	-10.2	17.0	22.2	-26.1	-2.7	4.7
Q3	-71.6	-24.0	1.0	-0.9	0.3	0.0	-61.5	-29.2	-6.6	11.3	-54.9	-40.5	-11.4	6.2
2001 Jan.	-45.2	102.4	0.5	1.3	3.6	-6.4	-51.4	108.2	-3.9	-1.9	-47.5	110.1	2.1	-0.7
Feb.	-6.6	10.4	0.3	-2.1	0.1	-3.8	-4.8	16.8	-2.8	4.7	-2.0	12.1	-2.2	-0.5
Mar.	-84.3	125.5	0.0	-1.8	-1.3	2.0	-78.7	136.7	-0.7	-1.0	-78.0	137.7	-4.3	-11.3
Apr.	7.1	14.3	-0.3	-1.6	-0.2	-0.8	14.4	16.2	-0.4	5.4	14.8	10.8	-6.9	0.5
May	2.3	14.5	-0.3	1.6	1.2	2.4	4.7	4.9	-7.3	4.2	12.0	0.7	-3.4	5.6
June	-1.2	-26.2	-0.3	4.2	-1.3	1.2	-7.2	-30.2	-2.6	7.4	-4.6	-37.6	7.5	-1.4
July	43.1	-61.0	0.7	-0.4	-1.7	0.8	46.3	-67.2	-2.1	1.9	48.4	-69.1	-2.2	5.8
Aug.	-35.1	16.6	0.1	-2.4	1.7	-2.7	-31.5	25.0	-4.6	3.7	-26.9	21.3	-5.4	-3.4
Sep.	-79.6	20.4	0.1	1.9	0.3	1.8	-76.2	13.0	0.1	5.6	-76.3	7.4	-3.8	3.8
Oct.	-26.5	12.7	-0.5	4.5	-0.2	2.1	-22.4	7.1	-4.4	2.9	-18.0	4.2	-3.3	-1.1
Nov.	-58.8	28.2	0.0	2.0	2.5	2.3	-54.0	25.1	-10.0	-14.6	-44.0	39.7	-7.3	-1.2

2. Other investment by sector and instrument ¹⁾**2.1. Eurosystem**

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999	-1.2	6.7	5.5	-0.8	-0.1	-0.9
2000	-1.1	0.9	-0.2	0.0	0.0	0.0
2000 Q3	0.2	-2.0	-1.8	0.0	0.0	0.0
Q4	-0.9	2.9	2.0	0.0	0.0	0.0
<i>Euro area enlargement</i>						
2001 Q1	0.8	-2.7	-1.9	0.0	0.0	0.0
Q2	-0.8	4.3	3.5	0.0	0.0	0.0
Q3	1.0	-0.9	0.0	0.0	0.0	0.0

Source: ECB.

1) Inflows (+); outflows (-).

2) For the comparability of recent and some earlier data, see the general notes.

2.2. General government

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 7	Liabilities 8	Balance 9	Assets 10	Liabilities 11	Balance 12	Assets 13	Liabilities 14	Balance 15
1999	0.0	0.0	0.0	4.4	-13.1	-8.7	-1.2	0.2	-1.0
2000	0.1	0.0	0.1	-1.8	1.0	-0.8	-0.8	0.0	-0.8
2000 Q3	0.0	0.0	0.0	-5.1	2.6	-2.5	-0.3	0.1	-0.2
Q4	0.1	0.0	0.1	5.3	3.2	8.6	0.3	0.2	0.4
<i>Euro area enlargement</i>									
2001 Q1	0.0	0.0	0.0	2.9	-8.0	-5.1	-0.5	-0.2	-0.7
Q2	0.0	0.0	0.0	0.1	2.7	2.8	-0.4	0.1	-0.3
Q3	0.0	0.0	0.0	0.6	0.0	0.6	-0.3	0.0	-0.3

2.3. MFIs (excluding the Eurosystem)

	Loans/currency and deposits			Other assets/liabilities		
	Assets 16	Liabilities 17	Balance 18	Assets 19	Liabilities 20	Balance 21
1999	17.3	160.4	177.7	0.8	0.7	1.5
2000	-127.3	284.3	157.0	-4.1	5.3	1.3
2000 Q3	-15.8	74.9	59.1	-1.4	0.0	-1.4
Q4	-62.4	55.1	-7.4	-1.4	4.4	2.9
<i>Euro area enlargement</i>						
2001 Q1	-130.5	257.8	127.3	-4.5	3.9	-0.6
Q2	15.4	-11.9	3.5	-3.4	2.8	-0.6
Q3	-60.6	-31.0	-91.6	-0.8	1.8	1.0

2.4. Other sectors

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 22	Liabilities 23	Balance 24	Assets 25	Liabilities 26	Balance 27	Assets 28	Liabilities 29	Balance 30
1999	-7.5	4.8	-2.7	-21.3	20.4	-1.0	-23.0	12.7	-10.3
2000	-14.9	10.4	-4.5	-23.8	53.6	29.8	-5.4	-5.0	-10.4
2000 Q3	-4.3	3.0	-1.3	-4.0	30.3	26.3	-1.0	0.0	-1.0
Q4	-4.3	1.3	-2.9	17.7	4.5	22.3	-3.9	2.4	-1.5
<i>Euro area enlargement</i>									
2001 Q1	-4.8	4.2	-0.6	3.0	-16.3	-13.3	-2.5	-0.4	-3.0
Q2	-3.7	1.8	-1.9	2.1	3.9	6.0	-1.2	-1.0	-2.1
Q3	-1.3	-2.2	-3.6	-8.4	7.3	-1.1	-1.7	1.1	-0.6

3. Reserve assets ¹⁾

	Total 1	Monetary gold 2	Special drawing rights 3	Reserve position in the IMF 4	Foreign exchange							Other claims 12
					Total 5	Currency and deposits		Securities			Financial derivatives 11	
						With monetary authorities and the BIS 6	With banks 7	Equity 8	Bonds and notes 9	Money market instruments 10		
1999	10.1	0.3	1.0	2.0	6.7	12.5	-11.4	0.2	3.5	2.0	-0.1	0.2
2000	17.6	1.0	0.3	2.9	11.6	4.3	2.9	0.0	-5.6	10.1	-0.1	1.7
2000 Q3	4.7	0.3	-0.1	0.0	3.6	2.4	3.2	0.0	-5.5	3.5	-0.1	0.8
Q4	10.7	0.0	0.3	-0.6	10.5	1.1	3.8	0.0	0.8	4.7	0.0	0.5
<i>Euro area enlargement</i>												
2001 Q1	9.5	0.3	-0.4	0.2	10.8	7.8	-6.9	-1.1	5.2	5.7	0.0	-1.3
Q2	2.5	-0.1	-0.6	-0.7	5.0	0.2	-0.8	0.0	5.5	0.0	0.0	-1.1
Q3	2.5	0.2	0.0	-4.5	5.0	-0.9	1.4	0.0	4.9	-0.4	0.0	1.7

Source: ECB.

1) Increase (-); decrease (+).

Table 8.7**International investment position and reserve assets outstanding****1. Net international investment position ¹⁾***(EUR billions (ECU billions in 1997); assets minus liabilities; end-of-period positions)*

	Total	Direct investment			Portfolio investment					Financial derivatives	Other investment				Reserve assets
		Total	Equity (including reinvested earnings)	Other capital	Total	Equity securities	Debt instruments				Total	Trade credits	Loans/currency and deposits	Other assets/liabilities	
							Total	Bonds and notes	Money market instruments						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1997	32.7	177.6	148.6	29.1	-724.7	-358.7	-366.0	-339.8	-26.2	-5.9	222.4	79.8	51.3	91.4	363.3
1998	-147.9	152.2	124.2	28.0	-713.5	-462.0	-251.5	-229.0	-22.5	2.3	81.7	100.0	-107.1	88.8	329.4
1999	-75.0	402.4	318.9	83.5	-752.8	-591.3	-161.4	-108.4	-53.0	10.1	-107.3	111.9	-338.2	119.0	372.6
2000	-101.4	466.6	395.0	71.6	-666.8	-366.9	-299.9	-263.1	-36.7	7.0	-286.2	115.7	-530.4	128.5	378.0
<i>Euro area enlargement</i>															
2001 1 Jan.	-152.1	459.3	388.5	70.8	-721.5	-375.8	-345.7	-308.6	-37.1	7.0	-288.2	114.9	-531.6	128.5	391.2

Source: ECB.

1) For the comparability of recent and some earlier data, see the general notes.

2. Reserves and related assets of the Eurosystem and of the European Central Bank ¹⁾

(EUR billions; end-of-period positions, unless otherwise indicated)

	Reserve assets													Memo: related assets	
	Total	Monetary gold	In fine troy ounces (millions)	Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims	Claims on euro area residents denom- inated in foreign currency	
						Total	Currency and deposits		Securities			Financial deriva- tives			
							With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes				Money market instru- ments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Eurosystem ³⁾															
1998 Dec. ³⁾	329.4	99.6	404.131	5.2	23.4	199.9	12.6	18.3	169.0	0.0	116.6	52.4	0.0	1.3	7.6
1999 Dec.	372.6	116.4	402.762	4.5	24.3	225.1	12.8	21.4	191.1	0.0	134.3	56.7	-0.2	2.4	14.6
2000 Dec.	378.0	117.8	399.537	4.3	20.8	234.2	9.2	20.2	204.2	0.0	153.9	50.3	0.7	0.7	15.8
<i>Euro area enlargement</i>															
2001 1 Jan.	391.2	119.2	404.119	4.3	21.2	245.7	9.2	27.6	208.2	0.0	157.9	50.3	0.7	0.7	16.3
2001 Jan.	385.8	115.0	404.119	4.5	22.3	243.2	11.8	19.9	210.7	-	-	-	0.8	0.8	20.9
Feb.	383.8	116.5	404.119	4.8	21.3	240.5	10.4	21.7	207.8	-	-	-	0.6	0.6	21.2
Mar. ⁴⁾	393.0	117.6	403.153	4.9	21.4	246.9	9.7	27.3	209.5	-	-	-	0.5	2.1	20.2
Apr.	386.3	119.5	403.153	4.9	21.1	240.2	11.5	23.7	204.6	-	-	-	0.4	0.6	23.4
May	408.4	127.2	403.153	5.6	22.3	251.5	10.6	25.7	215.0	-	-	-	0.2	1.8	22.9
June ⁴⁾	410.0	128.6	403.089	5.7	22.9	249.6	9.8	28.4	211.2	-	-	-	0.2	3.2	22.7
July ⁴⁾	397.1	122.3	402.639	5.5	22.7	242.7	8.5	32.7	201.2	-	-	-	0.4	3.9	23.8
Aug. ⁴⁾	381.8	120.0	402.430	5.5	21.9	232.4	8.3	26.3	197.3	-	-	-	0.5	2.0	23.7
Sep. ⁴⁾	393.4	129.0	401.904	5.4	25.8	232.0	10.2	24.7	196.7	-	-	-	0.4	1.2	21.9
Oct. ⁴⁾	393.6	123.9	401.902	5.4	24.9	237.4	8.6	31.2	197.1	-	-	-	0.5	2.1	22.0
Nov. ⁴⁾	396.5	124.4	401.903	5.4	24.7	240.1	7.9	31.8	199.9	-	-	-	0.4	1.9	22.2
Dec. ⁴⁾	392.4	126.1	401.874	5.5	25.3	233.0	7.9	23.4	201.2	-	-	-	0.4	2.6	24.9
European Central Bank ⁵⁾															
1999 Dec.	49.3	7.0	24.030	0.0	0.0	40.6	0.3	6.0	34.3	0.0	27.7	6.5	0.0	1.7	2.6
2000 Dec.	44.7	7.0	24.030	0.0	0.0	36.9	0.6	6.1	30.0	0.0	19.8	10.2	0.3	0.7	3.8
<i>Euro area enlargement</i>															
2001 Jan.	45.7	7.0	24.656	0.0	0.0	37.9	0.7	2.6	34.3	-	-	-	0.3	0.7	3.5
Feb.	46.2	7.1	24.656	0.0	0.0	38.4	0.6	3.9	33.9	-	-	-	0.1	0.6	3.0
Mar.	46.3	7.2	24.656	0.0	0.0	37.0	0.6	5.2	31.1	-	-	-	0.0	2.1	3.9
Apr.	44.8	7.3	24.656	0.0	0.0	37.0	0.8	5.2	31.0	-	-	-	0.0	0.5	3.6
May	49.6	7.8	24.656	0.0	0.0	40.0	0.8	5.2	34.0	-	-	-	0.0	1.8	2.7
June	50.7	7.9	24.656	0.1	0.0	40.0	0.9	6.8	32.3	-	-	-	0.0	2.8	3.1
July	49.8	7.5	24.656	0.1	0.0	38.4	1.0	7.8	29.6	-	-	-	0.0	3.9	2.9
Aug.	45.5	7.3	24.656	0.1	0.0	36.1	1.1	4.2	30.8	-	-	-	0.0	2.0	3.5
Sep.	44.5	7.9	24.656	0.1	0.0	35.4	1.4	3.4	30.6	-	-	-	0.0	1.1	3.9
Oct.	47.9	7.6	24.656	0.1	0.0	38.5	0.9	5.5	32.1	-	-	-	0.0	1.8	2.8
Nov.	48.3	7.6	24.656	0.1	0.0	38.7	0.9	4.2	33.6	-	-	-	0.0	1.9	3.2
Dec.	49.0	7.7	24.656	0.1	0.0	38.6	0.8	4.5	33.3	-	-	-	0.0	2.6	3.6

Source: ECB.

1) More comprehensive data in accordance with the template on international reserves and foreign currency liquidity can be found on the ECB's website.

2) The figures are not fully comparable with those in Table 1.1 owing to differences in coverage and valuation.

3) Position as at 1 January 1999.

4) Changes in the gold holdings of the Eurosystem are due to transactions in gold within the terms of the Central Bank Gold Agreement of 26 September 1999.

5) Part of the Eurosystem's reserves.

9 External trade in goods of the euro area

Table 9

1. Values, volumes and unit values by commodity ^{1) 2)}

(not seasonally adjusted, unless otherwise indicated)

	Exports of goods (f.o.b.)					Imports of goods (c.i.f.)					Total (s.a.) (1995=100)		
	Total				Memo: Manufac- tures 5	Total				Memo: Manufac- tures 10 Oil 11	Exports 12	Imports 13	
	1	Inter- mediate 2	Capital 3	Consump- tion 4		6	Inter- mediate 7	Capital 8	Consump- tion 9				
Values (EUR billions (ECU billions to end-1998); 1995=100 for columns 12 and 13)													
1997	762.8	357.3	168.3	202.3	661.0	674.2	389.3	104.8	161.4	481.9	62.6	122.5	119.8
1998	797.1	369.6	179.8	213.6	697.8	711.4	393.3	122.9	175.8	540.3	41.6	128.1	126.4
1999	832.8	386.5	183.2	224.2	725.0	781.2	423.2	143.6	192.1	590.6	61.5	133.8	138.8
2000	1,010.1	480.7	221.3	264.7	880.0	1,002.9	576.7	178.4	217.0	725.7	118.5	162.3	178.2
2000 Q2	248.4	118.7	55.2	63.7	216.4	244.5	140.5	43.9	52.7	178.9	26.3	157.7	172.8
Q3	251.0	120.8	53.7	65.8	218.6	246.3	143.0	41.8	54.2	176.6	31.8	165.8	184.2
Q4	279.8	130.9	63.9	73.3	243.8	278.8	159.7	52.0	57.8	199.4	34.3	173.8	195.5
<i>Euro area enlargement</i>													
2001 Q1	258.9	121.7	56.2	67.9	226.8	260.6	148.5	47.4	54.4	190.5	27.0	173.4	182.3
Q2	265.7	121.9	58.5	68.3	232.6	258.1	145.4	44.2	54.0	186.7	28.0	172.4	182.3
Q3	255.5	115.7	54.9	69.1	223.6	238.2	132.0	37.4	54.6	170.9	27.6	171.8	177.8
2001 June	91.6	41.8	20.2	24.0	80.6	86.4	48.7	14.4	18.6	62.4	10.0	175.5	184.6
July	91.6	41.7	19.5	24.7	80.9	83.4	46.4	13.0	18.8	59.8	9.4	169.4	180.6
Aug.	81.4	36.8	18.1	21.3	71.0	76.7	41.8	11.6	18.0	54.8	9.4	175.8	179.9
Sep.	82.6	37.2	17.3	23.0	71.8	78.1	43.7	12.8	17.8	56.3	8.8	170.2	172.9
Oct.	96.4	42.7	21.6	26.4	84.3	86.8	47.7	14.6	19.7	63.2	8.4	169.9	170.5
Nov.	90.0	.	.	.	.	84.5	.	.	.	.	.	167.0	169.4
Volumes (annual percentage changes; 1995=100 for columns 12 and 13) ³⁾													
1997	10.8	9.1	12.0	10.6	12.0	7.2	8.3	13.1	6.7	10.7	2.4	115.9	110.3
1998	3.6	4.2	5.9	3.6	4.0	11.6	8.1	21.8	7.6	13.4	-4.5	120.1	123.1
1999	2.2	2.9	-0.8	3.5	1.4	6.1	3.5	13.0	7.8	7.1	6.0	122.7	130.6
2000	12.0	12.1	12.5	12.4	13.2	5.3	6.2	11.1	3.9	8.2	4.3	137.6	137.6
2000 Q2	14.5	13.8	13.4	14.2	15.5	6.2	6.8	12.9	4.4	10.0	0.2	135.6	137.3
Q3	9.8	9.3	10.2	12.1	10.8	5.9	7.0	10.5	3.2	8.1	5.5	139.1	140.9
Q4	9.7	11.0	13.9	8.2	11.2	3.1	3.8	10.5	0.8	4.4	6.3	142.3	139.7
<i>Euro area enlargement</i>													
2001 Q1	6.4	4.2	11.7	5.9	7.3	1.6	0.7	5.6	-4.3	1.0	-3.1	143.0	138.3
Q2	2.6	-1.8	4.3	2.3	3.3	-1.7	-4.0	-5.4	-5.4	-2.7	-3.0	140.2	136.5
Q3	-0.2	-4.7	1.3	0.0	0.5	-4.0	-6.8	-13.8	-4.8	-6.2	-3.6	139.8	136.4
2001 June	3.6	-0.8	6.1	4.1	4.6	-2.3	-5.1	-7.3	-3.2	-3.2	-2.4	142.2	136.8
July	4.7	1.9	1.2	2.8	6.1	-1.1	-3.6	-8.6	-1.5	-1.8	-2.6	137.9	133.9
Aug.	1.8	-5.2	10.7	1.3	2.8	-3.8	-7.2	-16.4	-3.3	-6.3	-2.9	143.4	137.6
Sep.	-6.8	-10.9	-6.9	-3.9	-7.1	-7.0	-9.4	-16.2	-9.4	-10.2	-5.0	138.0	137.6
Oct.	-0.2	-5.1	2.6	1.3	-0.4	0.9	-1.7	-11.7	-2.4	-3.8	4.6	139.0	137.0
Nov.	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit values (annual percentage changes; 1995=100 for columns 12 and 13) ³⁾													
1997	2.8	2.6	3.5	3.5	2.7	5.8	5.4	5.5	4.8	4.9	4.2	105.7	108.6
1998	0.9	-0.7	0.8	2.0	1.5	-5.4	-6.5	-3.6	1.2	-1.1	-30.4	106.6	102.8
1999	2.3	1.7	2.7	1.4	2.4	3.5	3.9	3.4	1.4	2.0	39.4	108.9	106.2
2000	8.3	11.0	7.4	5.1	7.2	21.9	28.3	11.8	8.7	13.5	84.8	117.8	129.4
2000 Q2	6.8	9.5	8.3	3.9	5.7	21.5	28.7	10.9	8.1	12.5	101.4	116.3	125.9
Q3	9.1	12.7	7.5	4.4	8.5	20.0	26.6	10.4	7.9	12.5	71.0	119.2	130.8
Q4	10.0	11.4	7.7	7.4	8.8	23.9	28.3	15.1	12.6	18.1	53.1	122.1	140.0
<i>Euro area enlargement</i>													
2001 Q1	6.6	6.4	5.6	5.5	6.5	8.8	9.2	8.6	8.0	9.3	3.2	121.3	131.8
Q2	5.8	5.3	4.0	6.7	5.7	6.0	6.2	5.2	7.2	6.1	4.2	123.0	133.6
Q3	3.1	1.1	2.3	6.7	3.0	-0.3	-2.1	2.8	5.0	2.3	-12.5	122.9	130.4
2001 June	5.7	4.9	3.0	8.2	5.9	5.4	5.2	5.7	7.0	5.8	0.9	123.5	135.0
July	3.9	1.2	6.2	8.4	3.3	5.0	3.5	7.6	7.4	6.6	-4.5	122.8	134.9
Aug.	3.1	1.4	1.4	7.2	3.1	0.2	-2.0	2.0	5.7	2.8	-10.7	122.6	130.7
Sep.	2.2	0.8	-0.8	4.5	2.6	-5.6	-7.4	-0.9	2.1	-2.3	-21.2	123.3	125.7
Oct.	0.6	-1.2	-0.4	2.5	1.3	-10.4	-12.7	-4.2	-0.2	-5.3	-32.5	122.2	124.4
Nov.	.	.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations based on Eurostat data (volume calculations and seasonal adjustment of unit values).

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.2).

2) The commodity breakdown in columns 2 to 4 and 7 to 9 is in accordance with the Classification by Broad Economic Categories. Manufactured goods (columns 5 and 10) and oil (column 11) are in accordance with the SITC Rev.3.

3) For 2001, unit value indices, which are also used for the estimation of volumes, refer to the euro area excluding Greece.

2. Geographical breakdown ¹⁾

(EUR billions (ECU billions to end-1998); not seasonally adjusted, unless otherwise indicated)

	Total 1	Total (s.a.) 2	United Kingdom 3	Sweden 4	Denmark 5	Candidate countries 6	Switzer- land 7	United States 8	Japan 9	Asia excl. Japan 10	Africa 11	Latin America 12	Other countries 13
Exports (f.o.b.)													
1997	762.8	-	141.7	29.2	19.4	90.2	46.8	102.6	26.5	132.7	43.1	38.1	92.4
1998	797.1	-	150.2	31.5	20.5	101.5	51.1	119.9	23.9	114.9	49.7	42.4	91.5
1999	832.8	-	161.4	33.1	21.1	102.9	56.1	135.1	26.8	119.2	48.4	39.1	89.6
2000	1,010.1	-	188.9	38.6	23.1	130.7	63.2	171.0	34.1	150.8	55.9	46.5	107.2
2000 Q2	248.4	244.7	46.6	9.7	5.7	32.4	15.5	41.0	7.9	36.8	14.6	11.0	27.1
Q3	251.0	257.2	46.2	9.1	5.5	32.7	15.5	43.1	8.7	37.8	13.6	12.1	26.8
Q4	279.8	269.6	50.8	10.5	6.3	36.9	17.0	48.0	9.3	43.3	15.4	13.4	29.0
Euro area enlargement													
2001 Q1	258.9	265.8	49.5	9.7	6.1	33.3	17.0	45.1	9.2	39.8	14.3	12.1	22.9
Q2	265.7	264.3	50.7	9.0	7.2	34.0	16.6	45.1	8.3	40.4	15.3	12.7	26.4
Q3	255.5	263.3	49.2	7.9	5.9	32.1	16.0	43.6	8.2	39.8	14.3	12.0	.
2001 June	91.6	89.7	18.0	3.0	2.0	11.7	5.5	15.5	3.0	14.0	5.1	4.5	9.3
July	91.6	86.5	17.3	2.4	1.9	11.5	5.6	16.6	2.8	14.5	5.1	4.7	9.1
Aug.	81.4	89.8	14.9	2.6	2.0	10.1	5.1	13.6	2.6	13.2	4.8	4.0	8.6
Sep.	82.6	86.9	17.0	2.9	2.0	10.5	5.3	13.3	2.8	12.1	4.4	3.3	.
Oct.	96.4	86.8	.	.	.	12.4	5.7	16.6	3.1	14.6	5.6	4.4	.
Nov.	90.0	85.3	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year													
2001 Nov.	-5.4	-	.	.	.	.	.	.	.	.	.	.	.
Imports (c.i.f.)													
1997	674.2	-	117.7	27.1	16.9	60.2	36.9	94.3	43.3	124.8	49.7	28.4	74.8
1998	711.4	-	122.3	30.8	17.3	71.6	40.9	104.8	48.5	132.0	45.8	29.3	68.0
1999	781.2	-	131.0	33.2	18.6	80.4	43.2	113.2	53.9	151.8	49.0	30.4	76.5
2000	1,002.9	-	155.5	37.5	21.7	100.8	49.8	139.7	64.6	210.9	72.1	39.5	110.9
2000 Q2	244.5	242.0	37.4	9.6	5.2	24.6	12.2	35.2	16.7	49.9	16.7	10.6	26.4
Q3	246.3	257.9	36.6	8.6	5.2	25.0	11.9	33.8	15.1	54.5	17.8	10.0	27.9
Q4	278.8	273.8	43.8	10.2	6.1	27.7	13.2	38.8	17.0	59.4	20.9	10.2	31.5
Euro area enlargement													
2001 Q1	260.6	257.0	38.7	8.9	5.2	29.0	13.5	37.5	16.1	53.8	19.8	9.8	28.3
Q2	258.1	257.0	39.0	8.6	5.1	29.3	13.1	36.0	15.7	51.9	18.9	11.1	29.5
Q3	238.2	250.7	34.9	7.6	5.1	27.9	12.0	30.8	12.8	50.0	17.7	10.0	.
2001 June	86.4	86.8	13.0	2.9	1.7	10.1	4.3	12.1	4.8	17.5	6.4	3.8	9.9
July	83.4	84.9	11.7	2.4	1.7	10.0	4.6	10.8	4.6	17.4	6.4	3.5	10.1
Aug.	76.7	84.6	11.0	2.4	1.7	8.6	3.4	10.7	4.1	16.6	5.6	3.2	9.4
Sep.	78.1	81.3	12.2	2.8	1.7	9.3	4.0	9.3	4.1	16.1	5.7	3.2	.
Oct.	86.8	80.1	.	.	.	10.4	5.0	11.5	4.8	17.1	6.0	3.5	.
Nov.	84.5	79.6	.	.	.	.	.	.	.	.	.	.	.
% change versus previous year													
2001 Nov.	-13.1	-	.	.	.	.	.	.	.	.	.	.	.
Balance													
1997	88.6	-	23.9	2.1	2.5	30.0	9.9	8.3	-16.9	8.0	-6.5	9.7	17.5
1998	85.7	-	27.8	0.7	3.2	29.9	10.2	15.1	-24.6	-17.2	3.9	13.1	23.5
1999	51.6	-	30.4	-0.1	2.6	22.5	12.9	21.9	-27.1	-32.6	-0.6	8.7	13.1
2000	7.2	-	33.4	1.1	1.4	29.9	13.4	31.3	-30.5	-60.1	-16.1	7.1	-3.6
2000 Q2	3.9	2.7	9.2	0.1	0.5	7.8	3.3	5.9	-8.8	-13.1	-2.1	0.4	0.7
Q3	4.6	-0.7	9.6	0.5	0.3	7.7	3.5	9.3	-6.3	-16.7	-4.2	2.1	-1.1
Q4	1.0	-4.2	7.0	0.3	0.2	9.1	3.8	9.2	-7.7	-16.1	-5.5	3.1	-2.5
Euro area enlargement													
2001 Q1	-1.7	8.7	10.7	0.8	0.9	4.4	3.5	7.6	-7.0	-14.0	-5.5	2.3	-5.5
Q2	7.7	7.3	11.7	0.5	2.1	4.7	3.4	9.1	-7.3	-11.5	-3.6	1.6	-3.1
Q3	17.4	12.6	14.2	0.3	0.8	4.1	4.1	12.8	-4.6	-10.2	-3.5	2.0	.
2001 June	5.2	2.9	5.0	0.1	0.3	1.6	1.2	3.3	-1.8	-3.5	-1.3	0.7	-0.6
July	8.2	1.6	5.6	0.0	0.2	1.4	1.1	5.8	-1.8	-2.9	-1.4	1.2	-1.0
Aug.	4.7	5.2	3.9	0.2	0.3	1.5	1.6	2.9	-1.5	-3.4	-0.8	0.7	-0.8
Sep.	4.5	5.7	4.8	0.1	0.3	1.2	1.3	4.1	-1.3	-4.0	-1.3	0.1	.
Oct.	9.6	6.7	.	.	.	2.0	0.7	5.1	-1.7	-2.5	-0.3	1.0	.
Nov.	5.5	5.7	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations based on Eurostat data (balance and other countries).

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Tables 8.1 and 8.2).

10 Exchange rates

Table 10

Exchange rates

(period averages; units of national currency per ECU or euro (bilateral); index 1999 Q1=100 (effective))

	Effective exchange rate of the euro ¹⁾						Bilateral ECU or euro exchange rates ²⁾				
	Narrow group				Broad group		US dollar	Japanese yen	Swiss franc	Pound sterling	
	Nominal	Real CPI	Real PPI	Real ULCM	Nominal	Real CPI					
1	2	3	4	5	6	7	8	9	10		
1997	99.1	99.4	99.3	100.0	90.4	96.6	1.134	137.1	1.644	0.692	
1998	101.5	101.3	101.6	99.6	96.6	99.1	1.121	146.4	1.622	0.676	
1999	95.7	95.7	95.7	96.1	96.6	95.8	1.066	121.3	1.600	0.659	
2000	85.7	86.5	86.9	86.5	88.2	86.3	0.924	99.5	1.558	0.609	
2000 Q1	89.0	89.6	89.7	89.7	91.1	89.5	0.986	105.5	1.607	0.614	
Q2	86.0	86.6	87.0	87.1	88.4	86.6	0.933	99.6	1.563	0.610	
Q3	84.7	85.7	86.2	85.6	87.3	85.3	0.905	97.4	1.544	0.612	
Q4	83.0	84.0	84.8	83.5	85.9	83.6	0.868	95.3	1.516	0.600	
2000 Jan.	90.2	90.8	90.8	-	92.4	90.7	1.014	106.5	1.610	0.618	
Feb.	89.2	89.8	89.9	-	91.2	89.6	0.983	107.6	1.607	0.615	
Mar.	87.7	88.3	88.4	-	89.7	88.1	0.964	102.6	1.604	0.611	
Apr.	86.1	86.6	87.0	-	88.4	86.7	0.947	99.9	1.574	0.598	
May	84.5	85.0	85.6	-	86.9	85.1	0.906	98.1	1.556	0.602	
June	87.4	88.1	88.4	-	89.9	88.1	0.949	100.7	1.561	0.629	
July	86.9	87.9	88.1	-	89.4	87.5	0.940	101.4	1.551	0.623	
Aug.	84.6	85.5	86.0	-	87.0	85.1	0.904	97.8	1.551	0.607	
Sep.	82.8	83.6	84.5	-	85.3	83.3	0.872	93.1	1.531	0.608	
Oct.	81.6	82.4	83.3	-	84.4	82.2	0.855	92.7	1.513	0.589	
Nov.	82.3	83.3	84.0	-	85.1	82.9	0.856	93.3	1.522	0.600	
Dec.	85.4	86.4	87.0	-	88.1	85.8	0.897	100.6	1.514	0.613	
				<i>Euro area enlargement</i>							
2001	87.3	89.0	89.1	86.7	91.0	88.1	0.896	108.7	1.511	0.622	
2001 Q1	88.6	90.0	90.4	87.9	91.4	89.0	0.923	109.1	1.533	0.633	
Q2	86.0	87.7	87.8	85.7	89.5	86.9	0.873	106.9	1.528	0.614	
Q3	87.0	88.9	88.8	86.5	91.2	88.2	0.890	108.3	1.507	0.619	
Q4	87.5	89.5	89.6	86.8	92.0	88.5	0.896	110.5	1.473	0.621	
2001 Jan.	89.2	90.3	90.7	-	91.7	89.1	0.938	109.6	1.529	0.635	
Feb.	88.3	89.7	90.1	-	91.0	88.6	0.922	107.1	1.536	0.634	
Mar.	88.4	90.0	90.4	-	91.4	89.1	0.910	110.3	1.535	0.629	
Apr.	87.6	89.2	89.4	-	91.0	88.5	0.892	110.4	1.529	0.622	
May	85.9	87.6	87.6	-	89.3	86.7	0.874	106.5	1.533	0.613	
June	84.7	86.4	86.4	-	88.1	85.4	0.853	104.3	1.522	0.609	
July	85.4	87.3	87.1	-	89.1	86.3	0.861	107.2	1.514	0.609	
Aug.	87.7	89.6	89.5	-	91.8	88.9	0.900	109.3	1.514	0.627	
Sep.	88.0	89.8	89.8	-	92.6	89.4	0.911	108.2	1.491	0.623	
Oct.	88.0	90.0	90.0	-	92.8	89.4	0.906	109.9	1.479	0.624	
Nov.	86.8	88.8	88.9	-	91.3	87.7	0.888	108.7	1.466	0.618	
Dec.	87.7	89.8	89.8	-	91.9	88.3	0.892	113.4	1.475	0.620	
2002 Jan.	87.6	89.9	89.7	-	91.6	87.9	0.883	117.1	1.475	0.617	
% ch. vs. ⁴⁾ prev. month											
2002 Jan.	-0.1	0.1	-0.2	-	-0.3	-0.5	-1.0	3.3	0.0	-0.6	
% ch. vs. ⁴⁾ prev. year											
2002 Jan.	-1.8	-0.4	-1.2	-	-0.2	-1.4	-5.9	6.9	-3.6	-2.9	

Source: ECB.

1) More details of the calculation are given in the general notes.

2) To December 1998, rates for the ECU (source BIS); from January 1999, rates for the euro.

3) Indicative rates for these currencies are shown up to September 2000, as the ECB did not provide official reference rates for these currencies before that.

Bilateral ECU or euro exchange rates ²⁾								
Swedish krona	Danish krone	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar ⁵⁾	Korean won ³⁾	Singapore dollar ³⁾	
11	12	13	14	15	16	17	18	
8.65	7.48	8.02	1.569	1.528	8.75	1,069.8	1.678	1997
8.92	7.50	8.47	1.665	1.787	8.69	1,568.9	1.876	1998
8.81	7.44	8.31	1.584	1.652	8.27	1,267.3	1.806	1999
8.45	7.45	8.11	1.371	1.589	7.20	1,043.5	1.592	2000
8.50	7.45	8.11	1.434	1.564	7.68	1,109.8	1.674	2000 Q1
8.28	7.46	8.20	1.381	1.585	7.27	1,042.0	1.608	Q2
8.40	7.46	8.10	1.341	1.576	7.06	1,009.5	1.569	Q3
8.60	7.45	8.04	1.325	1.632	6.77	1,011.6	1.516	Q4
8.60	7.44	8.12	1.469	1.542	7.89	1,145.9	1.697	2000 Jan.
8.51	7.45	8.10	1.427	1.564	7.65	1,110.8	1.674	Feb.
8.39	7.45	8.11	1.408	1.583	7.51	1,076.1	1.654	Mar.
8.27	7.45	8.15	1.389	1.588	7.38	1,051.4	1.620	Apr.
8.24	7.46	8.20	1.355	1.570	7.06	1,015.3	1.566	May
8.32	7.46	8.25	1.402	1.597	7.40	1,061.1	1.641	June
8.41	7.46	8.18	1.389	1.598	7.33	1,047.9	1.636	July
8.39	7.46	8.10	1.341	1.557	7.05	1,007.6	1.556	Aug.
8.41	7.46	8.03	1.295	1.575	6.80	973.2	1.517	Sep.
8.52	7.45	8.00	1.292	1.618	6.67	965.1	1.498	Oct.
8.63	7.46	8.00	1.320	1.639	6.68	990.6	1.497	Nov.
8.66	7.46	8.13	1.368	1.642	7.00	1,089.6	1.558	Dec.
<i>Euro area enlargement</i>								
9.26	7.45	8.05	1.386	1.732	6.99	1,154.8	1.604	2001
9.00	7.46	8.20	1.410	1.741	7.20	1,174.7	1.616	2001 Q1
9.13	7.46	8.01	1.345	1.701	6.81	1,138.9	1.583	Q2
9.41	7.44	8.01	1.374	1.734	6.94	1,150.1	1.582	Q3
9.48	7.44	7.97	1.416	1.751	6.99	1,155.2	1.634	Q4
8.91	7.46	8.24	1.410	1.689	7.32	1,194.9	1.630	2001 Jan.
8.98	7.46	8.21	1.403	1.724	7.19	1,153.8	1.607	Feb.
9.13	7.46	8.16	1.417	1.807	7.09	1,173.4	1.611	Mar.
9.11	7.46	8.11	1.390	1.785	6.96	1,183.5	1.617	Apr.
9.06	7.46	7.99	1.347	1.681	6.82	1,133.7	1.586	May
9.21	7.45	7.94	1.302	1.647	6.65	1,104.1	1.550	June
9.26	7.44	7.97	1.315	1.689	6.71	1,120.3	1.569	July
9.31	7.45	8.06	1.386	1.717	7.02	1,154.0	1.586	Aug.
9.67	7.44	8.00	1.426	1.804	7.11	1,178.3	1.593	Sep.
9.58	7.44	8.00	1.422	1.796	7.07	1,178.6	1.640	Oct.
9.42	7.45	7.92	1.415	1.717	6.93	1,137.5	1.625	Nov.
9.44	7.44	7.99	1.408	1.735	6.96	1,147.0	1.639	Dec.
9.23	7.43	7.92	1.413	1.709	6.89	1,160.8	1.625	2002 Jan.
-2.2	-0.1	-0.9	0.4	-1.5	-1.0	1.2	-0.9	% ch. vs. ⁴⁾ prev. month 2002 Jan.
3.6	-0.4	-3.8	0.3	1.2	-5.9	-2.9	-0.3	% ch. vs. ⁴⁾ prev. year 2002 Jan.

4) The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year. A positive change denotes an appreciation of the euro. Due to the change in the weighting scheme, effective exchange rate data as from January 2001 are not fully comparable with earlier observations.

II Economic and financial developments in the other EU Member States

Table 11

Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	HICP	General government deficit (-)/surplus (+) as a % of GDP	General government gross debt as a % of GDP	Long-term government bond yield ¹⁾ as a % per annum	Exchange rate ²⁾ as national currency per ECU or euro	Current and new capital account as a % of GDP	Unit labour costs ³⁾	Real GDP	Industrial production index ⁴⁾	Standardised unemployment rate as a % of labour force (s.a.)	Broad money ⁵⁾	3-month interest rate ¹⁾ as a % per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Denmark												
1998	1.3	1.1	55.6	4.94	7.50	-0.9	2.3	2.5	2.2	5.2	5.4	4.27
1999	2.1	3.1	52.0	4.91	7.44	1.7	3.0	2.3	1.8	5.2	-0.2	3.44
2000	2.7	2.8	46.1	5.64	7.45	1.6	1.4	3.0	6.3	4.7	1.2	5.00
2001	2.3	.	.	5.08	7.45	.	.	.	.	4.5	5.9	4.70
2000 Q3	2.6	-	-	5.69	7.46	3.6	0.4	3.1	8.1	4.7	-0.1	5.84
Q4	2.6	-	-	5.42	7.45	1.4	1.1	2.7	6.1	4.7	-1.3	5.48
2001 Q1	2.3	-	-	5.03	7.46	4.7	2.4	2.0	5.2	4.7	2.4	5.26
Q2	2.5	-	-	5.27	7.46	2.4	3.5	0.9	0.9	4.6	4.1	5.06
Q3	2.3	-	-	5.18	7.44	4.4	3.0	1.2	1.7	4.5	7.9	4.73
Q4	2.0	-	-	4.83	7.44	.	.	.	.	4.4	9.3	3.77
2001 Aug.	2.5	-	-	5.12	7.45	-	-	-	2.5	4.5	7.0	4.81
Sep.	2.1	-	-	5.11	7.44	-	-	-	-1.8	4.5	9.2	4.43
Oct.	2.0	-	-	4.86	7.44	-	-	-	0.6	4.4	9.1	3.96
Nov.	1.7	-	-	4.67	7.45	-	-	-	2.4	4.4	11.4	3.70
Dec.	2.1	-	-	4.97	7.44	-	-	-	.	4.4	7.2	3.63
2002 Jan.	.	-	-	5.08	7.43	-	-	-	.	.	.	3.63
Sweden												
1998	1.0	1.9	71.8	4.99	8.92	3.7	0.9	3.6	3.8	8.3	3.5	4.36
1999	0.6	1.8	65.2	4.98	8.81	2.7	-1.0	4.5	1.8	7.2	6.8	3.32
2000	1.3	4.1	55.6	5.37	8.45	3.3	5.5	3.6	7.8	5.9	6.2	4.07
2001	2.7	.	.	5.11	9.26	-	.	.	.	5.1	.	4.11
2000 Q3	1.3	-	-	5.30	8.40	2.8	5.1	3.9	9.2	5.7	5.1	4.14
Q4	1.5	-	-	5.09	8.60	4.4	6.6	2.4	8.1	5.3	2.2	4.06
2001 Q1	1.6	-	-	4.83	9.00	3.4	2.4	2.3	5.6	5.3	0.2	4.10
Q2	3.0	-	-	5.20	9.13	2.5	4.4	1.1	-2.5	5.0	1.1	4.15
Q3	3.1	-	-	5.28	9.41	4.4	.	0.4	-2.0	4.9	2.6	4.34
Q4	3.0	-	-	5.12	9.48	.	.	.	.	5.0	.	3.85
2001 Aug.	3.0	-	-	5.16	9.31	-	-	-	-1.3	4.9	2.5	4.40
Sep.	3.3	-	-	5.26	9.67	-	-	-	-1.9	5.1	3.1	4.14
Oct.	2.9	-	-	5.17	9.58	-	-	-	-5.3	5.2	4.9	3.86
Nov.	2.9	-	-	4.96	9.42	-	-	-	-5.0	4.9	6.2	3.81
Dec.	3.2	-	-	5.24	9.44	-	-	-	.	5.0	.	3.88
2002 Jan.	.	-	-	5.27	9.23	-	-	-	.	.	.	3.87
United Kingdom												
1998	1.6	0.4	48.1	5.60	0.676	-0.5	2.8	3.0	0.9	6.3	9.7	7.42
1999	1.3	1.3	45.7	5.01	0.659	-2.0	3.8	2.1	0.8	6.1	5.4	5.54
2000	0.8	1.9	42.8	5.33	0.609	-1.6	2.0	3.0	1.7	5.5	6.6	6.19
2001	1.2	.	.	5.01	0.622	.	.	.	.	.	.	5.04
2000 Q3	0.8	1.7	41.9	5.31	0.612	-1.5	2.2	3.0	1.0	5.4	8.2	6.21
Q4	0.9	0.2	42.1	5.09	0.600	-2.1	2.2	2.7	1.3	5.3	8.4	6.07
2001 Q1	0.9	6.5	39.8	4.90	0.633	-1.0	3.1	3.0	1.3	5.1	8.9	5.72
Q2	1.5	-1.8	39.8	5.18	0.614	-1.0	3.8	2.7	-1.7	5.0	7.4	5.30
Q3	1.5	2.1	38.7	5.13	0.619	-1.1	3.2	2.2	-3.0	5.2	7.6	5.00
Q4	1.0	-2.7	38.7	4.82	0.621	.	.	.	.	.	.	4.16
2001 Aug.	1.8	0.0	39.0	5.07	0.627	-	-	-	-2.0	5.2	7.1	5.00
Sep.	1.3	0.5	38.7	5.02	0.623	-	-	-	-3.9	5.2	8.2	4.73
Oct.	1.2	4.6	38.5	4.86	0.624	-	-	-	-5.0	5.2	8.3	4.43
Nov.	0.8	-6.7	38.2	4.67	0.618	-	-	-	-4.5	.	8.3	4.00
Dec.	1.0	-6.0	38.7	4.94	0.620	-	-	-	.	.	.	4.05
2002 Jan.	.	.	.	5.02	0.617	-	-	-	.	.	.	4.05

Sources: Eurostat (columns 1, 8, 9 and 10); European Commission (Economic and Financial Affairs DG and Eurostat) (columns 2 (annual) and 3 (annual)); Reuters (column 12); national data (columns 2 (quarterly and monthly), 3 (quarterly and monthly), 4, 5, 7 (except Sweden) and 11); ECB calculations (columns 6 and 7 (Sweden)).

1) Average-of-period values.

2) For more information, see Table 10.

3) Whole economy; data for the United Kingdom exclude employers' contributions to social security.

4) Total excluding construction; adjusted for working days.

5) Average of end-month values; M3; M4 for the United Kingdom.

12 Economic and financial developments outside the EU

Table 12.1

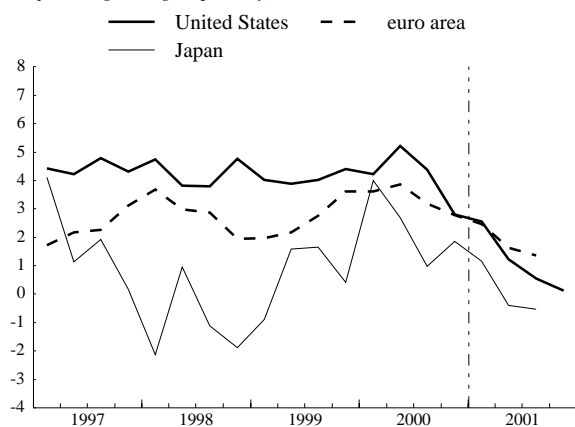
Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	Consumer price index 1	Unit labour costs ¹⁾ 2	Real GDP 3	Industrial production index ¹⁾ 4	Unemployment rate as a % of labour force (s.a.) 5	M2 ²⁾ 6	3-month interbank deposit rate ³⁾ as a % per annum 7	10-year government bond yield ³⁾ as a % per annum 8	Exchange rate ⁴⁾ as national currency per ECU or euro 9	Fiscal deficit (-)/surplus (+) ⁵⁾ as a % of GDP 10	Gross public debt ⁶⁾ as a % of GDP 11
United States											
1998	1.6	0.1	4.3	5.9	4.5	7.3	5.57	5.33	1.121	0.3	53.4
1999	2.2	-0.5	4.1	4.2	4.2	7.6	5.42	5.64	1.066	0.8	50.5
2000	3.4	0.8	4.1	4.7	4.0	6.1	6.53	6.03	0.924	1.7	44.9
2001	2.8	.	1.1	-4.3	4.8	8.7	3.78	5.01	0.896	.	.
2000 Q3	3.5	0.5	4.4	5.1	4.1	6.0	6.70	5.89	0.905	1.9	45.6
Q4	3.4	4.1	2.8	2.3	4.0	6.1	6.69	5.56	0.868	1.7	45.0
2001 Q1	3.4	6.7	2.5	-1.0	4.2	7.1	5.35	5.04	0.923	1.5	45.1
Q2	3.4	8.0	1.2	-4.2	4.5	8.1	4.19	5.25	0.873	1.1	43.5
Q3	2.7	6.5	0.5	-5.6	4.8	9.4	3.46	4.98	0.890	-0.9	44.2
Q4	1.9	.	0.1	-6.3	5.6	10.2	2.15	4.74	0.896	.	.
2001 Aug.	2.7	-	-	-5.3	4.9	8.8	3.56	4.97	0.900	-	-
Sep.	2.6	-	-	-6.5	5.0	10.6	3.03	4.76	0.911	-	-
Oct.	2.1	-	-	-6.7	5.4	9.9	2.40	4.55	0.906	-	-
Nov.	1.9	-	-	-6.4	5.6	10.4	2.10	4.61	0.888	-	-
Dec.	1.6	-	-	-5.9	5.8	10.3	1.92	5.07	0.892	-	-
2002 Jan.	.	-	-	.	5.6	.	1.82	5.00	0.883	-	-
Japan											
1998	0.7	6.3	-1.1	-7.1	4.1	4.4	0.66	1.30	146.4	-10.3	.
1999	-0.3	-2.5	0.7	0.8	4.7	3.7	0.22	1.75	121.3	-10.4	.
2000	-0.7	-6.5	2.4	5.9	4.7	2.1	0.28	1.76	99.5	.	.
2001	-0.7	.	.	-7.9	5.0	2.8	0.15	1.34	108.7	.	.
2000 Q3	-0.6	-6.1	1.0	5.5	4.6	1.9	0.32	1.79	97.4	.	.
Q4	-0.8	-5.3	1.9	4.9	4.8	2.0	0.56	1.73	95.3	.	.
2001 Q1	-0.4	-0.2	1.2	-1.1	4.8	2.4	0.37	1.38	109.1	.	.
Q2	-0.7	3.7	-0.4	-5.7	4.9	2.7	0.08	1.28	106.9	.	.
Q3	-0.8	9.4	-0.5	-11.1	5.1	3.1	0.07	1.36	108.3	.	.
Q4	-1.0	.	.	-13.3	5.5	3.2	0.08	1.35	110.5	.	.
2001 Aug.	-0.7	10.4	-	-11.7	5.0	3.0	0.08	1.36	109.3	-	-
Sep.	-0.8	11.0	-	-12.8	5.3	3.3	0.06	1.40	108.2	-	-
Oct.	-0.8	9.4	-	-11.8	5.4	3.0	0.08	1.36	109.9	-	-
Nov.	-1.0	.	-	-13.1	5.5	3.2	0.08	1.33	108.7	-	-
Dec.	-1.2	.	-	-15.0	5.6	3.4	0.08	1.35	113.4	-	-
2002 Jan.	.	.	-	.	.	.	0.09	1.42	117.1	-	-

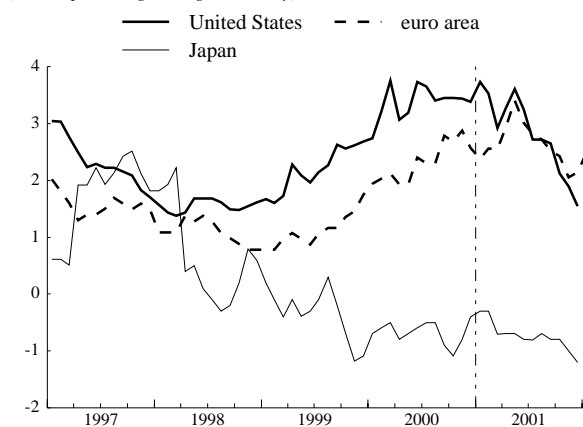
Real gross domestic product

(annual percentage changes; quarterly)



Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5, 6, 8 (to December 1998), 9 and 10); OECD (column 2 (Japan)); Eurostat (euro area chart data); Reuters (column 7 and 8 (from January 1999)); ECB calculation (column 11).

1) Manufacturing.

2) Average-of-period values; M2 and CDs for Japan.

3) For more information, see Tables 3.1 and 3.2.

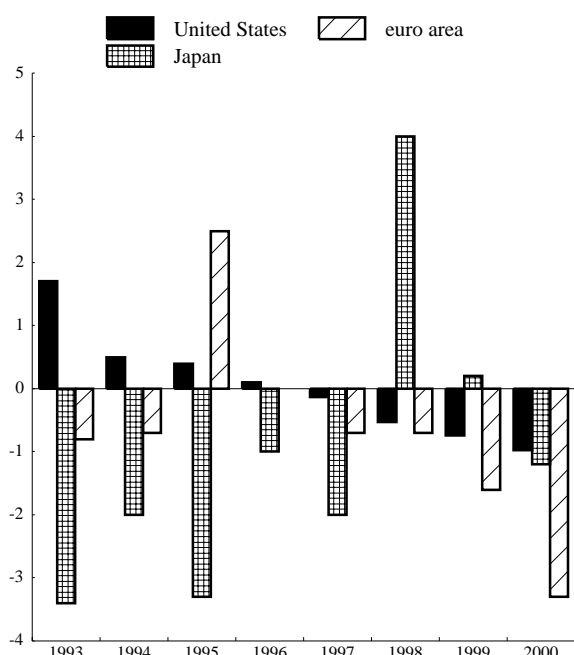
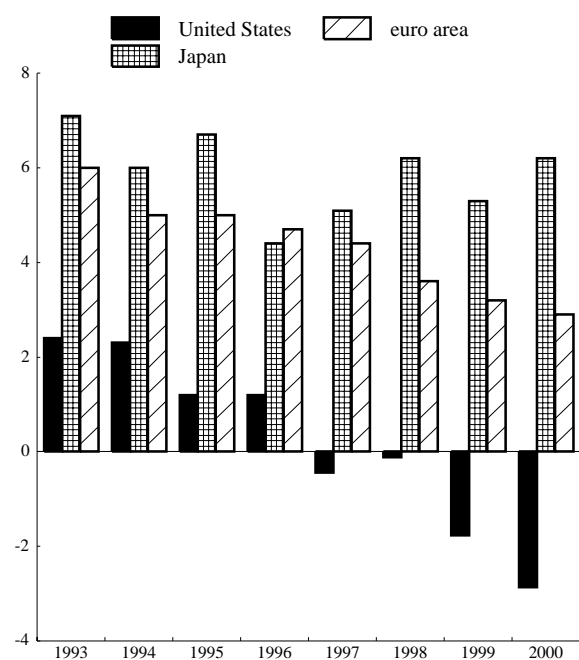
4) For more information, see Table 10.

5) Japan: the 1998 deficit includes a large debt assumption; financial accounts sources for 1999.

6) Gross consolidated debt for the general government (end of period).

Table 12.2
Saving, investment and financing
(as a percentage of GDP)

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households ¹⁾			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditure	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
1997	18.1	19.9	-1.5	9.4	8.6	3.3	8.7	3.4	2.1	11.8	4.1	12.1	4.6
1998	18.8	20.7	-2.3	9.7	8.8	6.5	8.1	7.0	1.6	12.3	5.5	12.8	5.6
1999	18.4	20.9	-3.3	9.9	9.3	7.2	8.1	7.9	3.2	12.9	4.7	11.4	6.5
2000	18.1	21.1	-4.4	9.9	9.5	6.3	8.0	7.3	2.8	13.0	2.9	10.4	5.8
1999 Q4	18.1	21.2	-3.7	10.0	9.2	5.5	8.2	6.3	3.5	12.9	4.6	10.7	6.6
2000 Q1	17.8	21.0	-4.1	9.8	9.4	7.7	7.9	8.8	5.6	13.3	4.5	10.4	7.9
Q2	18.3	21.4	-4.2	10.1	9.3	6.6	8.1	7.6	3.1	13.0	3.5	10.6	5.8
Q3	18.2	21.2	-4.5	10.2	9.6	6.9	8.2	8.0	2.4	12.9	2.8	10.3	5.8
Q4	18.0	21.0	-4.5	9.8	9.4	4.0	8.0	4.9	0.4	12.8	0.8	10.4	3.7
2001 Q1	17.3	20.2	-4.1	9.1	9.4	2.2	7.5	3.0	2.0	12.8	4.1	10.3	3.9
Q2	17.2	19.7	-4.0	8.6	8.9	0.1	7.5	0.8	2.8	12.8	4.5	10.5	6.7
Q3	17.1	19.1	-3.4	8.2	8.7	1.3	7.6	1.4	1.3	12.8	8.4	12.4	8.3
Japan													
1997	30.2	28.7	2.2	16.6	16.1	3.2	13.8	1.2	0.1	6.0	6.9	11.3	0.7
1998	29.1	26.9	2.6	15.6	15.6	-6.0	13.3	-8.3	-0.3	5.3	6.1	11.7	-1.0
1999	27.6	25.8	2.2	14.4	14.8	3.3	13.5	-2.0	1.8	5.2	5.9	11.1	-0.3
2000	27.7	25.9	2.3	15.2	15.5	2.6	13.8	1.0	1.0	5.2	4.3	10.9	-0.4
1999 Q4	.	26.9	.	.	.	19.1	.	13.7	4.0	.	12.7	.	1.4
2000 Q1	.	26.3	.	.	.	15.5	.	4.4	-1.2	.	-0.7	.	5.3
Q2	.	24.8	.	.	.	-25.0	.	-17.2	2.5	.	8.8	.	-7.5
Q3	.	27.1	.	.	.	12.7	.	1.8	-0.2	.	0.6	.	1.4
Q4	.	27.1	.	.	.	6.8	.	13.7	2.7	.	7.9	.	-0.5
2001 Q1	.	27.5	.	.	.	8.9	.	-3.3	0.2	.	-4.8	.	2.7
Q2	.	23.5	.	.	.	-30.8	.	-18.5	4.4	.	14.0	.	-5.3
Q3	.	26.1	.	.	.	-3.0	.	-7.8	-0.6	.	-3.4	.	-5.7

Net lending of non-financial corporations
(as a percentage of GDP)

Net lending of households ¹⁾
(as a percentage of GDP)


Sources: ECB, Federal Reserve Board, Bank of Japan and Economic and Social Research Institute.

1) Households including non-profit institutions serving households.

Technical notes

Relating to Table 2.4¹

Seasonal adjustment of the euro area monetary aggregates

The approach used relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2).² Seasonal adjustment for monetary aggregates includes a day-of-the-week adjustment for some components of M2. The seasonal adjustment of M3 is carried out indirectly by aggregating the seasonally adjusted series of M1, M2 less M1, and M3 less M2 to fulfil the additivity constraint.

Seasonal factors are estimated for the index of adjusted stocks. They are then applied to the levels expressed in EUR billions and to the adjustments due to reclassifications, other revaluations, etc., yielding seasonally adjusted values for the levels, the adjustments and thus for the flows. Seasonal factors are revised at annual intervals or as required.

Calculation of growth rates

Growth rates may be calculated from flows or the index of adjusted stocks.

If F_t^M represents the flow in month t , L_t the level outstanding at the end of the month t , X_t^M the rate of change in month t (augmented by one) defined as

$$(a) \quad X_t^M = \left(\frac{F_t^M}{L_{t-1}} + 1 \right)$$

and I_t the index of adjusted stocks in month t , defined as

$$I_t = I_{t-1} \times \left(1 + \frac{F_t}{L_{t-1}} \right)$$

where the base $I_{\text{DEC}1998} = 100$ is used, the annual percentage change a_t for month t – i.e. the change in the 12 months ending in month t – may be calculated as follows:

$$(b) \quad a_t = \left(\prod_{i=0}^{11} X_{t-i}^M - 1 \right) \times 100$$

$$(c) \quad a_t = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

Similarly, the monthly change, as shown in Table 2.4.4, may be calculated as $(I_t/I_{t-1} - 1) \times 100$. Finally, the three-month moving average for M3 is obtained as $(a_t + a_{t-1} + a_{t-2})/3$.

Roundings may give rise to differences from the annual percentage changes shown in Table 2.4. The index of adjusted stocks is available with a higher level of precision on the ECB's website (www.ecb.int) on the "Euro area statistics – download" page (in csv file format), from which the exact percentage changes in Table 2.4 may be calculated.

Relating to Tables 2.5 to 2.8

As far as possible, the data have been harmonised and are comparable. Nevertheless, as a result of the implementation of a new reporting scheme in January 1999, outstanding levels for Tables 2.5 to 2.8 prior to the first quarter of 1999 are not directly comparable with those referring to later periods, although they are sufficiently comparable for structural analysis. A detailed analysis of the growth rates can be performed for Tables 2.5 to 2.7 where quarterly flows are shown.

Finally, since the values reported for Tables 2.5 to 2.8 are revised on a quarterly basis (in the March, June, September and December issues), minor discrepancies may occur between these tables and those reporting monthly data.

Calculation of growth rates

Growth rates may be calculated from flows or the index of adjusted stocks.

¹ For details see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000).

² For details see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B. C. (1998), "New Capabilities and Methods of the X-12-Arima Seasonal Adjustment Program", *Journal of Business and Economic Statistics*, 16, 2, 127-152, or "X-12-ARIMA Reference Manual Version 0.2.2.", December 1998, Time Series Staff, Bureau of the Census, Washington, D.C.

For internal purposes, multiplicative models of TRAMO-SEATS also are used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Bank of Spain, Working Paper No. 9628, Madrid.

If F_t^Q represents the flow in the quarter ending in month t , X_t^Q the rate of change (augmented by one) in the quarter ending in month t defined as

$$(d) \quad X_t^Q = \left(\frac{F_t^Q}{L_{t-3}} + 1 \right)$$

and I_t and L_t are defined as above, the annual percentage change a_t referring to the quarter ending in month t may be calculated as follows:

$$(e) \quad a_t = \left(\prod_{i=0}^3 X_{t-3i}^Q - 1 \right) \times 100$$

$$(f) \quad a_t = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100.$$

Similarly, the quarterly change may be calculated as $(I_t/I_{t-3} - 1) \times 100$.

Roundings may give rise to differences from the annual percentage changes shown in Tables 2.5 to 2.7. The index of adjusted stocks is available with a higher level of precision on the ECB's website (www.ecb.int) on the "Euro area statistics – download" page (in csv file format), from which the exact percentage changes in Tables 2.5 to 2.7 may be calculated.

Relating to Table 4.1

Seasonal adjustment of the HICP¹

The approach used relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2) (see footnote 2 on the previous page). The seasonal adjustment of the total HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

Relating to Table 8.2

Seasonal adjustment of the balance of payments current account

The approach relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2) (see footnote 2 on the previous page). The seasonal adjustment for goods includes a working day and an Easter adjustment, whereas that for services includes only a working day adjustment. The seasonal adjustment of the total current account is carried out by aggregating the seasonally adjusted euro area series for goods, services, income and current transfers. Seasonal factors are revised at annual intervals or as required.

¹ See footnote 1 on the previous page.

General notes

The basis for the statistics compiled by the European Central Bank (ECB) is presented in the document entitled "Statistical information collected and compiled by the ESCB", dated May 2000. This document is an update of the report entitled "Statistical requirements for Stage Three of Monetary Union (Implementation Package)" of July 1996, and describes the provision of statistics as it stands today. The document covers money and banking and related statistics, balance of payments statistics, international investment position statistics and financial accounts statistics. The requirements of the ECB for statistics on prices and costs, national accounts, the labour market, government receipts and expenditure, short-term indicators of output and demand, and the European Commission Business and Consumer Surveys are set out in the document entitled "Requirements in the field of general economic statistics" of August 2000.¹

The focus of these statistics is the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in a downloadable format (csv files) on the ECB's website (www.ecb.int) and new or expanded data will appear in the ECB Monthly Bulletin as they become available.

Owing to the fact that the composition of the ECU does not coincide with the currencies of the Member States which have adopted the single currency, pre-1999 amounts converted from the participating currencies into ECU at current ECU exchange rates are affected by movements in the currencies of Member States which have not adopted the euro. To avoid this effect in the monetary statistics, the pre-1999 data in Tables 2.1 to 2.8 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless indicated otherwise, price and cost statistics before 1999 are based on the data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used as appropriate.

As a general rule, the cut-off date for the statistics included in the ECB Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue it was 6 February 2002.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

Overview

Key developments in the euro area are summarised in an overview table.

Monetary policy and financial statistics

Tables 1.1 to 1.5 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations, statistics relating to minimum reserves, and the banking system's liquidity position. Tables 1.2 and 1.3 reflect the switch to variable rate tenders in June 2000. Monetary data relating to Monetary Financial Institutions (MFIs), including the Eurosystem, are shown in Tables 2.1 to 2.3. Table 2.3 is consolidated; inter-MFI positions within the euro area are not shown, but any difference between the sum total of such claims and liabilities as recorded is shown in column 13. Table 2.4 sets out monetary aggregates drawn from the consolidated MFI balance sheet; they also include some (monetary) liabilities of central government. The M3 data shown in Table 2.4 exclude holdings by non-residents of the euro area of i) shares/units issued by

¹ Money and banking statistics are the responsibility of the ECB at the European level; responsibility for balance of payments, international investment position and financial accounts statistics is shared with the European Commission (Eurostat); price and cost and other economic statistics are the responsibility of the European Commission (Eurostat).

money market funds located in the euro area and ii) money market paper and debt securities issued with a maturity of up to two years by MFIs located in the euro area. Accordingly, these holdings are included in the item external liabilities shown in Table 2.3, and as a result have an impact on the item net external assets shown in Table 2.4. Table 2.5 shows a quarterly sectoral and maturity analysis of loans by MFIs to euro area residents. Table 2.6 shows a quarterly analysis of deposits held by euro area residents with MFIs. Table 2.7 provides a quarterly analysis of MFI claims on and liabilities to non-residents of the euro area. Table 2.8 shows a quarterly currency analysis of certain MFI balance sheet items. Tables 2.5 to 2.7 show flows adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions, and annual percentage changes. A complete list of MFIs is published on the ECB's website. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual: Guidance for the statistical classification of customers" (ECB, November 1999). The "Money and Banking Statistics Compilation Guide" (EMI, April 1998) explains recommended practices to be followed by the NCBs. From 1 January 1999 the statistical information is collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16, as replaced from January 2002 by ECB/2001/13).

Statistics on money market interest rates, long-term government bond yields and stock market indices (Tables 3.1 to 3.3) are produced by the ECB using data from wire services. For details concerning the statistics on retail bank interest rates (Table 3.4), see the footnote at the bottom of the relevant page.

Statistics on securities issues are presented in Tables 3.5 and 3.6. They are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in

accordance with the ESA 95, in exceptional cases two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term. The statistics on securities issues are estimated to cover approximately 95% of total issues by euro area residents. Table 3.5 shows securities issued, redemptions and amounts outstanding, broken down into short-term securities and long-term securities. Net issues differ from the change in amounts outstanding owing to valuation changes, reclassifications and other adjustments. Table 3.6 contains a sectoral breakdown of issuers of euro-denominated securities, whether resident in the euro area or elsewhere. For euro area residents, the sectoral breakdown is in line with the European System of Accounts 1995 (ESA 95).² For non-euro area residents, the term "banks (including central banks)" is used to indicate institutions of a similar type to MFIs (including the Eurosystem) resident outside the euro area. The term "international organisations" includes the European Investment Bank. (The ECB is included in the Eurosystem.)

The totals (columns 1, 7 and 14) in Table 3.6 are identical to the data on amounts outstanding (columns 8, 16 and 20), gross issues (columns 5, 13 and 17) and net issues (columns 7, 15 and 19) of euro-denominated securities in Table 3.5. The amounts outstanding of securities issued by MFIs (column 2) in Table 3.6 are broadly comparable with money market paper and debt securities issued as shown on the liabilities side of the aggregated MFI balance sheet in Table 2.8.3 (columns 2 and 10), although the coverage of securities issues statistics is at present somewhat narrower.

2 The code numbers in the ESA 95 for the sectors shown in tables in the Monthly Bulletin are: MFIs (including Eurosystem) comprises the ECB and the national central banks of Member States in the euro area (S.121) and other monetary financial institutions (S.122); non-monetary financial corporations comprises other financial intermediaries (S.123), financial auxiliaries (S.124) and insurance corporations and pension funds (S.125); non-financial corporations (S.11); central government (S.1311); other general government comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).

Prices and real economy indicators

The data presented in the ECB Monthly Bulletin are, with a few exceptions, produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. However, the availability of comparable data is, as a general rule, better for the more recent periods than for earlier periods.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. Data from January 2000 include the cost of health and educational services; data from January 2001 also cover hospital services and social services provided to people living at home, in retirement homes and in residences for the disabled; earlier data on the extended basis are, in general, not available. The HICP from January 2000 also covers spending by non-residents which had previously been excluded from the HICP in certain Member States. The table includes seasonally adjusted HICP data which are compiled by the ECB.

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the ESA 95 during 1999 and thereafter has begun to pave the way for fully comparable data, including quarterly summary accounts, across the euro area. Before 1999 the deflators of GDP in Table 4.2.2 are derived from national data in domestic currency. National accounts in this issue are based on the ESA 95.

Table 5.2 shows selected other real economy indicators. The implementation of Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning short-term statistics will enlarge

the range of available euro area data. The breakdown by end-use of the products applied in Tables 4.2.1 and 5.2.1 represents the harmonised sub-division of industry excluding construction (NACE sections C to E) into Main Industrial Groupings as defined in the Commission Regulation (EC) No. 586/2001 of 26 March 2001.

Opinion survey data (Table 5.3) draw on the Business and Consumer Surveys of the European Commission.

Employment data (Table 5.4) are based on the ESA 95. Whenever coverage of the euro area is incomplete, some data are estimated by the ECB on the basis of the information available. Unemployment rates conform to International Labour Organization (ILO) guidelines.

Financial accounts statistics

Table 6.1 shows quarterly data on financial accounts for non-financial sectors in the euro area, comprising general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15). The data (not seasonally adjusted) cover levels outstanding and financial transactions classified according to the ESA 95 and show the main financial investment and financing activities of the non-financial sectors. On the financing side (liabilities) the data are presented by ESA 95 sector and original maturity. Whenever possible the financing taken from MFIs is separately presented. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible. While both levels and transactions may throw light on economic developments, the latter are more likely to be the focus of attention.

The quarterly data are based on euro area MFI and securities issues statistics, government finance statistics, quarterly national financial accounts, and BIS

international banking statistics. While all euro area countries contribute to the euro area statistics, Ireland and Luxembourg, as yet, do not provide quarterly national financial accounts data.

Table 6.2 shows annual data on saving, (financial and non-financial) investment and financing in the euro area. These data cannot yet be reconciled with the quarterly data presented in Table 6.1.

General government fiscal position

Tables 7.1 to 7.3 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The euro area aggregates are compiled by the ECB from harmonised data provided by the NCBs, which are regularly updated. Data on deficit and debt for the euro area countries may therefore differ from those used by the European Commission in the context of the excessive deficit procedure.

Table 7.1 shows general government revenue and expenditure on the basis of definitions laid down in Commission Regulation No. 1500/2000 of 10 July 2000 amending the ESA 95. Table 7.2 shows details of general government gross consolidated debt at nominal value in accordance with the Treaty provisions on the excessive deficit procedure. Tables 7.1 and 7.2 include summary data for individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. Table 7.3 analyses changes in general government debt. The difference between the change in government debt and government deficit, the deficit-debt adjustment, is mainly explained by government transactions in financial assets and by foreign exchange valuation effects.

Balance of payments and international investment position of the euro area (including reserves), trade in goods and exchange rates

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.6) and international investment position (i.i.p.) statistics generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of May 2000 (ECB/2000/04) on the statistical reporting requirements of the ECB, and to Eurostat's documentation.

The euro area balance of payments is compiled by the ECB. Data up to December 1998 are expressed in ECU. The recent monthly figures for balance of payments statistics should be regarded as provisional. Data are revised with the publication of the detailed quarterly balance of payments data. Earlier data are revised periodically.

Some earlier data have been partially estimated and may not be fully comparable with more recent observations. That is the case for the b.o.p. financial account before end-1998, the services account before end-1997, the monthly pattern of income for the years 1997 to 1999 and the i.i.p. at end-1997. Table 8.5.2 provides a sectoral breakdown of euro area purchasers of securities issued by non-residents of the euro area. It is not possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents.

The euro area i.i.p. (Table 8.7.1) is compiled on a net basis by aggregating national data. The i.i.p. is valued at current market prices with the exception of direct investment stocks, where book values are used to a large extent.

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.7.2 with the corresponding reserves and related assets held by the ECB. The data in Table 8.7.2 are in line with the recommendations for the IMF/BIS template

on international reserves and foreign currency liquidity. Earlier data are revised on an ongoing basis. Reserve assets data before end-1999 are not fully comparable with later observations. A publication on the statistical treatment of the Eurosystem's international reserves is available on the ECB's website.

Table 9 shows data on euro area external trade in goods. The main source for the data is Eurostat. The ECB derives volume indices from Eurostat value and unit value indices, and performs seasonal adjustment of unit value indices, while value data are seasonally and working day adjusted by Eurostat.

The commodity breakdown is in accordance with the classification by Broad Economic Categories (based on the SITC Rev. 3 definition) for intermediate, capital and consumption goods, and with the SITC Rev. 3 for manufactured goods and oil. The geographical breakdown shows main trading partners, individually or in regional groups. The 13 EU candidate countries are Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, the Slovak Republic, Slovenia and Turkey.

Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular imports, are not fully comparable with the goods item in the balance of payments statistics (Tables 8.1 and 8.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998 (ECB estimates).

Table 10 shows ECB calculations of nominal and real effective exchange rate indices for the euro based on weighted averages of

bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade with the trading partners and capture third-market effects. Up to December 2000, the narrow group is composed of the countries whose currencies are shown in the table plus the Greek drachma. On adopting the euro in January 2001, Greece ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, the Slovak Republic, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices in manufacturing (PPI) and unit labour costs in manufacturing (ULCM). Where deflators are not yet available, estimates are used. The bilateral rates shown are those against the 12 currencies used in the ECB's calculation of the "narrow" effective exchange rate of the euro. The ECB publishes daily reference rates for these and some other currencies.

Other statistics

Statistics on other EU Member States (Table 11) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Tables/Charts 12.1 and 12.2 are obtained from national sources. Saving, investment and financing data for the United States and Japan (Table/Chart 12.2) are structured in the same way as the capital and financial flows data shown for the euro area in Table/Chart 6.



Chronology of monetary policy measures of the Eurosystem¹

4 January 2000

The ECB announces that on 5 January 2000 the Eurosystem will conduct a liquidity-absorbing fine-tuning operation with same-day settlement. This measure aims at restoring normal liquidity conditions in the money market after the successful transition to the year 2000.

5 January 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

15 January 2000

At the request of the Greek authorities, the ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece decide, following a common procedure, to revalue the central rate of the Greek drachma in the exchange rate mechanism (ERM II) by 3½%, with effect from 17 January 2000.

20 January 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

It also announces that the Eurosystem intends to allot an amount of €20 billion for each of the longer-term refinancing operations to be conducted in the first half of 2000. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the first half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the financial sector through its main refinancing operations.

3 February 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.25%, starting from the operation to be settled on 9 February 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.25% and 2.25% respectively, both with effect from 4 February 2000.

17 February, 2 March 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

16 March 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.5%, starting from the operation to be settled on 22 March 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.5% and 2.5% respectively, with effect from 17 March 2000.

30 March, 13 April 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.5%, 4.5% and 2.5% respectively.

¹ The chronology of monetary policy measures of the Eurosystem taken in 1999 can be found on pages 176 to 179 of the ECB Annual Report 1999.

27 April 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.75%, starting from the operation to be settled on 4 May 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.75% and 2.75% respectively, both with effect from 28 April 2000.

11 May 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

25 May 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

8 June 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.50 percentage point to 4.25% and to apply this in the two operations (which will be conducted as fixed rate tenders) to be settled on 15 and 21 June 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 5.25% and 3.25% respectively, both with effect from 9 June 2000.

It also announces that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem

will be conducted as variable rate tenders, applying the multiple rate auction procedure. The Governing Council decides to set a minimum bid rate for these operations equal to 4.25%. The switch to variable rate tenders in the main refinancing operations is not intended as a further change in the monetary policy stance of the Eurosystem, but as a response to the severe overbidding which has developed in the context of the current fixed rate tender procedure.

19 June 2000

In accordance with Article 122 (2) of the Treaty establishing the European Community, the ECOFIN Council decides that Greece fulfils the necessary conditions on the basis of the criteria set out in Article 121 (1) and abrogates the derogation of Greece with effect from 1 January 2001. The ECOFIN Council took its decision, taking account of the reports of the European Commission and the ECB on the progress made in the fulfilment by Sweden and Greece of their obligations regarding the achievement of Economic and Monetary Union, after consulting the European Parliament, and after a discussion in the EU Council meeting in the composition of Heads of State or Government.

The ECOFIN Council, acting with the unanimity of the Member States of the European Community without a derogation and the Member State concerned, upon a proposal from the European Commission and after consultation of the ECB, also adopts the irrevocable conversion rate between the Greek drachma and the euro, with effect from 1 January 2001. Following the determination of the euro conversion rate of the Greek drachma (which is equal to its prevailing central rate against the euro in the exchange rate mechanism, ERM II), the ECB and the Bank of Greece announce that they will monitor the convergence of the market exchange rate of the Greek drachma against the euro towards its euro conversion rate, which should be completed at the latest by 29 December 2000.

21 June 2000

The Governing Council of the ECB decides that the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 5.25% and 3.25% respectively. It reiterates that, as announced on 8 June 2000, the forthcoming main refinancing operations of the Eurosystem will be conducted as variable rate tenders, applying the multiple rate auction procedure, with a minimum bid rate of 4.25%.

The Governing Council also announces that, for the longer-term refinancing operations to be conducted in the second half of 2000, the Eurosystem intends to allot an amount of €15 billion per operation. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the second half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the financial sector through its main refinancing operations.

6 July, 20 July, 3 August 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.25%, 5.25% and 3.25% respectively.

31 August 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 6 September 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 1 September.

14 September 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

5 October 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.75%, with effect from the operation to be settled on 11 October 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.75% and 3.75% respectively, both with effect from 6 October.

19 October, 2 November, 16 November, 30 November 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

14 December 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides to reconfirm the existing reference value for monetary growth, namely an annual growth rate of 4½% for the broad aggregate M3. This decision is taken on the grounds that the available evidence continues to support the assumptions underlying the initial derivation of the reference value in December

1998 (and its confirmation in December 1999), namely that, over the medium term, M3 income velocity declines at a trend rate in the range from ½% to 1% per annum and potential output grows at a trend rate between 2% and 2½% per annum. The Governing Council will undertake the next review of the reference value in December 2001.

2 January 2001

On 1 January 2001 the euro was introduced in Greece. Greece thus became the twelfth EU Member State to adopt the single currency and the first to do so since the start of Stage Three of Economic and Monetary Union (EMU) on 1 January 1999. As a result, the Bank of Greece is now a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which previously adopted the euro. In accordance with Article 49 of the Statute of the European System of Central Banks and of the European Central Bank, the Bank of Greece pays up the remainder of its contribution to the capital of the ECB, as well as its share of the ECB's reserves, and also transfers to the ECB its contribution to the foreign reserve assets of the ECB.

Further to the announcement on 29 December 2000, the first main refinancing operation of 2001, in which the Greek counterparties of the Eurosystem participate for the first time, is successfully conducted. The allotment volume of €101 billion takes into account the additional liquidity needs of the euro area banking system resulting from the integration of the Greek Monetary Financial Institutions.

4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

18 January, 1 February, 15 February, 1 March, 15 March, 29 March, 11 April, 26 April 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

10 May 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 15 May 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 11 May 2001.

23 May, 7 June, 21 June, 5 July, 19 July, 2 August 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

30 August 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 4.25%, with effect from the operation to be settled on 5 September 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.25% and 3.25% respectively, both with effect from 31 August 2001.

13 September 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.25%, 5.25% and 3.25% respectively.

17 September 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 3.75%, with effect from the operation to be settled on 19 September 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 4.75% and 2.75% respectively, both with effect from 18 September 2001.

27 September, 11 October, 25 October 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

8 November 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 3.25%, starting from the operation to be settled on 14 November 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 4.25% and 2.25% respectively, both with effect from 9 November 2001.

6 December 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

In addition, it decides that the reference value for the annual growth rate of the broad monetary aggregate M3 will remain at 4½%.

3 January 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

The Governing Council also decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2002. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2002 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

7 February 2002

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing

operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

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