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MONTHLY BULLETIN

February 1999

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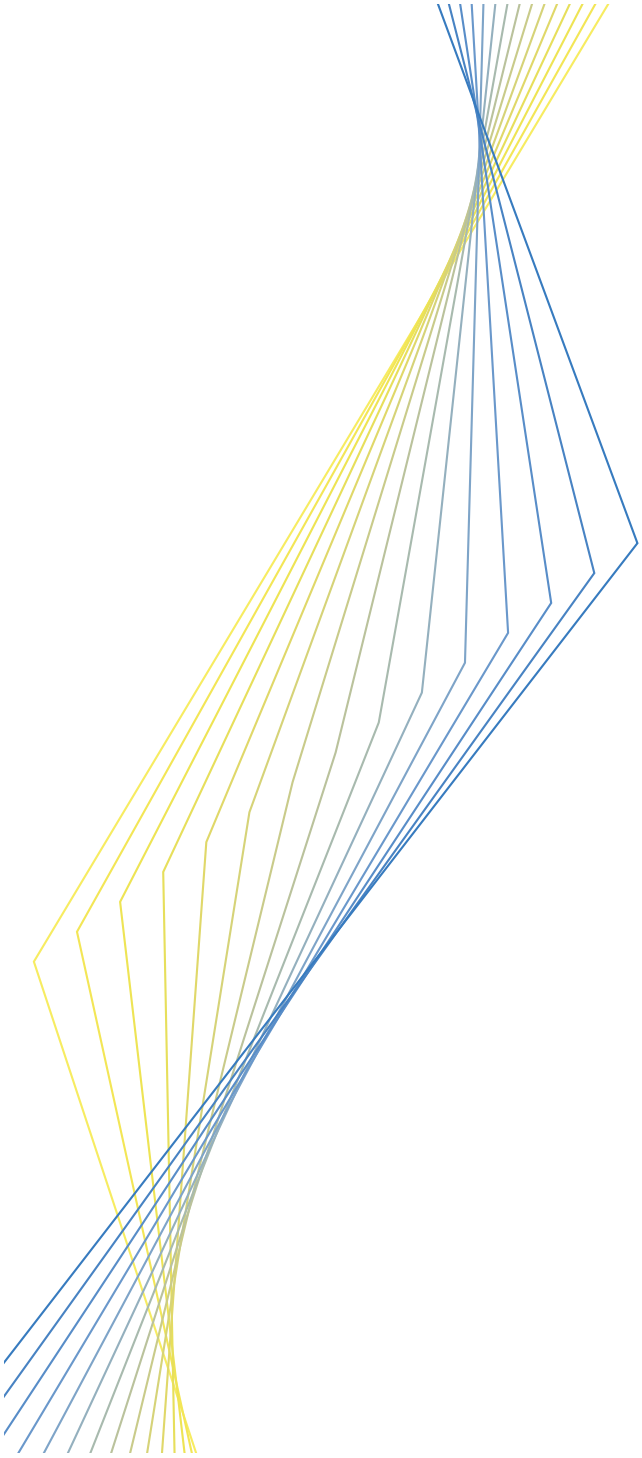

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Abbreviations

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

ACEA/A.A.A.	European Automobile Manufacturers' Association
BIS	Bank for International Settlements
BPM4	IMF Balance of Payments Manual (4th edition)
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
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 Organisation
IMF	International Monetary Fund
MFIs	Monetary Financial Institutions
NCBs	National central banks
Repos	Repurchase agreements
SITC Rev. 3	Standard International Trade Classification (revision 3)

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

Two main monetary policy decisions were taken by the Governing Council of the ECB at its meetings on 21 January and 4 February 1999.

First, the Governing Council decided at both meetings that the conditions applicable to the main refinancing operations of the Eurosystem would be kept unchanged, i.e. that these would continue to be conducted as fixed rate tenders at a rate of 3.0%.

Second, on 21 January 1999 the Governing Council confirmed its earlier announcements that it would widen the band defined by the two standing facilities. The Governing Council thus set the interest rate for the marginal lending facility at 4.5% and that for the deposit facility at 2.0%, thereby returning to the interest rates it had set for the start of Stage Three. It was deemed appropriate to discontinue application of the temporary narrow corridor, which had been in effect from 4 to 21 January 1999, as the initial difficulties of market participants in adapting to the new money market environment had significantly diminished since the start of the year and as the integration of the euro area money market had progressed sufficiently in the first three weeks after its inception.

These interest rate decisions were taken in accordance with the stability-oriented monetary policy strategy of the Eurosystem following a careful evaluation of the latest monetary, financial and other economic developments, which confirmed the earlier overall favourable assessment of the outlook for price stability.

An important element of the monetary policy strategy of the Eurosystem is the detailed examination and assessment of monetary trends. A special article in this Bulletin describes in detail how the monetary aggregates of the euro area are constructed and the role they play in the Eurosystem's monetary policy strategy. The monetary data for December 1998, which were released on 1 February 1999, bear witness to the continuation of favourable prospects for price stability in the euro area. The 12-month growth rate of M3 declined slightly in December 1998 to 4.5%, having stood at 5.0% in October 1998 and 4.7% in November 1998. The three-month moving average of the 12-month growth rate of M3 up to December 1998 was 4.7%, a level unchanged from the three-month period from September to November 1998, and very close to the reference value for broad monetary growth of 4½% per annum set by the Governing Council.

Developments in the narrow monetary aggregate M1 have been more buoyant recently. Similarly, the growth of credit to the private sector was relatively high in December 1998, in line with the evolution of the previous months. These developments, which need to be carefully monitored in the coming months, seem to reflect, above all, the current low levels of both short-term and long-term interest rates in the euro area. In addition, the strong growth of credit suggests the absence, at present, of deflationary risks in the euro area.

Turning to financial indicators, long-term nominal interest rates continued the falling trend which had been evident throughout most of 1998. The yield curve shifted downwards in January 1999, while the spread of nominal bond yields over comparable yields on inflation index-linked bonds issued in the euro area narrowed further. These developments suggest that the long-term inflation expectations of market participants may have declined further in recent months.

New information on indicators of economic activity in the euro area continued to provide mixed signals. On the one hand, industrial output growth slowed down, capacity utilisation in manufacturing decreased, and the decline in unemployment appears to have stalled around the year-end. On the other, Eurostat's revised estimates for euro area real GDP growth for the first three quarters of 1998 indicate that quarter-on-quarter real GDP growth has been broadly stable at around 0.7% since the beginning of 1998. In addition, the latest data indicate that the deterioration in industrial confidence appears to have been halted. Furthermore, in January 1999 export order books improved slightly and consumer confidence increased further, exceeding the peak level recorded in 1990. Recent external

developments were also rather mixed. While developments in Brazil led to a bout of volatility in financial markets and increased uncertainty, the economy of the United States continued to show resilience.

Overall, while there are indications of a slowdown in real GDP growth in the euro area around the turn of the year, the extent and duration of such a weakening of economic activity remain a matter of uncertainty.

Recent price developments are consistent with future price stability. The HICP inflation rate for the euro area continued the downward movement seen in the second half of 1998, falling to 0.8% in December 1998. The decline in inflation rates was influenced by the fall in oil prices which, from July to December 1998, was approximately 25% in ECU terms. The pattern of unit labour costs, which showed slightly negative growth rates in the third quarter of 1998, has also contributed to the decline in inflation rates.

While, on balance, the outlook for price stability remains favourable, some risks can be identified. On the downward side, further turbulence in emerging markets or a more serious than expected slowdown in economic activity in the euro area may have negative effects on prices. On the upward side, excessive wage growth and a relaxation of fiscal policies could adversely affect the prospects for future price stability. Furthermore, exchange rate developments and trends in commodity prices need to be monitored closely.

Anticipation of some downward pressure on prices as a result of expectations of a slowdown in economic activity had already been reflected in the co-ordinated interest rate decision of NCBs to reduce their key rates to 3.0% on 3 December 1998 and in the Governing Council's confirmation of the appropriateness of that level on 22 December 1998. By January 1999 the three-month nominal interest rate had fallen to 3.1%, reflecting a decline of more than 110 basis points over the past 12 months. According to a definition of the real interest rate as the nominal interest rate minus the current HICP inflation rate, a measurement which is influenced to a considerable extent by the recent decline in energy prices, the real three-month interest rate stood at 2.3% in January 1999, i.e. approximately 80 basis points lower than a year earlier. At the same time, nominal long-term interest rates have fallen by 140 basis points over the past 12 months, to stand at around 3.8%. In real terms, i.e. if corrected for current HICP inflation, long-term interest rates reached a level of around 3% in January 1999, standing 110 basis points lower than a year earlier. These interest rates are very low by international and historical standards. Monetary and financial conditions are therefore favourable for sustained growth of output and employment in the euro area in line with price stability.

Economic developments in the euro area

1 Monetary and financial developments

Monetary policy decisions by the Governing Council of the ECB

Following the meetings of the Governing Council of the ECB on 21 January and 4 February 1999, the ECB announced that for the four main refinancing operations to be settled between 27 January and 17 February 1999 the same conditions would apply as for the first three such operations, i.e. they would be offered as fixed rate tenders conducted at an interest rate of 3.0%. These decisions were deemed appropriate in view of the stable development of M3 and the favourable overall assessment regarding the outlook for price stability, which had remained unchanged since the meeting of the Governing Council on 7 January 1999.

On 21 January 1999 the Governing Council also confirmed its previous announcement that it would terminate the transitional measure of the narrow corridor established by the interest rates on the two standing facilities. For the period between 4 and 21 January 1999 the interest rates on the marginal lending facility and the deposit facility had been set at 3.25% and 2.75% respectively. This narrow corridor was aimed at facilitating the adaptation of market participants to the new monetary policy environment in Stage Three. The narrow corridor proved to be an effective instrument, mitigating initial problems of individual credit institutions with the functioning of the euro area payment systems and money market. However, difficulties that some market participants encountered in the initial days of trading on the euro money market diminished considerably over time. In view of the more satisfactory degree of integration of the euro money market and the fact that continuing to maintain a narrow corridor would have been likely to hamper the development of an efficient money market in the euro area in the longer term, the Governing Council decided to set the deposit rate and the marginal lending rate at 2.0% and 4.5% respectively as from 22 January 1999. These rates are equal to the interest rates which had already been set officially for the start of Stage Three on 1 January 1999 (see Chart 1 below and the "Chronology of monetary policy measures of the Eurosystem" at the back of this Bulletin).

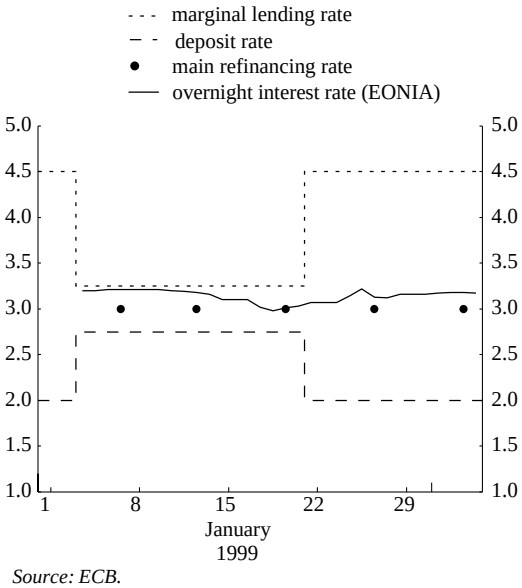
Stable trend of broad money growth continued

In December 1998 the broad monetary aggregate M3 grew by 4.5% on an annual basis, decreasing from 4.7% in November (see Chart 2). The three-month moving average of the 12-month growth rate of M3, covering the months from October to December 1998, stood at 4.7%. This was the same as the rate recorded for the period from September to November 1998 and was very close to the reference value of 4½% per annum set by the Governing Council. The moderate slowdown in the pace of M3 growth in December 1998 compared with November was primarily the result of a substantial contraction of marketable

Chart 1

ECB interest rates and the overnight market interest rate

(percentages per annum; daily data)



Source: ECB.

instruments included in M3 (debt securities issued with a maturity of up to two years, repurchase agreements, money market fund shares/units and money market paper), which more than offset a moderate increase in the growth rate of the other components of M3 (currency in circulation and short-term deposits).

The narrow monetary aggregate M1 grew at an annual pace of 9.2% in December 1998, increasing from 8.7% in November. The relatively high rate of growth of narrow money reflected the steady rise in the demand for overnight deposits, the 12-month growth rate of which reached 11.1% in December (compared with a rate of 10.8% in November). Moreover, the annual growth of currency in circulation increased to 1.4% in December, from 0% in November. The fast pace of growth of M1 reflected primarily the low opportunity costs of holding liquid instruments in an environment of historically low short and long-term interest rates in the euro area and of price stability.

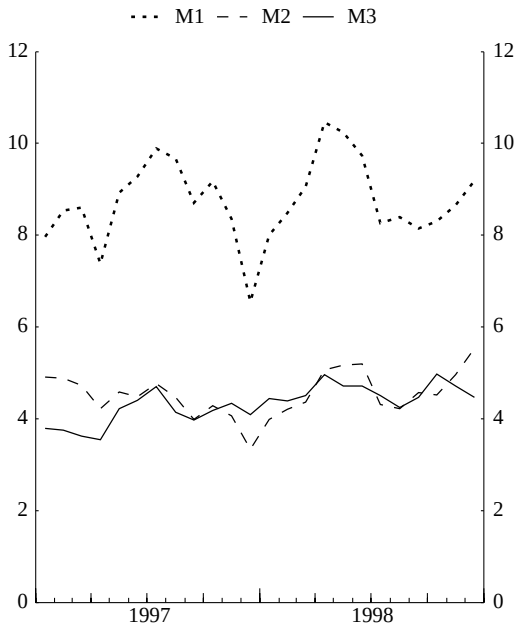
With regard to other short-term deposits included in M2 (and M3), the annual growth rate of deposits redeemable at up to three months' notice fell to 5.6% in December – from 6.6% in November – whereas the 12-month rate of change of deposits with an agreed maturity of up to two years rose to -1.2% in December from -3.4% in November. The 12-month growth of the intermediate monetary aggregate M2, which includes the components of M1 and these short-term deposits, increased to 5.5% in December from 5.0% in November.

The aforementioned contraction of the marketable instruments included in M3 was particularly evident for debt securities issued with a maturity of up to two years, as their annual growth rate became negative in December (-6.7%), compared with a value exceeding 20% in November. In some countries the decline in this relatively small component of M3 might have been related to the absence of reserve requirements applicable to them prior to 1 January 1999.

Chart 2

Monetary aggregates in the euro area

(annual percentage changes)



Source: ECB.

Repurchase agreements decreased by 11.7% in December compared with a year earlier (against a decline of 8.0% in November). The positive 12-month rate of growth in money market fund shares/units and money market paper slowed down to 5.2% in December from 7.3% in the previous month. The overall contraction of these marketable instruments can also be related to the steady decline in short-term interest rates. The reduction in holdings of these financial instruments is not a recent phenomenon, but has been evident since July 1998 (with the sole exception of October 1998 – a month marked by particularly high volatility in international financial markets). In absolute and non-seasonally adjusted terms, the levels for December 1998 of repurchase agreements and debt securities with a maturity of up to two years were 15.9% and 27.3% below their July 1998 levels respectively. The total amount of money market fund shares/units and money market paper in December 1998 was 2.8% below its July 1998 level.

Credit to the private sector continued to grow at a strong pace

On the assets side of the consolidated balance sheet of the MFI sector, the 12-month growth rate of credit to the private sector remained high in December, at 9.2%. The continued strong growth of credit to the private sector seems to be associated primarily with the favourable financing conditions for non-financial firms and households as shown by the significant decline in retail bank lending interest rates over recent years. It also reflects the fact that economic activity expanded at a relatively strong pace during 1998 in several parts of the euro area.

By contrast, the 12-month growth rate of credit to the public sector (including lending in the form of the acquisition of securities) remained subdued, even though it rose moderately in December 1998 to 1.6%. The 12-month rate of change of loans to general government was -0.2% in December compared with -1.8% in November, while MFI holdings of public sector securities grew at an annual rate of 2.9% in December, compared with 3.6% in November.

Among the other counterparts of M3, the longer-term financial liabilities of the MFI sector (comprising longer-term deposits, debt securities issued and the capital and reserves of MFIs) expanded at an annual rate of 2.6% in December 1998 (down from 3.4% in November). The subdued growth of this component may be linked to the reduction in the spread between long-term and short-term interest rates in recent months.

Furthermore, the rate of growth of both external assets and liabilities of the MFI sector fell in December 1998. Compared with December 1997, the external assets of MFIs rose by 2.5% and their external liabilities increased by 11.3%. On balance, the net external asset position of the MFI sector deteriorated by €110 billion in 1998.

In summary, in the year to December 1998, the moderate growth of M3 was accompanied by a substantial growth in credit extended by MFIs to the non-government sector in the euro area, some expansion in MFIs' non-monetary liabilities and a rather large decline in MFIs' net external asset position, while MFIs increased their credit to the government by only small amounts.

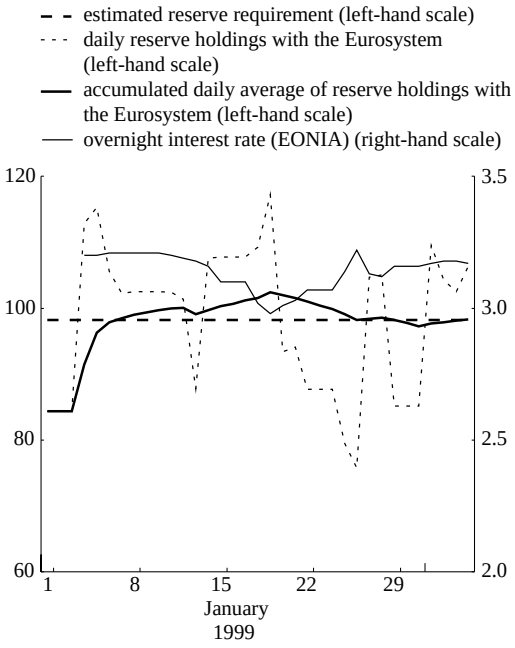
Liquidity conditions subject to some volatility

The overnight money market rate underwent some fluctuations during the first weeks of 1999. In the first few days of Stage Three, euro area money market conditions were relatively tight. Between 4 and 13 January 1999, the overnight interest rate, as measured by the EONIA ("euro overnight index average", i.e. the weighted average of the rates on unsecured overnight contracts reported by a panel of major banks in the euro area), stood at around 3.2%, a level close to the then applicable interest rate of 3.25% on the marginal lending facility (see Chart 1). This pattern was accounted for in the very first business days of Stage Three by an accumulated shortage of liquidity in the money market. Thereafter, the allotment of liquidity in the first main refinancing operation of the Eurosystem on 7 January 1999 was sufficient to create a temporary surplus in the banking system's liquidity position, so that the credit institutions' reserve holdings on their current accounts with the Eurosystem could be in excess of the reserve requirement (see Chart 3a). The fact that the overnight interest rate did not fall quickly after the allotment in the first main refinancing operation probably reflected the very cautious behaviour in the money market on the part of credit institutions that were uncertain about their exact reserve requirement, while being confronted with the challenge of adapting to the new environment and, in particular, to the functioning of TARGET and other cross-border payment systems (see also Box 1).

Chart 3a

Banking liquidity and the overnight market interest rate

(EUR billions; daily data)

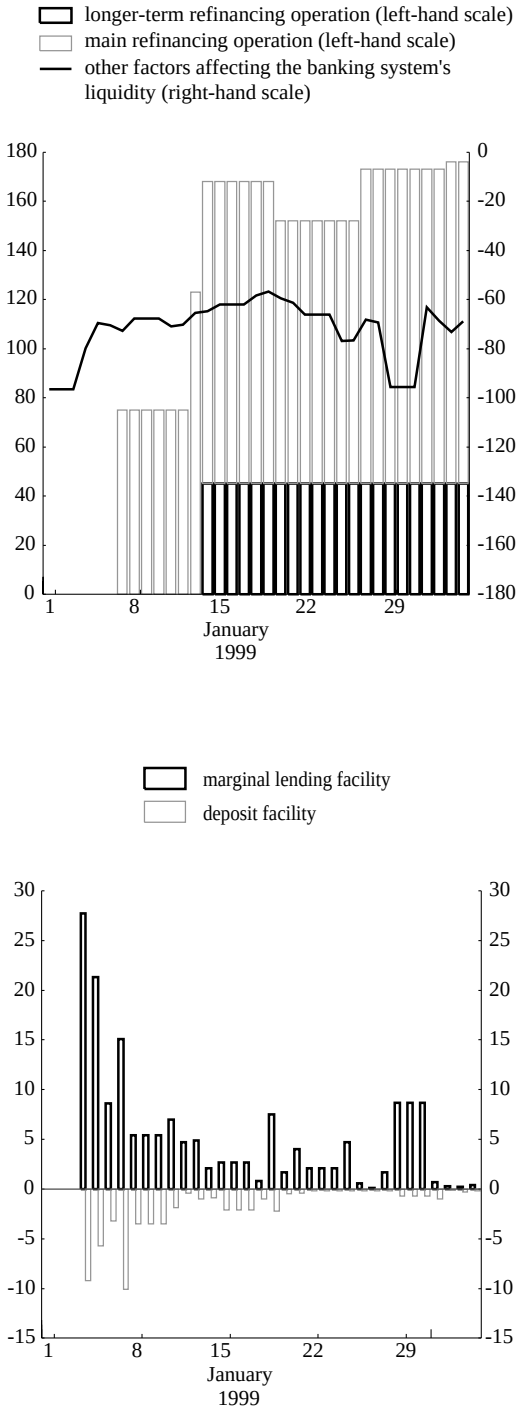


Source: ECB.
Note: Overnight interest rate in percentages per annum.

Chart 3b

Factors contributing to the banking system's liquidity

(EUR billions; daily data)



Source: ECB.

provided sufficient liquidity to enable credit institutions to accumulate comfortable surplus positions on their reserve accounts with the Eurosystem. Second, uncertainty about the exact reserve requirements of credit institutions was gradually reduced. Third, credit institutions quickly adjusted to the new environment of an area-wide euro money market, as confirmed by the rapid decline in recourse to the standing facilities seen throughout the euro area. The average daily recourse to the marginal lending facility declined from €15.6 billion in the first week of January to €4.3 billion in the second week; similarly, the average daily recourse to the deposit facility declined from €6.3 billion to €1.3 billion (see Chart 3b).

In late January and early February 1999, however, the overnight interest rate rebounded to a level of between 3.1% and 3.2%. The rebound reflected a slight tightening in the money market, which was to some extent caused by increases in deposits on Treasury accounts with some

NCBs. Some of these increases reflected a normal pattern of tax collection in certain Member States, which takes place during the second half of each month. However, other increases had not been expected by the Eurosystem and had to be compensated in the subsequent main refinancing operations of the Eurosystem.

Table 1 provides an overview of the factors contributing to the liquidity of the banking system between 1 January 1999 and the cut-off date for this Bulletin, 4 February 1999. The figures in this table are presented as daily averages. The average amount of the Eurosystem's monetary policy operations outstanding under the main refinancing operations was €91.9 billion. The amount of liquidity supplied through the first longer-term refinancing operation was €45 billion, but, as this operation was only settled on 14 January 1999, the average daily amount provided through this operation between 1 January and 4 February 1999 was only €28.3 billion. Net recourse to the standing facilities, computed as the difference between the recourse to the marginal lending facility and to the deposit facility, was €3.2 billion on average. Finally, monetary policy operations which were initiated by NCBs during 1998 and which gradually matured during the first weeks of January 1999 provided the banking system with an average of €47.2 billion of liquidity.

The banking system's liquidity position is also affected by movements in other items of the consolidated balance sheet of the Eurosystem. Banknotes in circulation amounted to €331.1 billion on average during January 1999, while government deposits with the Eurosystem stood at €38.9 billion, and the net foreign asset position of the Eurosystem (including gold) amounted to €329.2 billion. Finally, the sum of all other positions on the Eurosystem's balance sheet represented an average net liability position of €31.5 billion. These items either provide

Table 1

Contributions to the banking system's liquidity

(EUR billions)

Daily average from 1 January to 4 February 1999

		Liquidity providing	Liquidity absorbing	Net contribution
Monetary policy operations of the Eurosystem				
Main refinancing operations		91.9	-	+ 91.9
Longer-term refinancing operations		28.3	-	+ 28.3
Standing facilities		4.9	1.7	+ 3.2
Other operations		0.0	0.0	0.0
Stage Two monetary policy operations (net) [1]		47.2	0.0	+ 47.2
TOTAL	**(a)**	**172.3**	**1.7**	**+ 170.6**
Other factors affecting the banking system's liquidity				
Banknotes in circulation		-	331.1	- 331.1
Government deposits with the Eurosystem		-	38.9	- 38.9
Net foreign assets		329.2	-	+ 329.2
Other factors (net)		-	31.5	- 31.5
TOTAL	**(b)**	**329.2**	**401.5**	**- 72.3**
Credit institutions' holdings on current accounts with the Eurosystem	**(a) + (b)**			**98.3**
Memorandum item:				
Estimated reserve requirement for the period from 1 January to 23 February 1999 [2]				around 98

1) *Monetary policy operations initiated by NCBs in Stage Two and outstanding at the start of Stage Three (excluding outright operations and the issuance of debt certificates).*
2) *Estimate as of 4 February 1999.*

the banking system with liquidity or withdraw liquidity from it, depending on whether they are assets or liabilities of the Eurosystem.

On average over the period from 1 January to 4 February 1999 the liquidity of the banking system, which is reflected in the balance of the current accounts held by credit institutions with the Eurosystem, was equal to €98.3 billion. This was broadly in line with the estimated reserve requirement of around €98 billion which credit institutions have to fulfil on average over the first maintenance period, which runs from 1 January to 23 February 1999.

Further decline in the three-month interest rate

The three-month market interest rate declined in the first few weeks of Stage Three, continuing the downward trend of 1998. Starting from a level of 3.24% on the first day of trading of the euro, i.e. 4 January 1999, the three-month EURIBOR had fallen to 3.05% by 19 January 1999 but edged up slightly afterwards (see Chart 4).

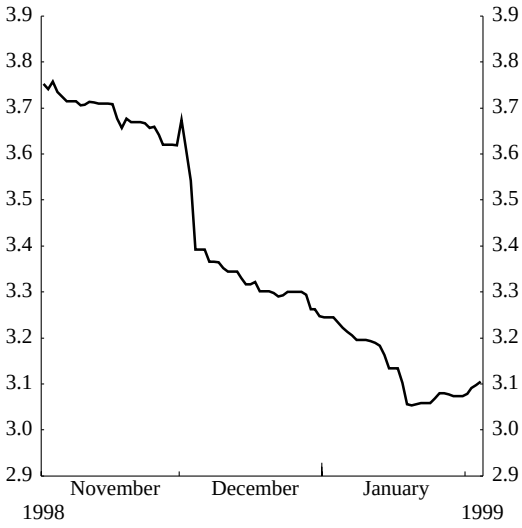
On 4 February 1999, the cut-off date for this Bulletin, markets expected a gradual decline in short-term rates, as was evident from the interest rates on futures contracts with delivery dates in 1999. On 4 February 1999 the three-month futures rate on euro for delivery in March 1999 was 3.04%, while the three-month futures rates for delivery in June 1999 and September 1999 were 2.94% and 2.90% respectively.

Market expectations of a gradual fall in short-term market rates in 1999 were also revealed in the first longer-term refinancing operation of the Eurosystem, which was settled on 14 January 1999. In order to phase in this kind of operation, it was conducted as three separate tenders with maturities of (approximately) one month, two months and three months respectively. As the Eurosystem does not intend to send monetary policy signals with these longer-term operations, they were conducted in the form of variable rate tenders with a pre-announced volume. The resulting interest rates were 3.13% for the operation maturing on 25 February 1999, 3.10% for that maturing on 25 March 1999, and 3.08% for that maturing on 29 April 1999.

Chart 4

Three-month interest rate in the euro area

(percentages per annum; daily data)



Source: ECB.

Note: Euro area average of national three-month interbank rates until 29 December 1998; three-month EURIBOR from 30 December 1998 onwards.

Long-term bond yields continued their declining trend

By the end of January 1999 the average 10-year government bond yield across the euro area stood at 3.77%, a level which was low by historical standards. This low level is partly a reflection of global factors, but also bears witness to the impact of many favourable influences associated with the move to Stage Three of EMU. Internal influences include the progress towards price stability within the euro area, the gradual elimination in some countries of risk premia associated with intra-EU exchange rate uncertainty during the run-up to the changeover to the euro and the process of convergence in the fiscal area. Linked to this,

the low bond yields reflect the attainment of a high degree of confidence in financial markets that the single monetary policy will deliver low and stable rates of inflation in the future.

In the course of January 1999 10-year bond yields in the euro area declined by almost 20 basis points (see Chart 5). This development contrasted with developments in the United States, where 10-year bond yields showed little discernible trend over the period from end-December 1998 to end-January 1999. As a consequence, the differential between 10-year bond yields in the United States and comparable yields in the euro area widened by over 20 basis points.

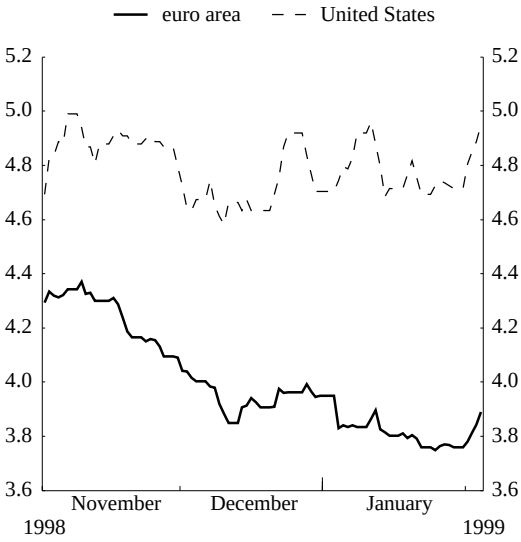
At the very beginning of 1999 this development in the spread reflected international portfolio reallocation in favour of securities denominated in euro. This was apparent in the sharp increase in trading volumes in contracts on bonds in euro area derivatives exchanges compared with the levels recorded at the end of 1998. The pattern of trading volumes on derivatives exchanges in recent months would tend to suggest that some market participants may have postponed investments in euro-denominated securities until the changeover had been seen to have been completed smoothly.

As the month progressed, other influences also played a supportive role in the decline in long-term bond yields in the euro area. First, some domestic indicators of activity, particularly in the industrial sector, may have led to market expectations of slower economic activity in the euro area. A second factor was a further bout of volatility in global financial markets following the currency devaluation in Brazil. As with the Russian and Asian financial crises over the summer months of 1998, this development prompted a "flight to quality" from emerging markets to industrialised countries, as well as a "flight to safety" within the capital markets of industrialised countries from stock markets to bond markets. Third, market perceptions

Chart 5

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

(percentages per annum; daily data)



Sources: ECB and BIS.
Note: Long-term government bond yields refer to 10-year bonds or to the closest available bond maturity.

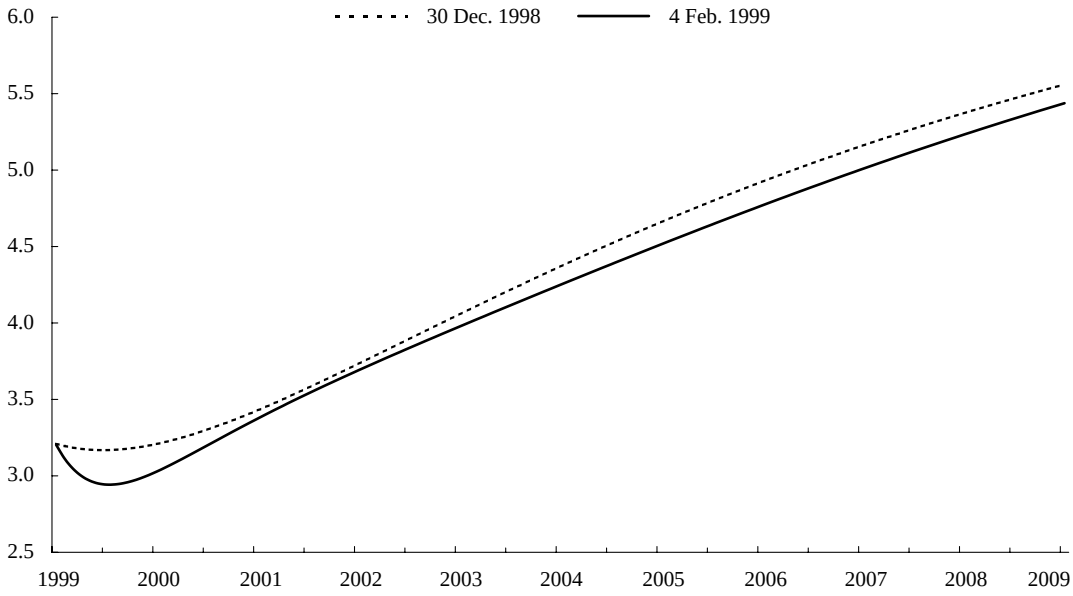
that the economic situation in Brazil may influence the outlook for global economic activity, as well as continued evidence that price stability in the euro area will be maintained, appear to have led to a further decline in bond market expectations concerning the average pace of price change in the longer term. This view of a downward revision of financial market expectations for long-term inflation was supported by the narrowing of the differential between yields available from fixed nominal income bonds and those available from inflation index-linked bonds with a comparable maturity in France (see Box 2).

Consistent with the view that there has been a decline in long-term expectations for inflation, the euro area yield curve shifted downwards across all maturities in the course of January 1999 (see Chart 6). This change in expectations was particularly evident in the decline in expected forward overnight interest rates on longer maturities. At the same time, in line with the observations outlined above with regard to futures markets, there was a configuration of implied forward overnight

Chart 6

Implied forward euro area overnight interest rates

(in percentages, daily data, end-period)



Source: ECB estimation using the method outlined in the article entitled "Estimating and interpreting forward interest rates: Sweden 1992-94" by L. E. O. Svensson (1994), IMF WP/94/114, Washington, DC. The data used in the estimation are derived from swap contracts.

interest rates at the short end of the yield curve which reflected market expectations of a decline in these rates in the months to come. According to this indicator, financial markets expect overnight interest rates to increase again after the first half of 1999.

In early February, against a background of a global upturn in long-term bond yields, 10-year bond yields in the euro area reversed some of the declines seen in January, although the increase in the euro area was less pronounced than in the United States.

Stock markets remain volatile

In an environment of renewed volatility which characterised the stock markets of industrialised countries, stock prices in the euro area, as measured by the broad Dow Jones EURO STOXX index, increased by more than 8% in the first three trading days of 1999, before suffering a setback which left them 3.5% above their end-1998 levels at the end of January 1999 (see Chart 7). Over the same period, in the United States, the Standard and Poor's 500 index rose by more than 4%, while in Japan the Nikkei 225 index increased by almost 5%.

The initial strength of stock prices in the euro area relative to overseas markets might have been a reflection of the aforementioned international reallocation in favour of securities denominated in euro once the changeover was seen to have been completed smoothly. In addition, the successful launch of the euro appeared to lead to heightened expectations of merger activity in the euro area corporate sector.

The subsequent setback in the euro area stock market, which was common to stock markets in most industrialised countries, reflected heightened uncertainty about the implications of the economic situation in Brazil for global growth following the

Box 2

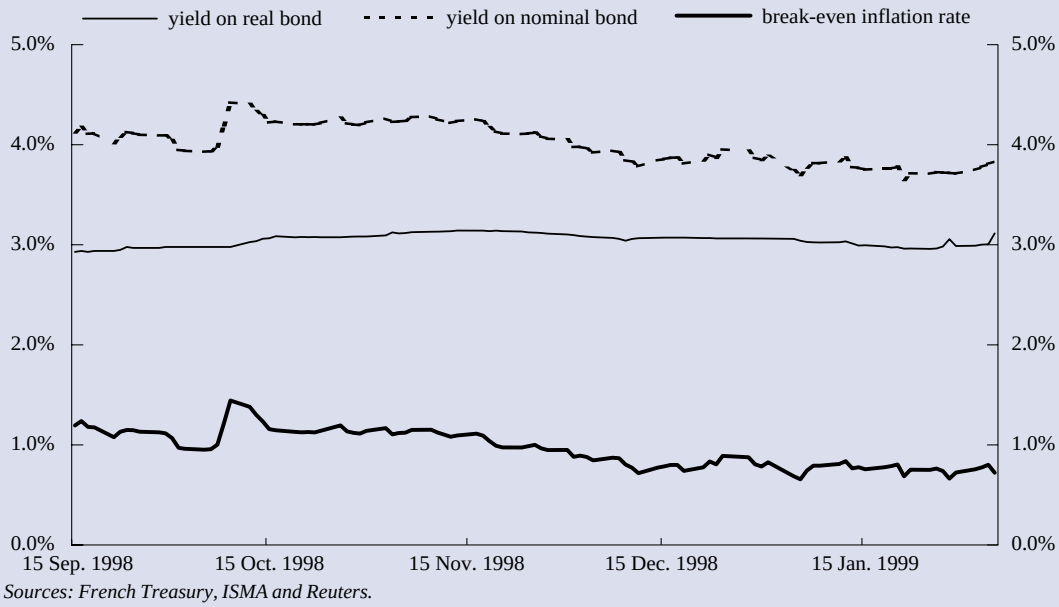
Deriving inflation expectations from inflation index-linked bonds

In general, a comparison of the yields on inflation index-linked bonds and those from nominal fixed income securities with similar maturities can provide some insight into inflation expectations in the economy. Until recently inflation index-linked bonds had not been issued in the euro area. Indeed, the French Treasury issued the first such inflation-indexed bond ("OATi" or Obligation Assimilable du Trésor Indexée) in September 1998. This bond will mature in 2009 and it carries a 3% real coupon that is paid annually. The nominal coupons on this bond are calculated ex post and the indexing lag is at most three months. The coupon and principal payments of the OATi are linked to the French consumer price index (CPI) excluding tobacco prices.

The differential between a long-term nominal bond yield and the real yield available on an index-linked bond of the same maturity is generally known as the "break-even inflation rate". This is because, under this rate of inflation, the expected nominal return to an investor will be the same regardless of whether the investment is made in a fixed nominal income or an index-linked bond. However, the break-even inflation rate is not a direct measure of inflation expectations. First of all, it also contains an inflation risk premium to allow for the additional uncertainty faced by an investor in a fixed income bond due, in particular, to the volatility of inflation. Furthermore, it reflects a premium related to the relatively lower level of liquidity that usually characterises index-linked bond markets. While the existence of an inflation risk premium implies that the break-even inflation rate overestimates true market expectations of inflation, the liquidity premium works in the opposite direction. However, the narrowness of the spread currently observed between quoted bid and ask prices for the OATi tends to suggest that the liquidity premium may be of a limited magnitude only.

The chart below shows recent break-even inflation rates which are derived from a comparison of the rate on the OATi that will mature in 2009 and the rate on a comparable fixed nominal income OAT (which carries a fixed 4% nominal coupon and matures in 2009). It shows that the break-even inflation rate has declined more or less continuously since the OATi was issued and reached a level of around 0.8% in early February 1999. To the extent that the aforementioned risk premia are assumed to have been relatively stable over time, it may be inferred that market expectations concerning long-term inflation in France have fallen as well. It is important to reiterate that the measure of inflation used in the OATi is a variant of the French CPI. Hence the OATi can only provide information on inflation expectations in France and not on those for the euro area as a whole. Nonetheless, to the extent that French inflation expectations are indicators of inflation expectations in the euro area as a whole, break-even inflation rates in France may provide useful indicative information regarding financial market expectations in the euro area more generally.

Break-even inflation rate calculated for the French CPI (excluding tobacco prices)
(in percentages)

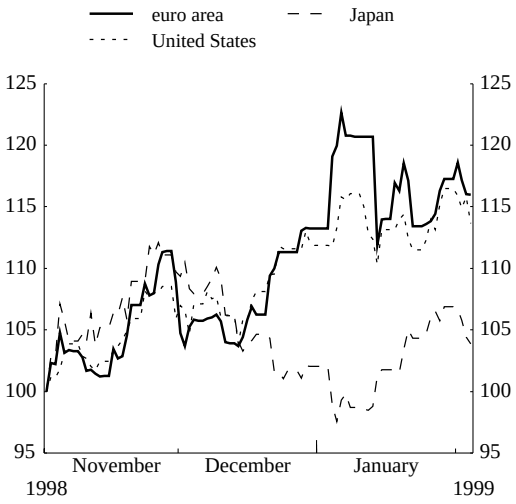


Sources: French Treasury, ISMA and Reuters.

Chart 7

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

(1 November 1998=100; daily data)



Sources: Reuters for the euro area; BIS for the United States and Japan.
Note: Dow Jones EURO STOXX broad (stock price) index for the euro area, Standard and Poor's 500 for the United States and Nikkei 225 for Japan.

devaluation of the Brazilian real. These developments appeared to lead to a downward revision of corporate earnings expectations. A further factor may have been a rise in the risk premium associated with equity investment. Such a development, which is typical during episodes of turbulence in international financial markets, highlights the key role which common external factors often play in driving movements in international equity markets.

In the first few days of February stock prices in the euro area reversed some of the gains made in January. This development mainly reflected similar setbacks in the United States and Japan.

All in all, by 4 February 1999 these developments left euro area stock prices at around 9% below the peak levels observed in mid-July 1998, although this was still almost 33% above the levels recorded at end-1997.

2 Price developments

Consumer price increases continued to edge downwards

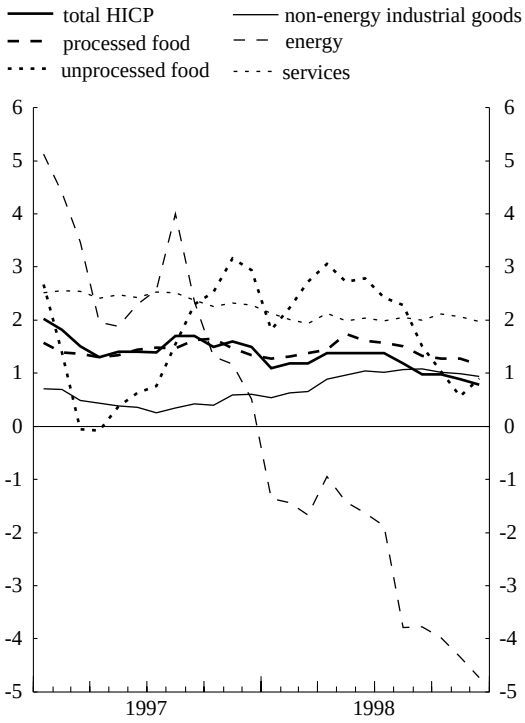
At the end of last year the annual increase in consumer prices in the euro area edged downwards further. As measured by the Harmonised Index of Consumer Prices (HICP), the increase was 0.8% in December 1998, i.e. 0.1 percentage point lower than in the previous month. For 1998 as a whole the annual percentage change in harmonised consumer prices was 1.1%, down from 1.6% in 1997.

The further reduction in the annual rate of increase in December 1998 was mainly due to the continued decline in energy prices; these account for almost one-tenth of total HICP and were down -4.7% compared with a year earlier (see Chart 8). Underlying this decline was the protracted fall in oil prices, which, in ECU terms, in December 1998 stood 45% below the level recorded a year earlier. In January 1999, however, oil prices increased slightly. Prices of processed food and non-energy industrial goods showed a slightly lower rate of increase in December after having remained largely unchanged in the previous months. In contrast to developments in recent months, increases in unprocessed food prices did not slow down further, but rather picked up to 0.9%. Overall, the rate of increase in goods prices continued to fall, reaching 0.2% in December 1998, compared with 0.3% in November 1998 and 1.1% in December 1997. At the same time, the rate of increase in services prices, which account for one-third of total HICP, remained stable at around 2%, i.e. at the level recorded during the whole of 1998.

Chart 8

Breakdown of HICP inflation in the euro area by components

(annual percentage changes; monthly data)



Source: Eurostat.
Note: For further information on the data used, see the respective tables and charts in the "Euro area statistics" section of this Bulletin.

Other cost and price indicators continued to support the general picture of price stability in the euro area (see Table 2). In particular, the annual percentage change in unit labour costs was negative in the first three quarters of 1998. In the third quarter unit labour costs fell by 0.7% compared with a year earlier owing to moderate wage increases and productivity growth at around the average level for the 1990s. Commodity prices continued to fall in December 1998 and remained considerably below the levels recorded in the previous year. The subdued growth in labour costs, combined with the decline in oil and non-energy commodity prices, was also reflected in lower industrial producer prices. Producer price increases have slowed down gradually since the end of 1997. The slowdown was mainly concentrated in prices of intermediate goods. In May 1998 producer prices started to decrease in absolute terms and in November 1998 were 2.3% lower compared with a year earlier.

Table 2

Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1996	1997	1998	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1998 Aug.	1998 Sep.	1998 Oct.	1998 Nov.	1998 Dec.	1999 Jan.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	2.2	1.6	1.1	1.2	1.4	1.2	0.9	1.2	1.0	1.0	0.9	0.8	.
of which:													
Goods	1.8	1.1	0.7	0.7	1.1	0.7	0.3	0.7	0.5	0.4	0.3	0.2	.
Food	2.0	1.5	1.6	1.7	2.1	1.7	1.1	1.8	1.4	1.2	1.0	1.1	.
Processed food	2.0	1.5	1.4	1.3	1.6	1.5	1.2	1.5	1.3	1.3	1.3	1.2	.
Unprocessed food	1.9	1.5	2.0	2.3	2.9	2.1	0.8	2.3	1.5	1.0	0.6	0.9	.
Industrial goods prices	1.7	0.9	0.2	0.2	0.5	0.2	-0.1	0.0	0.1	0.0	-0.1	-0.2	.
Non-energy industrial goods	1.5	0.5	0.9	0.6	1.0	1.1	1.0	1.1	1.1	1.0	1.0	0.9	.
Energy	2.4	2.6	-2.6	-1.5	-1.3	-3.2	-4.3	-3.8	-3.8	-4.0	-4.3	-4.7	.
Services	3.1	2.4	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	.
Other price and cost indicators													
Industrial producer prices [1]	0.6	1.0	.	0.4	-0.2	-1.3	.	-1.4	-1.6	-2.0	-2.3	.	.
Unit labour costs [2]	1.8	0.6	.	-2.3	-0.7	-0.7	.	-	-	-	-	-	-
Compensation per employee [2]	3.4	2.6	.	1.0	1.1	1.1	.	-	-	-	-	-	-
Labour productivity [2]	1.6	2.1	.	3.3	1.7	1.8	.	-	-	-	-	-	-
Oil prices (EUR per barrel) [3]	15.9	17.1	12.0	13.6	12.8	11.7	10.0	11.2	11.9	11.2	10.2	8.8	9.5
Commodity prices (EUR) [4]	-6.9	13.0	-12.5	-0.1	-10.7	-18.1	-20.5	-19.0	-20.9	-23.6	-18.4	-19.5	-17.2

Sources: Eurostat, national data, HWWA-Institut für Wirtschaftsforschung, Hamburg, and ECB calculations.
Note: For further information on the data used, see the respective tables and charts in the "Euro area statistics" section of this Bulletin.
1) Excluding construction.
2) Whole economy.
3) Brent Blend (for one-month forward delivery). ECU up to December 1998.
4) Excluding energy. ECU up to December 1998.

3 Output, demand and labour market developments

Revised data on real GDP growth

Compared with the previous release (in December 1998), the latest Eurostat estimates of euro area quarterly real GDP growth imply a downward revision for the first quarter and an upward revision for the second and third quarters of 1998. On the basis of these revised data, real GDP growth in the third quarter was 2.7% compared with the same period a year earlier, which is around 0.5 percentage point lower than average growth in the first half of 1998 (see Table 3). In terms of quarter-on-quarter changes, euro area real GDP increased by 0.7% in the third quarter of 1998, which was the average pace of growth during the first half of the year.

In general, the revised data also suggest a somewhat smoother pattern of output growth over the first three quarters of the year than was apparent from the previous data, owing to the fact that they are now based on data for German GDP which have been adjusted for variations in the number of working days. However, uncertainties about the precise quarterly development of real GDP growth remain, given that this kind of adjustment is not currently available for the majority of the remaining Member States. In addition, the quarterly pattern in the first half of 1998 remains subject to certain other distortions in connection with, inter alia, a VAT increase in Germany that had a favourable impact on output growth in the first quarter, at the expense of growth in the second. However, these factors do not change the overall

impression that the pace of economic expansion may be seen as having been broadly undiminished up to the third quarter.

By contrast with the broadly favourable pattern of real GDP growth up to the third quarter of 1998, some recent monthly indicators continue to point to the possibility that overall output growth may have slowed down towards the end of the year. Measured on the basis of moving averages, industrial production in the three-month period up to November 1998 increased by 3.1% compared with the same period a year earlier, which was down from 3.6% and 4.0% respectively in the preceding two reference periods. When measured in terms of changes from the previous period, industrial production in the most recent three-month period was 0.1% higher than the level in the period from June to August, while in the two preceding three-month periods the growth rate had been 0.4% and 0.9% respectively.

Notwithstanding the slowdown in overall industrial production growth, the data available up to November 1998 suggest a mixed picture across the main categories of output. On a year-on-year basis there was a continued decline in the rate of growth in production of intermediate goods industries (i.e. those which manufacture inputs such as chemicals and steel and which account for more than two-fifths of

Table 3

Output, demand and labour market developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1996	1997	1998	1998 Q1	1998 Q2	1998 Q3	1998 Q4	1998 July	1998 Aug.	1998 Sep.	1998 Oct.	1998 Nov.	1998 Dec.
								3-month centred moving averages					
Real gross domestic product	1.6	2.5	.	3.7	2.9	2.7	.	-	-	-	-	-	-
- Change from previous period [1]	-	-	-	0.9	0.5	0.7	.	-	-	-	-	-	-
Industrial production excl. construction	0.0	4.1	.	6.3	4.4	4.0	.	4.0	4.0	3.6	3.1	.	.
- Change from previous period [2]	-	-	-	1.1	0.8	0.9	.	0.7	0.9	0.4	0.1	.	.
of which:													
Manufacturing	-0.2	4.7	.	7.3	5.0	4.4	.	4.4	4.4	4.0	3.2	.	.
by main industrial groupings:													
Intermediate goods	-0.7	5.4	.	7.3	4.2	3.3	.	3.5	3.3	2.7	2.3	.	.
Capital goods	1.7	4.2	.	9.2	6.6	7.1	.	6.7	7.1	7.1	6.2	.	.
Consumer goods	-0.6	1.8	.	3.6	4.0	3.7	.	3.6	3.7	3.5	3.1	.	.
Construction	-2.5	-1.2	.	2.9	0.4	-1.7	.	-0.4	-1.7	.	.	.	.
Capacity utilisation (%) [3]	80.3	81.6	83.1	83.1	83.6	83.3	82.4	-	-	-	-	-	-
Economic sentiment index	-2.5	2.7	3.1	3.9	4.5	2.8	1.2	3.6	2.8	1.8	1.5	1.2	1.4
Consumer confidence indicator [4]	-8	-3	7	4	7	7	10	7	7	8	9	10	11
Industrial confidence indicator [4]	-8	3	7	10	10	7	0	8	7	5	3	0	-1
Construction confidence indicator [4]	-13	-10	4	-2	1	10	8	7	10	9	9	8	11
Retail sales, constant prices	1.1	0.8	.	2.8	1.8	3.0	.	2.9	3.0	2.4	2.9	.	.
New passenger car registrations	6.6	3.9	7.7	12.6	3.3	7.5	7.7	6.6	7.5	5.1	7.8	7.7	.
Employment (whole economy)	0.2	0.3	.	1.0	1.1	1.3	.	-	-	-	-	-	-
Unemployment (annual change in 000s)	420	104	-757	-426	-709	-911	-982	-875	-911	-956	-995	-982	.
Unemployment (% of labour force)	11.6	11.7	11.1	11.3	11.1	11.0	10.8	11.0	11.0	10.9	10.8	10.8	.

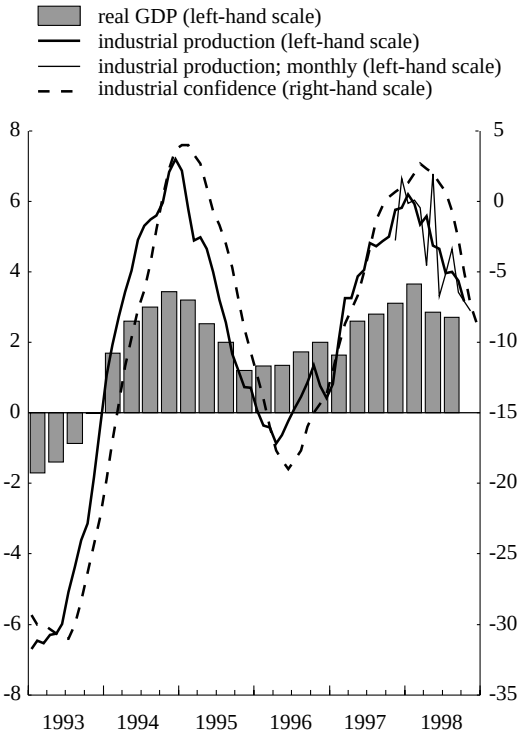
Sources: Eurostat, European Commission Business and Consumer Surveys, ACEA/A.A.A., national data and ECB calculations.
Note: For further information on the data used, see the respective tables and charts in the "Euro area statistics" section of this Bulletin. All data are seasonally adjusted, apart from industrial production (adjusted for variations in the number of working days), retail sales and new passenger car registrations.

1) *Seasonally adjusted data.*
2) *Seasonally adjusted data; monthly data are calculated as three-month centred moving averages against the corresponding average three months earlier.*
3) *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 quarterly averages. Latest observations: 83.7% (July 1998), 82.8% (Oct. 1998) and 81.9% (Jan. 1999).*
4) *Percentage balances; data shown are calculated as deviations from the average over the period since January 1985.*

Chart 9

Output and industrial confidence in the euro area

(annual percentage changes; percentage balances for industrial confidence)



Sources: Eurostat and European Commission Business and Consumer Surveys.
Note: For further information on the data used, see the respective tables and charts in the "Euro area statistics" section of this Bulletin. All data are seasonally adjusted; data for industrial production (total, excluding construction) and industrial confidence are three-month centred moving averages.

total industrial output), while growth was broadly sustained at around 6% and 8% in the capital goods and durable consumer goods industries respectively. Judging from the pattern emerging from month-on-month changes (which are not shown in the table), there is some evidence of a slight pick-up in production in the intermediate goods sector since the summer months, while the capital goods industry saw a decline in growth rates after having experienced sustained increases during the summer. With regard to output in the capital goods industry, it should be noted that production also includes cars for commercial and private use. Given that car production has remained strong, this could possibly indicate that the demand for machinery and equipment may have been weakening. As regards consumer goods, no clear trend is apparent from the most recent monthly figures.

According to the preliminary survey data from the European Commission published for January 1999, capacity utilisation in the manufacturing sector declined further. The average of the January 1999 and October 1998 survey figures suggests that capacity utilisation in the fourth quarter of 1998 was around 1 percentage point lower than in the third quarter, although it remained slightly above its long-term average up to the beginning of this year. However, the latest data are provisional and may be subject to subsequent revision.

Retail sales volumes, which are based on national data and – for some countries – include passenger car sales, increased by 2.9% compared with a year earlier in the three-month period up to November 1998. The most recent rate of expansion corresponds closely to the temporarily high average growth rate seen in the first quarter of the year. New passenger car registrations increased in the second half of 1998 at a steady rate of around 7.5% compared with a year earlier and showed no signs of slowing towards the end of the year. In the three-month period up to December they had grown by 3.0% on the preceding quarter. This points to an ongoing willingness on the part of consumers to make major purchases.

There was an unusually long phase of divergent developments in industrial and consumer confidence from the spring of 1998 up to December 1998, with assessments in the manufacturing sector worsening to below their long-term average and consumer confidence reaching its highest level since the series began in 1985. According to the preliminary results for January 1999 as released by the European Commission, consumer confidence continued to improve at a steady rate and industrial confidence saw no further decline compared with the previous month (see the Box below for further details of recent developments in confidence indicators in the euro area). In addition, the rise in confidence in the construction sector observed in the course of 1998 appears to have resumed.

Box 3

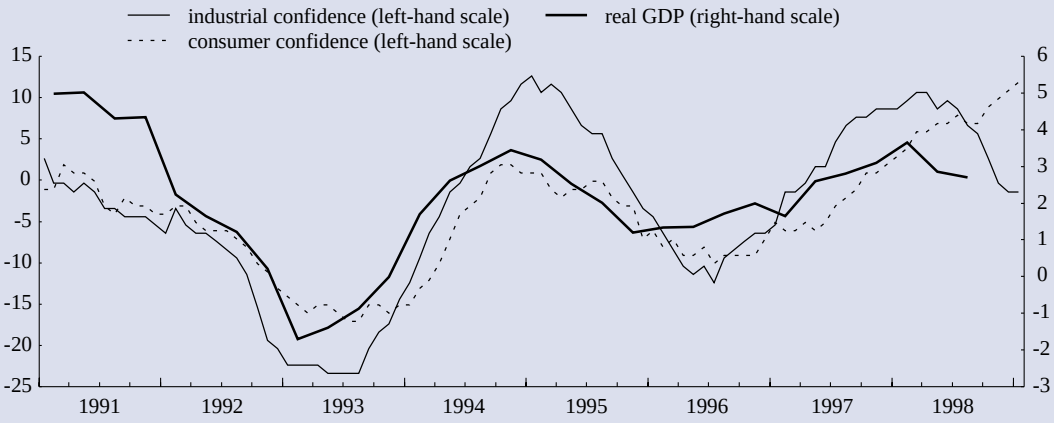
Recent developments in confidence indicators in the euro area

Developments in confidence indicators have attracted considerable attention in recent months. In view, in particular, of the limited availability of other reliable and timely statistics, analysis of these confidence variables may provide useful information on a number of key questions regarding the current conjunctural situation and the prospects for output growth in the euro area. At the area-wide level there has been a clear divergence in the paths of consumer and industrial confidence since the spring of 1998. Most notably, while consumer confidence has continued to improve, there has been a significant decline in industrial confidence. By the end of last year, consumer confidence had risen to the highest level attained by the indicator since 1985, whereas industrial confidence had fallen back from a peak in March 1998 to a level slightly below its long-term average. The extent and the duration of the recent divergence of consumer and industrial confidence indicators is highly unusual. The series have been highly correlated with one another in the past (with industrial confidence perhaps slightly leading the consumer confidence indicator, but only by one to two months).

Both consumer and industrial confidence indicators are produced by averaging the responses to a number of questions put to households and businesses respectively. Consumer confidence comprises the responses to a total of five questions: two questions on the financial situation over the past and the next 12 months, two further questions on the economic situation over the past and the next 12 months, and one question on attitudes concerning major purchases. The industrial confidence indicator averages the responses to questions on production expectations, order books and (with the sign reversed) stocks of finished products. An analysis of the responses to the individual questions that are used to compile the consumer and industrial confidence indicators does not suggest that there are any particular problems or peculiarities with either of the two overall series. In general, the trends towards improving or deteriorating confidence in each of the indicators are also broadly followed by the various underlying components. The national confidence indicators which are available also generally support, rather than conflict with, the European Commission survey data.

Movements in consumer and industrial confidence appear to follow developments in the real economy relatively closely (see the chart below). Industrial confidence is closely correlated with GDP (as well as industrial production; see Chart 9 in the main text), while consumer confidence is linked to GDP (and, although to a lesser extent, to private consumption). It is more difficult, however, to be precise about the extent

Confidence indicators and real GDP in the euro area
(percentage balances; annual percentage changes for GDP)

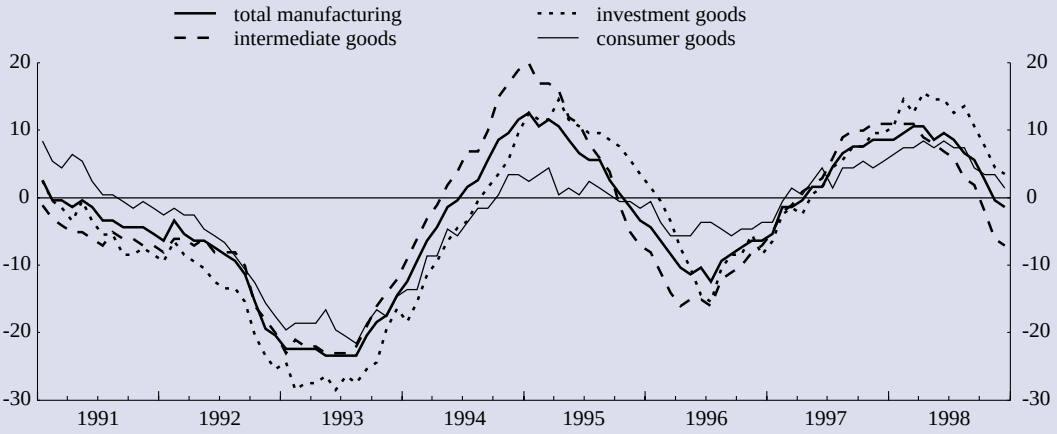


Sources: European Commission Business and Consumer Surveys and Eurostat.
Note: For further information on the data used, see the respective tables and charts in the "Euro area statistics" section of this Bulletin. All data are seasonally adjusted. Survey data shown are calculated as deviations from the average over the period since January 1985.

to which the series provide reliable leading information on developments in real economic activity; in general the various indicators would appear to have a rather short lead over activity or even to be coincident. As data on confidence are available prior to actual data on sectoral activity or GDP, however, the survey evidence may be considered quite valuable, even if the series are to be seen primarily as coincident indicators. Moreover, an analysis of turning-points in output suggests that the timing of any relationship with activity is variable (although the identification of turning-points is itself open to some debate). Overall, this suggests that a mechanistic interpretation of these indicators should be avoided.

In addition to the aggregate industrial confidence figures, the European Commission also publishes a detailed breakdown of the results of the industrial survey by sector. The chart below shows the developments in total manufacturing and three broad categories – intermediate goods, investment goods and consumer goods. Considering the period from March 1998 onwards, it would appear that by far the sharpest decline in confidence has occurred in the intermediate goods sector. Although a decline is evident in all sectors, the fall in confidence in the intermediate goods sector has been much larger than that in the investment goods sector, while the decline in confidence in the consumer goods sector, which appears to be less volatile, has clearly been smaller. This corresponds in part to actual industrial production data, as data for the intermediate goods sector show that production in this sector weakened the most over the past year and that the level of production has remained broadly unchanged since the spring.

Industrial confidence by sector for the euro area
(percentage balances; seasonally adjusted)



Sources: European Commission Business and Consumer Surveys and ECB calculations.
Note: Data shown are calculated as deviations from the average over the period since January 1985.

Furthermore, the development of the consumer and industrial confidence indicators appears to be broadly consistent with actual economic developments to date. Private consumption has been fairly robust over the past year, but industrial production has slowed in line with the deterioration in the external environment and increased uncertainty about the global situation. It is quite reasonable to assume that the current path of divergence between the consumer and industrial confidence indicators cannot continue. However, there are two possible ways in which the divergence could be reduced. One possibility is that low industrial confidence, especially in the intermediate goods sector, will spread to other industrial sectors, adversely affecting investment and employment, and thus also leading to a retrenchment in consumption. At present, however, there is little evidence that this has occurred. The other possibility is that continued robust consumption growth and consumer confidence, underpinned by further growth of employment – in the absence of a further deterioration in the external situation – may lead to a gradual recovery in industrial confidence and production. Such an outcome would be consistent with a more modest slowdown in output growth concentrated around the turn of the year.

Unemployment rate unchanged

In December 1998 the standardised unemployment rate in the euro area, at 10.8%, was unchanged from the preceding two months (see Table 3). When considering these latest data releases in the context of the developments over the year as a whole, the most recent results appear to confirm that only very slow progress is being made in reducing euro area unemployment. In fact, over the past 12 months the rate has come down by less than 0.1 percentage point per month on average and, moreover, the decline seems to have virtually stalled altogether in the last quarter of the year. This is also suggested by the absolute levels of unemployment. Although the number of unemployed declined by over 900,000 in the course of 1998, there was almost no reduction in seasonally adjusted unemployment in December 1998. Unemployment of those under 25 years of age appears to be decreasing further, possibly also as a result of recent government initiatives which, in a number of countries, have targeted this group. By contrast, no progress can be seen in the large fraction of those over 25 years of age; this may indicate that, given the current structures and institutional arrangements in the labour markets, even steady output growth rates of the magnitude seen over the past few quarters may not be sufficient to bring about a decisive reduction in unemployment. In addition, the limited information available from national statistics on vacancies also suggests a slowing-down in the demand for labour from the third quarter of 1998 onwards.

With regard to employment developments, there now also appear to be signs that job creation is slowing down in those sectors which are primarily exposed to global developments. In particular, quarter-on-quarter growth in manufacturing employment decelerated markedly in the third quarter of 1998 to 0.3% (revised from 0.4%), compared with 1.2% and 0.8% respectively in the first and second quarters. By contrast, up to the third quarter, strong net job creation seems to have continued in the more domestically oriented sectors of the economy, probably driven by sustained consumption against the background of high consumer confidence. Overall, growth in total employment, albeit revised slightly downwards from a year-on-year rate of 1.4% to 1.3%, appears to have remained steady in the third quarter of 1998, at the same quarter-on-quarter pace as seen in the first two quarters. Thus, employment is expected to have increased by more than 1% in 1998. However, given the latest indicators of the state of the economy, it should be remembered that employment usually reacts with time lags with regard to actual and expected economic developments. Therefore, any change in the actual or prospective pace of economic expansion would only have an impact on employment developments after a certain delay.

4 Exchange rate and balance of payments developments

Moderate weakening of the euro

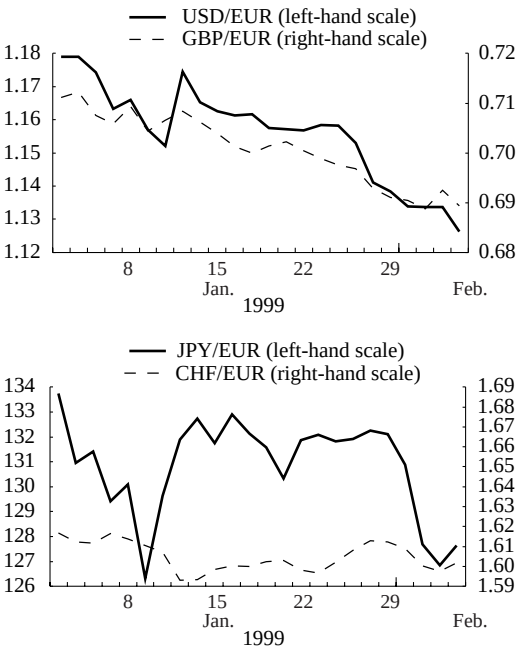
Since the euro started trading on 4 January 1999 foreign exchange markets have been characterised primarily by the gradual strengthening of the US dollar and the pound sterling vis-à-vis the euro, and by the significant volatility of the Japanese yen vis-à-vis other major currencies. Specific developments, such as the decision of the Brazilian Government in mid-January to float the real – which had depreciated by around 40% against the US dollar by the end of the month – had only limited spillover effects on foreign exchange markets with regard to the currencies of both industrial and emerging economies.

Against the US dollar, the euro weakened by around 3½% during January 1999, being quoted at USD 1.14 at the end of the month, compared with USD 1.18 on 4 January. This development may be seen as a reflection of the general strengthening of the US dollar amid evidence of an unexpectedly strong growth performance of the US economy and a continuation of subdued inflationary pressures. Boosted by strong consumption and export performance, real GDP grew at an annualised rate of 5.6% in the fourth quarter of 1998 and by 3.9% in 1998 as a whole, as the US economy displayed considerable resilience in the face of the unfavourable international environment. In addition – and notwithstanding the possible negative impact on the economy of the unfolding crisis in Brazil – a number of indicators of domestic demand, mostly referring to private consumption, appear to suggest a continuation of these trends in the early part of 1999. Furthermore, there are no signs of imminent inflationary pressures despite a historically low unemployment rate of 4.3% in December 1998. Against this background, the strength of the US dollar observed in early 1999 continued into the first few days of February. On 4 February 1999, i.e. the cut-off date for the data contained in this issue, the euro was being quoted at USD 1.13.

Chart 10

Patterns in exchange rates

(daily data)



Source: ECB.

After showing significant volatility during January, the exchange rate of the euro against the Japanese yen ended the month at JPY 132, i.e. close to its starting level. This volatility – implying fluctuations of between JPY 126 and JPY 134 – was mainly related to concerns about the financial impact of the growing fiscal deficit in Japan and reflected the fact that the fundamental outlook for the Japanese economy remained mixed. In particular, although the April 1998 stimulus package appears to be taking effect, private demand – both for investment and consumption – continues to be weak. On 4 February 1999 the euro stood at JPY 128.

Against the pound sterling, the euro weakened from GBP 0.71 on 4 January 1999 to GBP 0.69 on 28 January, with the pound sterling moving closely in line with the US dollar. Vis-à-vis the Swiss franc, the euro ended the month close to its starting level of

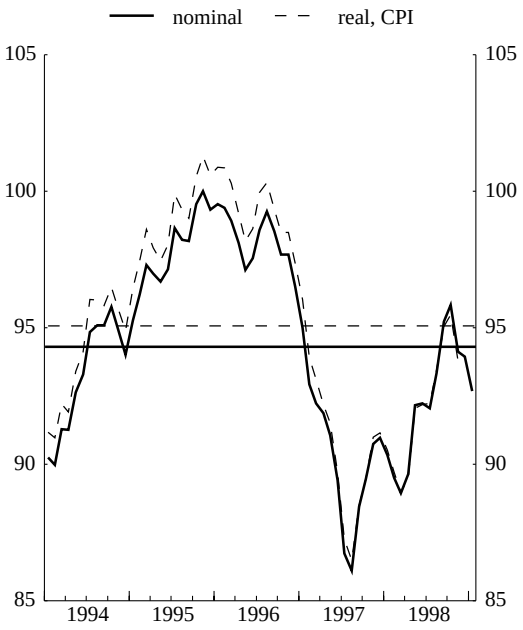
CHF 1.62. At the end of the reporting period the euro was being quoted at GBP 0.69 and CHF 1.60 respectively.

In nominal effective terms, i.e. on the basis of the trade-weighted average index provided by the Bank for International Settlements (BIS), the euro weakened by 3.7% between 4 January and 4 February 1999, mainly reflecting developments vis-à-vis the US dollar and the pound sterling. Compared with the average level for the first week of trading in the euro, which may be a better reference point than the quotation on its first trading day, by early February 1999 the euro had declined by 2.9% in effective terms. Taking a medium-term perspective, the most recent developments imply that both the nominal and the real effective exchange rate (deflated by the respective CPIs) are estimated to be somewhat below their respective longer-term averages.

Chart 11

Effective exchange rates of the euro area [1)]

(monthly averages; index 1990 = 100)



Source: BIS.

1) Data are BIS calculations; for information on the methodology used, see Table 10 in the "Euro area statistics" section of this Bulletin. An upward movement of the index represents a currency appreciation for the euro area. Horizontal lines are averages over the period shown.

Cumulative trade balance surplus declines slightly

As noted in the January 1999 issue of the Monthly Bulletin, few reliable statistics are as yet available on overall balance of payments developments for the euro area. Therefore, until later in 1999, reference will be made only to external trade data produced by Eurostat. These data are based on gross figures for exports and imports between the euro area and the rest of the world, excluding intra-euro area transactions.

The trade balance surplus for the euro area in October 1998 (the latest month for which data are available) was ECU 7.5 billion, i.e. ECU 2.2 billion lower than in the corresponding month in 1997. The decline in

Table 4

Trade in goods of the euro area

	1996	1997	1997 Q1	1997 Q2	1997 Q3	1997 Q4	1998 Q1	1998 Q2	1998 Q3	1998 Sep.	1998 Oct.
Exports											
ECU billions	667.8	761.9	170.2	191.6	193.5	206.5	193.8	203.7	194.1	65.6	68.7
Annual percentage changes	7.3	14.1	7.8	15.7	19.1	13.6	13.9	6.3	0.3	-4.1	-6.2
Imports											
ECU billions	594.4	672.5	158.1	167.6	166.6	180.2	180.4	178.6	168.8	60.3	61.2
Annual percentage changes	5.6	13.1	6.7	13.7	17.9	14.4	14.1	6.6	1.3	-1.0	-3.7
Trade balance											
ECU billions	73.5	89.4	12.2	24.0	26.9	26.3	13.5	25.1	25.3	5.2	7.5
ECU billions, cumulative [1)]	73.5	89.4	12.2	36.2	63.1	89.4	13.5	38.5	63.8	63.8	71.4

Source: Eurostat.

1) For the year to date.

the surplus in merchandise trade was mainly due to the continuing weakness of exports, which have been increasingly affected by the worsening of the global environment. On an annual basis, export values fell by 6.2% in October – the second consecutive month in which a negative rate of growth was recorded in 1998. The value of imports, which had declined already in September, decreased more strongly in October (-3.7% compared with the same month in 1997), reflecting the weakness of oil and commodity prices. Over the first 10 months of 1998, the cumulative surplus in the trade balance reached ECU 71.4 billion, which was ECU 1.5 billion lower than the value recorded for the corresponding period in 1997.

The primary objective of the Eurosystem, consisting of the European Central Bank (ECB) and the national central banks (NCBs) of the 11 Member States which have adopted the euro, is to maintain price stability. As there is wide agreement that the development of the price level in the medium to long term is a monetary phenomenon, developments in the amount of money held by the public may reveal useful information about future price movements and thereby offer an important compass for the conduct of monetary policy. In addition, analysis of monetary aggregates can contribute to the general assessment of developments in the financial system and the broader economy.

A monetary aggregate can be defined as the sum of currency in circulation plus the outstanding amounts of certain liabilities of financial institutions which have a high degree of "moneyness" or liquidity in a broad sense. The Eurosystem has defined a narrow (M1), an "intermediate" (M2) and a broad aggregate (M3). These aggregates differ with respect to the degree of moneyness of the assets included. According to the analysis conducted at the ECB and by its predecessor, the European Monetary Institute, broad euro area monetary aggregates might be less controllable in the short term but have more favourable properties than narrow ones in terms of their stability and their information content regarding price developments in the medium term. The monetary policy strategy of the Eurosystem requires identification of a monetary aggregate which is a stable and reliable indicator of inflation over the medium term. Therefore, the Governing Council of the ECB has decided to give the broad monetary aggregate M3 a prominent role in the monetary policy strategy by announcing a reference value for its annual growth rate.

1 The importance of monetary aggregates

The information content of monetary aggregates

The primary objective of the Eurosystem is to maintain price stability. Monetary policy, however, cannot directly control euro area price developments, but has to operate through a complex transmission process. This process normally involves the financial system, financial markets and the real economy. It is characterised by several channels of monetary transmission, each having long, variable, and not fully predictable time lags between monetary instruments and prices. In consequence, monetary policy has to analyse the outlook for future price developments and to assess carefully the timing and magnitude of the effects which monetary policy actions have on future prices. To this end, central banks analyse and monitor a number of monetary, financial and other economic indicators that help to provide a more accurate assessment of the economic environment, the outlook for future price developments and the transmission of monetary policy measures.

Among the variables that are useful in this respect, money plays a key role. Consequently, the Governing Council of the ECB has decided that money will be accorded a prominent role in the monetary policy strategy of the Eurosystem. This role was signalled by the announcement of a reference value for the growth of a broad monetary aggregate by the Governing Council in December 1998 (see the article "The stability-oriented monetary policy strategy of the Eurosystem" in the January 1999 edition of the Monthly Bulletin of the ECB).

Monetary developments can reveal useful information about future price developments and thereby offer an important compass for the conduct of monetary policy. There is broad consensus, based on substantial empirical evidence, that the development of the price level is a monetary phenomenon in the medium to long term. In particular, increases in prices are normally closely linked to rates of monetary growth in excess of the real growth capacity of the economy over the medium term. Moreover, the historical experience of central banks in Europe and beyond demonstrates that it is important for the success of monetary policy to carry out a thorough analysis of monetary aggregates and the information they contain.

Apart from revealing information about future price developments, such investigations play an important role in the general assessment of the economy. Monetary aggregates – and their counterparts – are normally determined by variables measuring economic activity and wealth, and by interest rates or their spreads. Given that the reaction of monetary aggregates to specific shocks may depend on their asset composition, an analysis of different monetary aggregates can contribute to a better understanding of developments in the banking sector, financial markets and the broader economy. Monitoring monetary developments helps to identify the nature of shocks hitting the economy and, thus, contributes to the assessment of overall economic developments.

While broad monetary aggregates normally contain information for price developments in the medium to long term, this link may be distorted by a variety of special factors in the short term. Month-to-month growth rates of monetary aggregates do not give an unambiguous and clear signal regarding future price developments. Such distortions may result from shocks that affect the demand for money, e.g. institutional changes in the banking system, financial innovation, changes in taxes and reserve requirements or the use of the currency in other countries. It is therefore important to distinguish, as far as this is possible, between changes in monetary aggregates which are caused by special factors, and those changes which signal risks to price stability. The leading indicator properties of money with regard to prices may also be undermined in the short term by shocks directly affecting the price level, which stem, for example, from changes in indirect taxes or regulated prices or from commodity price shocks.

Against this background it is essential to base the analysis of monetary aggregates on advanced analytical methods and a good understanding of those economic and institutional factors which may have an impact on the relationship between money, real activity, interest rates and prices in the short term. This enables central banks to assess and estimate distortions and to use the information content of monetary aggregates in the most effective way.

The role of central banks

In addition to the empirical observation that money is closely linked to price movements over the medium term, there are conceptual and institutional reasons pointing to the importance for the Eurosystem of monitoring monetary developments. Central banks are institutions that create money in the most liquid form, i.e. currency and central bank deposits held by credit institutions. In this respect, central banks have a monopoly. This central bank money, the so-called "base money", is the only asset that simultaneously performs both a payment and a settlement function. The Eurosystem not only has a monopoly on issuing banknotes with legal tender status in the euro area, it also requires credit institutions to hold minimum reserves, which, in turn, creates an additional demand for central bank money from the financial sector.

Central banks, owing to their monopolistic supply position, can directly influence the price (or opportunity cost) of holding base money, namely the short-term market interest rate. They do so by providing liquidity in the form of base money to credit institutions at policy-determined interest rates. The creation of bank deposits and other monetary instruments is in turn related to the availability of central bank money and the level of official central bank interest rates. Through these channels, the need for central bank money provides the Eurosystem with leverage for influencing the expansion of the money stock as a whole.

Base money is, however, very volatile in the short term and not a reliable indicator of future inflation. The focus of monetary policy is therefore typically on broader aggregates. In the case of the euro area these consist of currency in circulation and certain liabilities of Monetary Financial Institutions (MFIs; see Box 1).

Box 1

Monetary Financial Institutions (MFIs)

The concept of Monetary Financial Institutions (MFIs) was developed by the European Monetary Institute (EMI) in co-operation with the national central banks (NCBs) in the context of the preparation for the single monetary policy. MFIs comprise three main groups of institutions. The first are central banks. The second are resident credit institutions as defined in Community law. These are defined as "an undertaking whose business is to receive deposits or other repayable funds from the public (including the proceeds arising from the sales of bank bonds to the public) and to grant credit for its own account". The third group consists of all other resident financial institutions whose business is to receive deposits and/or close substitutes for deposits from entities other than MFIs and, for their own account (at least in economic terms), to grant credits and/or to make investments in securities. This group comprises mostly money market funds (MMFs).

In order to identify the third group of MFIs, the ESCB has defined the term "close substitutes for deposits" with regard to liquidity characteristics. This definition combines the characteristics of transferability, convertibility, certainty and marketability, and has regard, where appropriate, to the term of issue. Specifically, "close substitutability for deposits" is assessed on the basis of the following criteria:

- "transferability" refers to the possibility of mobilising funds placed in a financial instrument by using payment facilities such as cheques, transfer orders, direct debits or similar means;
- "convertibility" refers to the possibility and the cost of converting financial instruments into currency or transferable deposits;
- "certainty" means knowing the liquidation value of a financial instrument in terms of the currency precisely in advance; and
- "marketability" refers to securities quoted and traded regularly on an organised market.

The Eurosystem establishes and maintains a list of MFIs for statistical purposes. The population of MFIs constitutes the actual reporting population for compiling the consolidated balance sheet of the MFI sector of the euro area. However, NCBs may grant derogations to small MFIs, provided that the MFIs which contribute to the monthly consolidated balance sheet account for at least 95% of the total MFI balance sheet in the respective participating Member State.

2 Definition of euro area monetary aggregates

The starting-point for the definition of euro area monetary aggregates is the consolidated balance sheet of the MFI sector (see Table 1). In general, the appropriate definition of a monetary aggregate largely depends on the purpose for which the selected aggregate is intended. Given that many different financial assets are substitutable, and that the nature and features of financial assets, transactions and means of payment are changing over time, it is not always clear how money should be defined and which financial assets belong to a certain definition of money. For these reasons, central banks usually define and monitor several monetary aggregates. These range from very narrow aggregates such as central bank money or base money, consisting of currency (i.e. banknotes and coins) and central bank deposits, to broader aggregates, which include currency, bank deposits and certain types of securities.

In defining money, both the microeconomic perspective of the individual holder of money and the empirical properties of monetary aggregates resulting from the joint behaviour of holders of money are relevant.

Table 1

Schematic consolidated balance sheet of the MFI sector for the euro area [1)]

Assets	Liabilities
1. Loans	1. Currency in circulation
2. Securities other than shares	2. Deposits of central government
3. Shares and other equities	3. Deposits of other general governments/other euro area residents
4. External assets	4. Money market fund shares/units and money market paper
5. Fixed assets	5. Debt securities issued
6. Remaining assets	6. Capital and reserves
	7. External liabilities
	8. Remaining liabilities

1) A detailed description of the instrument categories is provided in Annex 4 of the ECB publication: "The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures", September 1998.

Microeconomic criteria

Money fulfils three functions in the economy. It serves as a medium of exchange, as the unit of account and as a store of value. As a medium of exchange, money facilitates the exchange of goods and services by lowering information and transaction costs. As a unit of account for economic transactions, money facilitates the access of economic agents to information on relative prices of various goods in a convenient manner. As a store of value, money is also held for saving purposes (although the bulk of savings are held in the form of other, i.e. non-monetary assets). Money can fulfil these functions in an optimal way only if prices are stable. Thus, the share of wealth which is held by economic agents in the form of monetary assets – and hence the demand for money – is generally enhanced by price stability.

The better a certain asset fulfils the functions typically performed by cash, the higher its "degree of moneyness". This is generally measured by the degree of liquidity (defined in a broad sense) of the asset. The lower the transaction costs (e.g. fees, taxes and, under specific circumstances, penalties) incurred when making a payment using the purchasing power embedded in the asset, and the less volatile the nominal value of the asset over time, the higher its liquidity will normally be. For example, overnight deposits have a very high degree of moneyness. By contrast, equity shares and real estate properties are far removed from money.

However, if only a narrow monetary aggregate were monitored, central banks would run the risk that close substitutes for money, e.g. short-term savings deposits, would be overlooked in their analysis of monetary developments. On the other hand, a broader definition of money might not reflect the function of money as a medium of exchange to the same extent.

Macroeconomic criteria

It is an empirical matter to identify which monetary aggregates show a close relation to important macroeconomic variables, in particular to the price level and to those interest rates that are closely influenced by monetary policy. Three main criteria can be distinguished.

- *Stability* of money demand is given if the level of the money stock has a stable relationship with the price level, so that a central bank

can judge what rate of money growth is consistent with price stability. The usual approach is to investigate the stability of a money demand relationship, where the money stock is related to the price level and other macroeconomic variables, in particular real income and interest rates. It is useful to distinguish between long-term and short-term stability of money demand.

- Money has *leading indicator properties* if the monetary aggregate contains information that will help to predict the price level in the future, when lagged effects have worked through.

- *Controllability* of a monetary aggregate is given if its growth rate can be steered over a short time horizon by the central bank using monetary policy instruments. Controllability is particularly important if the central bank announces a target for monetary growth for which it wants to be held accountable.

Broad aggregates normally show higher stability and better leading indicator properties than narrow aggregates. This is mainly because they are less affected by substitution between various MFI liabilities. By contrast, narrow aggregates appear to be easier to control in the short term, via official interest rates, than broad aggregates. This is because many components of narrow money are not remunerated at interest rates close to the short-term market rate. These assets therefore become less attractive for investors when short-term rates rise, implying a fall in the demand for narrow money. By contrast, broad money is less controllable in the short run since many of its components are remunerated at interest rates close to short-term market rates, making the demand for it relatively interest inelastic in the short term.

The ECB's definition of euro area monetary aggregates

The ECB's definition of euro area monetary aggregates is based on the following:

(1) A harmonised definition of the *money-issuing sector*. It consists of those entities that issue liabilities with a high degree of moneyness to non-MFIs located in the euro area (excluding central government). This sector comprises MFIs resident in the euro area (see Box 1).

(2) A harmonised definition of the *money-holding sector*, which comprises all non-MFIs resident in the euro area (except central government). In addition to households, non-financial corporations and financial institutions which are not MFIs are included, as well as state and local governments and social security funds. Central governments are considered to constitute a *"money-neutral" sector*, with one exception: central government liabilities with a monetary character (Post Office accounts, national savings accounts and Treasury accounts) are included as a special item in the definition of monetary aggregates.

(3) The harmonised definitions of *MFI liabilities categories*. These make it possible to distinguish between MFI liabilities according to their degree of moneyness (see Box 2), while also taking into account the features of different financial systems.

Box 2

Harmonisation of euro area monetary aggregates

The reporting scheme for euro area monetary aggregates was harmonised in two main phases by the EMI and the ECB in co-operation with the NCBs of the European Union.

First phase

In the early 1990s the Committee of Governors of the Central Banks of the Member States of the European Economic Community developed a number of harmonisation proposals for national monetary aggregates in EU countries, mainly based on the degree of moneyness of the existing national instrument categories. However, this pragmatic approach had a number of drawbacks. In particular, only a limited degree of harmonisation was achieved owing to the heterogeneity of the underlying statistical definitions and classifications. Furthermore, these aggregates were still based on the national money and banking statistics. The harmonised monetary aggregates were named by adding the letter H to the code, e.g. M3H, so as to distinguish them from non-harmonised national monetary aggregates.

Second phase

The EMI carried out extensive preparatory work to harmonise money and banking statistics, resulting in the adoption of the "Statistical requirements for Stage Three of Monetary Union (Implementation Package)" in July 1996. On the basis of the statistical requirements set out in this report, the NCBs have performed comprehensive reviews of their statistical reporting systems, in particular to provide harmonised instrument/maturity and sector categories. Statistical requirements were then also extended to cover the reporting of cross-border positions within the euro area. The resulting (new) statistical system for the euro area, covering the consolidated balance sheet of the MFI sector, is based on the following two main elements: the list of MFIs for statistical purposes (see Box 1) and a detailed specification of the statistical information reported by these MFIs at monthly and quarterly intervals. This statistical information is collected from the MFIs by the NCBs according to national procedures and on the basis of harmonised definitions and classifications.

In order to derive a definition of euro area monetary aggregates from the Eurosystem's money and banking statistics, the degree of moneyness of various assets (or, from the point of view of the MFIs, liabilities) is distinguished by reference to four basic criteria (i.e. transferability, convertibility, maturity and period of notice). The criteria of "transferability" and "convertibility" are explained in Box 1. "Maturity" makes a distinction between instruments according to the time between the contract date and the redemption date, prior to which it is difficult to convert funds placed on deposit. The "period of notice" corresponds to the time between the moment the holder gives notice of his/her intention to redeem the instrument and the date on which the holder is allowed to convert the respective instrument into cash without incurring a penalty. Generally, the shorter the maturity and the period of notice, the higher the degree of moneyness of an asset.

First data from the new harmonised money and banking statistics for the whole euro area started to become available at the ECB in the summer of 1998. Further improvements in the overall quality of monetary statistics are expected in early 1999. Ongoing refinements will be aimed at taking separate account of recent developments in financial innovation.

Based on conceptual considerations and empirical studies, and in line with international practice, the Eurosystem has defined a narrow (M1), an "intermediate" (M2) and a broad aggregate (M3). These aggregates differ with respect to the degree of moneyness of the assets included. Table 2 shows the definitions of the euro area monetary aggregates using the definition of liabilities issued by the MFI sector (see Table 1) as well as by entities belonging to the central government sector (Post Offices, Treasuries) of the euro area. As noted above, these aggregates include only positions of residents of the euro area which are held with

Table 2

Definitions of euro area monetary aggregates

Liabilities [1]	*M1*	*M2*	*M3*
Currency in circulation	X	X	X
Overnight deposits	X	X	X
Deposits with agreed maturity up to 2 years		X	X
Deposits redeemable at notice up to 3 months		X	X
Repurchase agreements			X
Money market fund (MMF) shares/units and money market paper			X
Debt securities up to 2 years			X

1) *Liabilities of the money-issuing sector and central government liabilities with a monetary character held by the money-holding sector.*

MFIs located in the euro area. Holdings by euro area residents of liquid assets denominated in foreign currency can be close substitutes for euro-denominated assets. Therefore, the monetary aggregates include such assets if they are held with MFIs located in the euro area.

Narrow money (M1) includes currency, i.e. banknotes and coins, as well as balances that can immediately be converted into currency or used for cashless payments, i.e. overnight deposits.

"Intermediate" money (M2) comprises narrow money (M1) and, in addition, deposits with maturities of up to two years and deposits redeemable at notice of up to three months. Depending on their degree of moneyness, such deposits can be converted into components of narrow money, but in some cases there may be restrictions involved, such as the need for advance notification, delays, penalties or fees. The definition of M2 reflects the particular interest in analysing and monitoring a monetary aggregate that, in addition to currency, consists of deposits which are liquid.

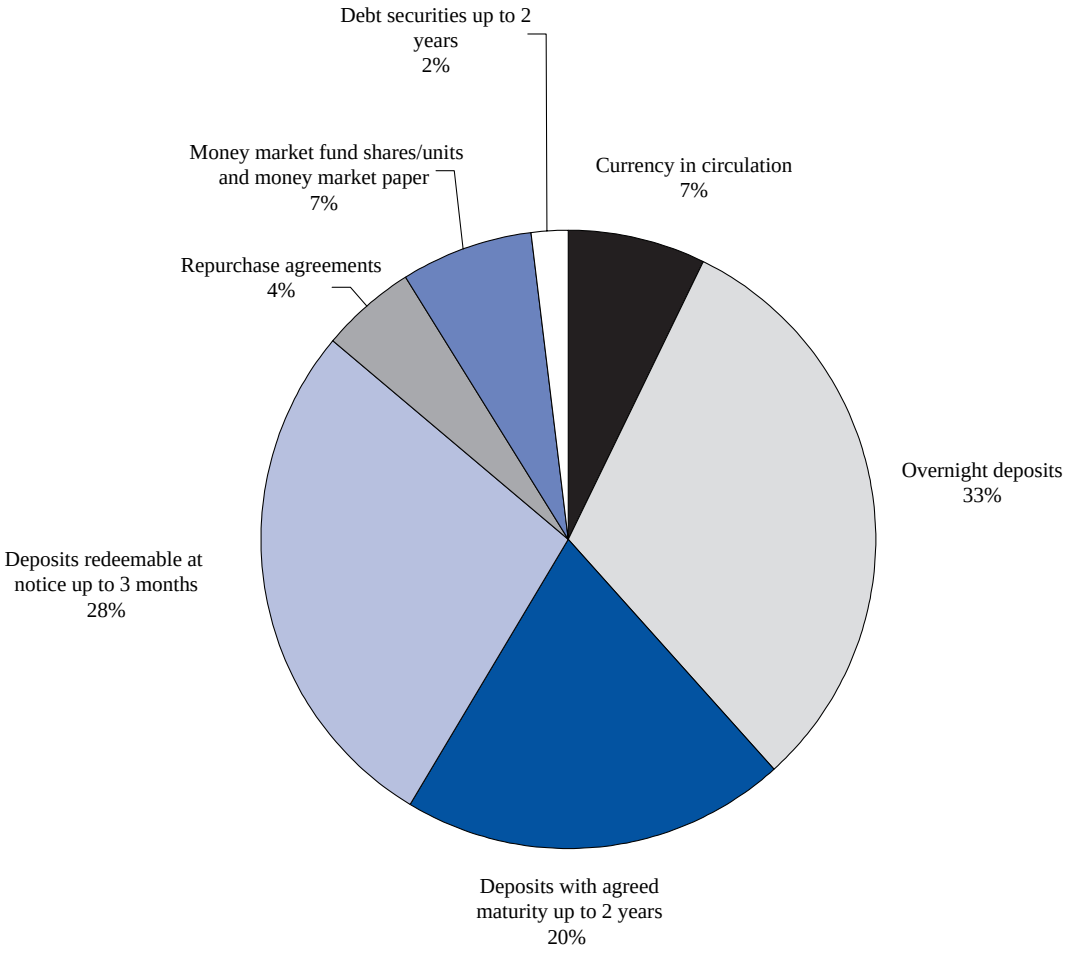
Broad money (M3) comprises M2 and marketable instruments issued by the MFI sector. Certain money market instruments, in particular money market fund (MMF) shares/units and money market paper, and repurchase agreements are included in this aggregate. A high degree of liquidity and price certainty make these instruments close substitutes for deposits. As a result of their inclusion, M3 is less affected by substitution between various liquid asset categories than narrower definitions of money, and is more stable.

With regard to the components of M3 the following shares have been calculated on the basis of December 1998 data (see Chart 1). Overnight deposits account for the largest share, namely 33% of M3. The share of deposits with agreed maturities up to two years is 20% and that of deposits redeemable at notice up to three months is 28% of M3. The share of currency in circulation is 7% and that of money market fund shares/units and money market paper is also 7%. Finally, the outstanding stock of repurchase agreements accounted for 4% of M3 and that of debt securities issued with maturities up to two years for 2%.

Chart 1

Percentage shares of the components of M3

(December 1998)



Source: ECB.
Note: Differences in totals are due to rounding.

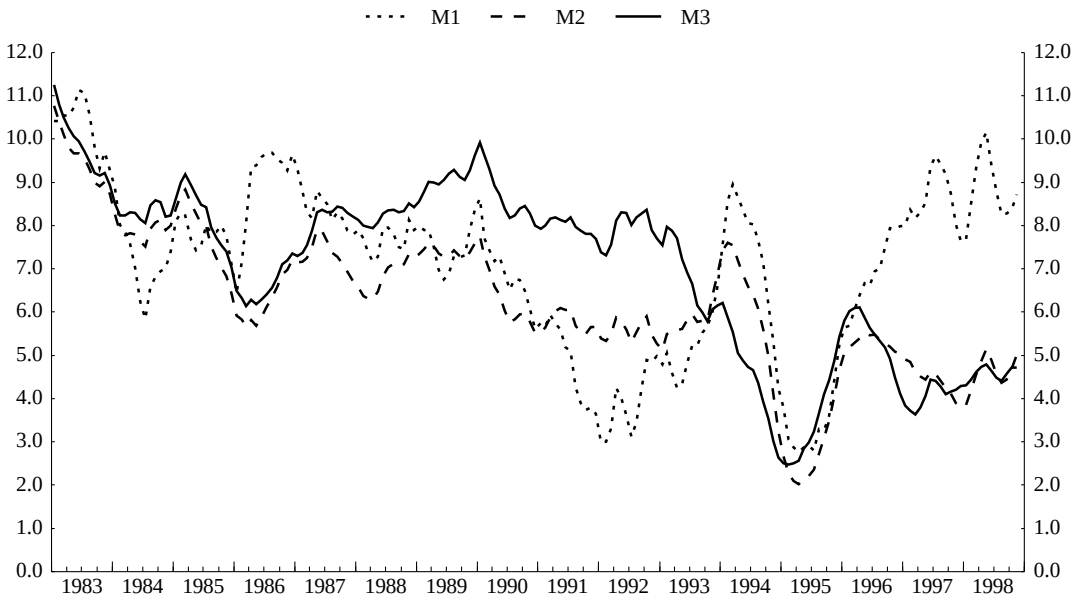
3 Assessment of historical developments of euro area monetary aggregates

As from January 1999 euro area monetary aggregates have been compiled from the consolidated balance sheet of the euro area MFI sector denominated in the single currency, the euro. This consolidated balance sheet in euro is available with the same degree of detail back to September 1997. Time series going further back in the past, which are needed to assess longer-term trends in monetary aggregates, can only be constructed on the basis of the aggregation of estimated national contributions to the corresponding euro area monetary aggregates. These estimates have to be based on national money and banking statistics that were not fully harmonised in the past (see Box 2). In the same vein, the choice of the aggregation method for linking pre-1999 data to the post-1999 euro area statistics is not straightforward, reflecting the fundamental problem that it is only from 1999 onwards that a single currency has been in place. The charts below and all other monetary statistics in this Bulletin use the irrevocably fixed conversion rates vis-à-vis the euro which were determined on 31 December 1998 in order to obtain the corresponding historical series for the euro area

Chart 2

Monetary aggregates for the euro area

(annual percentage change)



Sources: National data and ECB calculations.
Note: Change from the previous year in %, smoothed by means of a three-month centred moving average.

monetary aggregates. The Annex to this article provides data and methodological notes on historical monetary series.

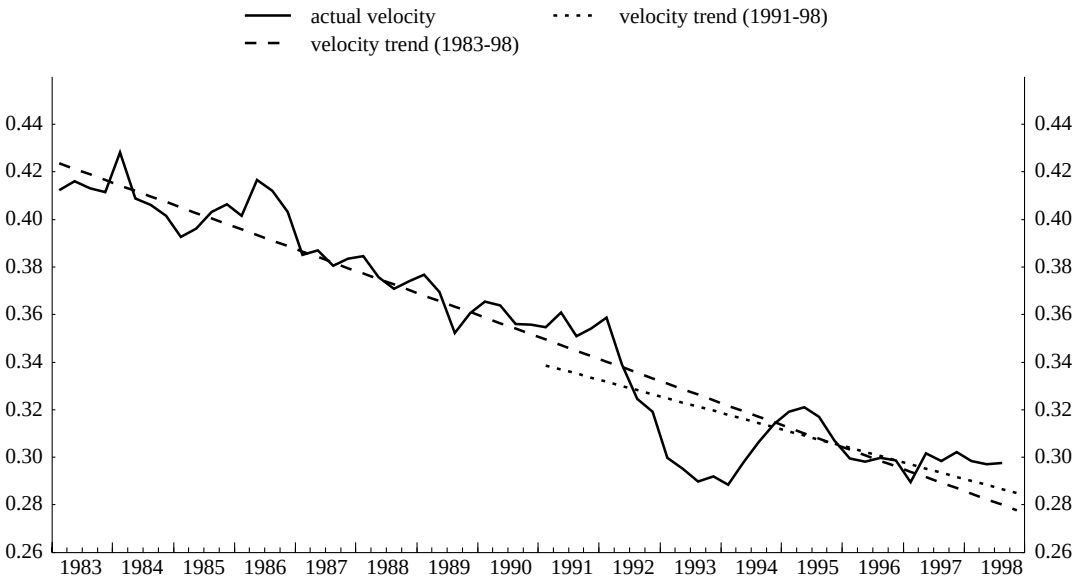
Chart 2 illustrates that broad money growth in the euro area has slowed down since 1990 and has thereby paved the way for further reductions in euro area inflation. Rapidly growing volumes of MMF shares/units and money market paper appear to have increased the growth rates of M3 relative to M2 between 1987 and 1993; MMF shares/units and money market paper, on occasion, have accounted for substantial differences between the annual growth rates of M3 and M2. Since the mid-1990s M3 and M2 growth rates have, however, been fairly similar. Furthermore, Chart 2 demonstrates that movements in M1 are generally more volatile than those in M3. This is, inter alia, because the growth rate of narrow money is more sensitive to interest rate changes. Since end-1996, M3 growth has stabilised at rates of between 3½ and 5%. At the same time, lower interest rates in the euro area and the improved outlook for price stability have made the most liquid assets more attractive, causing M1 growth to increase.

An important measure for the assessment of the behaviour of monetary aggregates over longer periods is the velocity of circulation. The income velocity of M3 is defined as the ratio between the nominal gross domestic product (GDP) and (nominal) M3. Over the last two decades M3 velocity has shown a relatively smooth downward trend (see Chart 3); over this period M3, on average, grew at around 1% per annum faster than nominal GDP. Between mid-1992 and mid-1995 this downward trend was temporarily distorted. In this period velocity first fell sharply until end-1993 and then increased significantly over the following one and a half years. The exchange rate crises in the European Monetary System (EMS), substantial movements in interest rates and also special factors – such as major changes in the taxation of interest income in some countries – appeared to have affected monetary developments during this period.

Chart 3

M3 velocity trends for the euro area

(log levels)



Sources: Eurostat, national data and ECB calculations.
Note: Velocity is measured as the ratio of actual levels of nominal GDP to M3; seasonally adjusted data; national levels of nominal GDP have been converted to euro using the fixed conversion rates of 31 December 1998.

Notwithstanding this temporary volatility in velocity in the mid-1990s, econometric analysis of euro area monetary aggregates over the past two decades supports the view that the long-run stability of money demand holds for past developments of M3, as well as for M2. By contrast, long-run stability does not appear to exist for the narrow aggregate M1.

Furthermore, broad money growth (M3) data contain useful information for future price developments. In Chart 4 M3 growth is compared with increases of consumer price indices for the euro area, whereby M3 growth has been shifted forward by six quarters. The chart illustrates that changes in broad money under normal circumstances lead consumer price developments over the medium term.

Formal empirical analysis of leading indicator properties conducted at the ECB confirms that broad money is a better indicator of future price developments than narrow money (M1). However, as already mentioned, in the short and also in the medium term, prices may deviate from the path mapped out by monetary growth. For example, portfolio shifts in the mid-1990s, which partly reflected institutional factors, appear to have temporarily weakened the leading indicator properties of broad money.

4 The Eurosystem's reference value for the growth of broad money

In view of the favourable empirical properties of M3, the Governing Council of the ECB decided to give broad money a prominent role in the Eurosystem's monetary policy strategy. To this end, the Governing Council has announced a quantitative reference value of 4½% per annum for the growth of this broad monetary aggregate.

The reference value is intended to help the Governing Council analyse and present the information contained in the broad monetary aggregate in a manner that offers a coherent and credible guide for monetary policy aimed at price stability.

Derivation of the reference value

As was explained in the January 1999 edition of the Monthly Bulletin, the reference value was derived in a manner that is consistent with – and serves the achievement of – price stability. Substantial or prolonged deviations of monetary growth from the reference value would, under normal circumstances, signal risks to price stability over the medium term.

The derivation of the reference value was based on the well-known relationship between monetary growth, inflation, real GDP growth and changes in velocity. It embodies the definition of price stability ("increase in the HICP of below 2% per annum") as announced by the Governing Council of the ECB in October 1998. The derivation of the reference value was further based on medium-term assumptions regarding the trend of real GDP growth and the trend in the velocity of circulation of M3.

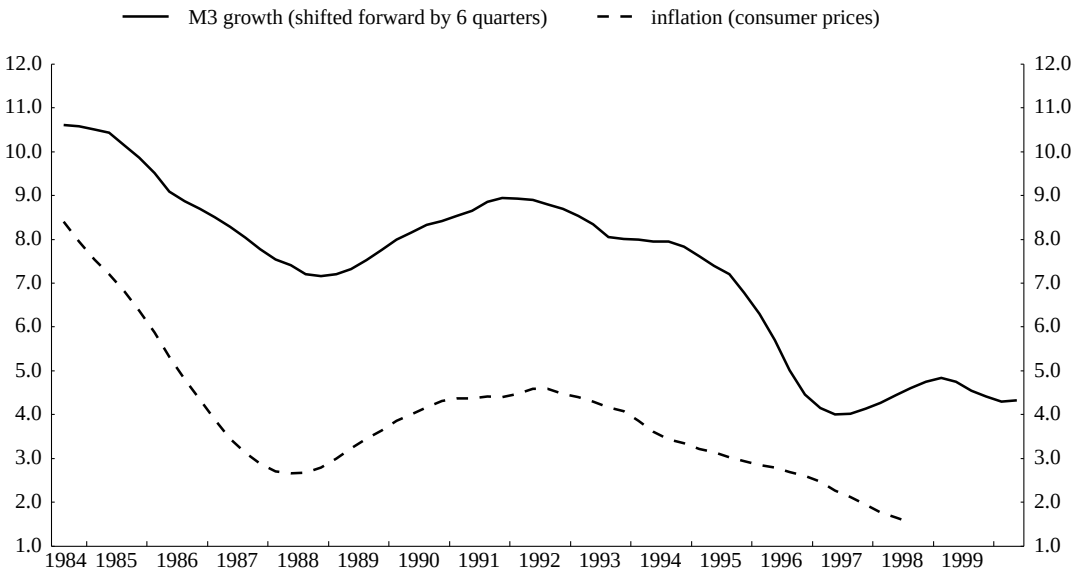
For the medium-term trend in real GDP growth for the euro area, an assumption of 2-2½% per annum was made, in line with estimates from both international organisations and the ECB. In setting the assumption for the decline in the velocity of circulation, various approaches were applied. One approach was to base it on a trend derived from the historic evolution of velocity. This was done by looking at various sample periods and using different specifications. As a second approach, a medium-term assumption for velocity was derived by making use of estimates of long-run money demand relationships together with the assumptions for real GDP growth and prices mentioned above. It was found that the estimates of medium-term velocity trends implied by stable long-run money demand relationships are broadly in line with the range identified by various estimates of the time trend of velocity.

As can be seen from Chart 3, the estimate of the velocity trend depends on the sample period. For example, over the period 1983-98 the trend decline was around 1% per annum, whereas over more recent periods, starting around the beginning of the 1990s, the trend decline was smaller, coming closer to ½%.

Chart 4

Longer-term trends in the money stock and prices for the euro area

(annual percentage change)



Sources: Eurostat, national data and ECB calculations.
Note: Change from the previous year in M3 and consumer prices in %, smoothed by means of an eight-quarter moving average; for the period before 1996, changes in consumer prices are derived from national consumer price indices, thereafter the HICP is used.

Against this background, and also reflecting the uncertainties related to the move to Stage Three, the Governing Council chose a range of ½ to 1% for the trend decline in velocity, rather than a single figure.

Taking into account these assumptions for the medium-term trends in real GDP growth and velocity, and based on its intention to maintain HICP inflation for the euro area *below* 2%, the Governing Council decided to set its first reference value for M3 growth at 4½% per annum. Money growth substantially in excess of this value would tend to signal inflationary risks if the relationship between M3, prices and real GDP underlying the velocity trend decline of ½ to 1% remains stable.

Although several of the components used in the derivation of the reference value were expressed in the form of a range, the Governing Council has decided to announce a single reference rate for monetary growth, rather than a range. Announcing a reference range might have been falsely interpreted by the public as implying that interest rates would be changed automatically if monetary growth were to move outside the boundaries of the range.

The Governing Council deliberately announced a reference value, not a target that it would intend to meet. The concept of the reference value does not entail a commitment on the part of the Eurosystem to correct deviations of monetary growth from the reference value over the short term. Interest rates will not be changed "mechanistically" in response to such deviations in an attempt to return monetary growth to the reference value. The fundamental idea behind the concept of a reference value is that deviations of monetary growth from the reference value will be thoroughly analysed. If monetary developments signal risks to price stability, monetary policy will normally act in order to maintain price stability.

The Governing Council analyses monetary developments in relation to the reference value on the basis of a three-month moving average of 12-month growth rates of broad money. This approach is intended to smooth out monthly fluctuations. The Governing Council will review the reference value of 4½% in December 1999 with a view to assessing whether the assumptions underpinning its derivation are still valid.

5 Concluding remarks

There is broad consensus that the development of the price level is a monetary phenomenon in the medium to long term. Consequently, the Governing Council of the ECB has decided that money will be accorded a prominent role in the Eurosystem's monetary policy strategy. This role was signalled by the announcement of a reference value for the growth rate of the broad monetary aggregate M3 of 4½% per annum by the Governing Council in December 1998. The derivation of this rate embodies the Eurosystem's definition of price stability. It is based on medium-term assumptions regarding real GDP growth and the trend decline in the velocity of circulation of M3. In order to achieve its primary objective of price stability, it is important for the Eurosystem to analyse closely the development of this aggregate against the reference value and to monitor other monetary aggregates.

Annex

Euro area monetary aggregates from 1980 to 1998

The historical time series on euro area monetary aggregates comprise M1, M2 and M3 as defined in the main article. End-of-month, non-seasonally adjusted levels for the three aggregates have been compiled starting in January 1980, with 12-month growth rates available from January 1981 onwards. In order to achieve the best possible approximation to the ECB's definition of euro area monetary aggregates, a considerable amount of estimation was necessary, particularly for earlier dates. Moreover, further work may lead to revisions to these data. These series should therefore be treated with caution.

Sources and data availability

The following statistical information provided by the NCBs was used to compile the historical series:

- Source I: *MFI balance sheet statistics*. This source comprises data collected under the new harmonised reporting system as well as best estimates of individual balance sheet items. The new reporting system is defined within the framework of the ECB Regulation of 1 December 1998 concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16). The balance sheets of euro area NCBs and – from June 1998 – the ECB are included.
- Source II: *best estimates of national contributions to the euro area aggregates*. These data take account, as far as possible, of the cross-border positions of Monetary Financial Institutions (MFIs) within the euro area. When no data are available from Source I, Source II provides the closest possible approximation to the euro area aggregates as defined by the ECB.
- Source III: *national monetary aggregates*. In some cases national and non-harmonised data have been used to fill gaps.

The use of the different sources for each euro area Member State is set out in the table below.

Table 3

Sources and periods of coverage

Country	Source I MFI balance sheet statistics	Source II Best estimates of national contributions to the euro area aggregates	Source III National monetary aggregates (national non-harmonised data)
Belgium	As from December 1996	January 1980 to November 1996	
Germany	As from January 1980		
Spain	As from January 1980		
France	As from January 1980		
Ireland	As from September 1997	December 1995 to August 1997	January 1980 to November 1995
Italy	As from December 1995	January 1980 to November 1995	
Luxembourg	As from September 1997	January 1980 to August 1997 [1]	
Netherlands	As from December 1990	December 1982 to November 1990	January 1980 to November 1982
Austria	As from November 1996 [2]	January 1980 to October 1996	
Portugal	As from January 1980		
Finland	As from January 1980		

1) Estimated by applying the EU10 growth rates.
2) Includes interpolations for the period from November 1996 to August 1997.

Compilation

The following approach has been used to provide full coverage using the best statistics available.

The complete consolidated balance sheet of the euro area MFI sector derived from harmonised statistical information on the MFI balance sheets is available from September 1997 onwards. For this period the ECB is in a position to calculate the euro area monetary aggregates according to its regular compilation procedures (see Source I). The monthly data from September 1997 onwards are those published in the section of the Monthly Bulletin entitled "Euro area statistics" (see "Monetary and financial developments in the euro area").

For periods prior to September 1997 most NCBs were in a position to estimate the detailed breakdown as given in the ECB Regulation (ECB/1998/16). These estimates are included under Source 1. However, not all NCBs could provide figures for periods as far back as January 1980. Where the full balance sheet data were not available for a given country, Sources II or III were used. When linking the data from the different sources, consistency in levels was achieved by applying, where necessary, the annual growth rates derived from Sources II or III to the levels of M1, M2 and M3 as calculated from the full balance sheet data. In addition, some national series were adjusted for important breaks, for example the statistical impact of German unification in July 1990.

Finally, in order to aggregate the national data and calculate euro area aggregates, for the purposes of this publication the series were converted into euro by applying the irrevocable conversion rates fixed on 31 December 1998 (see main article).

Table 4

Monetary aggregates [1)]

(EUR billions (not seasonally adjusted; end-of-period stocks) and annual percentage changes [2)])

		M1		M2		M3	
		Total	Annual percentage change [2)]	Total	Annual percentage change [2)]	Total	Annual percentage change [2)]
1980	Jan.	456.6		1,139.3		1,165.5	
	Feb.	451.4		1,139.1		1,166.2	
	Mar.	460.4		1,146.3		1,176.2	
	Apr.	460.2		1,150.4		1,181.0	
	May	463.8		1,155.1		1,185.7	
	June	479.5		1,167.5		1,198.3	
	July	479.4		1,173.4		1,205.3	
	Aug.	473.4		1,176.5		1,208.4	
	Sep.	479.1		1,176.7		1,207.0	
	Oct.	478.1		1,182.9		1,212.6	
	Nov.	501.2		1,211.0		1,242.6	
	Dec.	506.4		1,249.6		1,281.4	
1981	Jan.	492.8	7.9	1,241.7	9.0	1,275.1	9.4
	Feb.	490.9	8.8	1,246.5	9.4	1,281.7	9.9
	Mar.	493.0	7.1	1,245.8	8.7	1,286.1	9.3
	Apr.	492.3	7.0	1,254.8	9.1	1,296.2	9.8
	May	501.9	8.2	1,268.4	9.8	1,311.1	10.6
	June	512.3	6.9	1,277.5	9.4	1,322.0	10.3
	July	503.8	5.1	1,278.3	8.9	1,325.1	9.9
	Aug.	501.1	5.8	1,280.1	8.8	1,328.0	9.9
	Sep.	507.7	6.0	1,285.4	9.2	1,331.8	10.3
	Oct.	505.0	5.6	1,291.2	9.2	1,337.4	10.3
	Nov.	524.6	4.7	1,311.3	8.3	1,358.9	9.4
	Dec.	534.2	5.5	1,358.4	8.7	1,406.3	9.7

Table 4 cont'd

Monetary aggregates [1]

(EUR billions (not seasonally adjusted; end-of-period stocks) and annual percentage changes [2])

		M1		M2		M3	
		Total	Annual percentage change [2]	Total	Annual percentage change [2]	Total	Annual percentage change [2]
1982	Jan.	525.9	6.7	1,361.7	9.7	1,411.7	10.7
	Feb.	523.5	6.6	1,366.6	9.6	1,418.1	10.6
	Mar.	525.2	6.5	1,368.1	9.8	1,422.1	10.6
	Apr.	526.0	6.8	1,380.3	10.0	1,431.9	10.5
	May	537.5	7.1	1,392.3	9.8	1,443.9	10.1
	June	552.3	7.8	1,405.6	10.0	1,463.0	10.7
	July	547.8	8.7	1,413.8	10.6	1,472.5	11.1
	Aug.	546.4	9.0	1,422.3	11.1	1,481.5	11.6
	Sep.	553.3	9.0	1,426.6	11.0	1,483.6	11.4
	Oct.	556.3	10.2	1,437.5	11.3	1,494.0	11.7
	Nov.	576.8	9.9	1,455.1	11.0	1,512.9	11.3
	Dec.	588.0	10.1	1,507.7	11.0	1,568.7	11.6
1983	Jan.	581.4	10.5	1,508.3	10.8	1,570.9	11.3
	Feb.	579.4	10.7	1,510.6	10.5	1,573.2	10.9
	Mar.	578.1	10.1	1,503.3	9.9	1,566.9	10.2
	Apr.	583.3	10.9	1,516.7	9.9	1,581.1	10.4
	May	594.7	10.6	1,526.5	9.6	1,591.0	10.2
	June	611.1	10.6	1,538.5	9.5	1,603.3	9.6
	July	614.2	12.1	1,553.8	9.9	1,620.7	10.1
	Aug.	603.3	10.4	1,554.6	9.3	1,621.8	9.5
	Sep.	604.0	9.2	1,550.7	8.7	1,615.5	8.9
	Oct.	611.2	9.9	1,566.9	9.0	1,632.6	9.3
	Nov.	628.3	8.9	1,586.5	9.0	1,653.5	9.3
	Dec.	648.5	10.3	1,643.2	9.0	1,710.7	9.1
1984	Jan.	631.7	8.7	1,631.3	8.2	1,703.5	8.4
	Feb.	623.8	7.7	1,625.7	7.6	1,699.3	8.0
	Mar.	622.7	7.7	1,620.1	7.8	1,695.8	8.2
	Apr.	631.2	8.2	1,637.3	8.0	1,714.3	8.4
	May	635.0	6.8	1,645.0	7.8	1,722.5	8.3
	June	648.1	6.0	1,656.5	7.7	1,734.2	8.2
	July	650.4	5.9	1,669.9	7.5	1,750.5	8.0
	Aug.	637.0	5.6	1,669.7	7.4	1,751.7	8.0
	Sep.	653.8	8.2	1,688.4	8.9	1,767.4	9.4
	Oct.	651.4	6.6	1,691.3	7.9	1,768.5	8.3
	Nov.	665.9	6.0	1,706.6	7.6	1,783.9	7.9
	Dec.	703.5	8.5	1,777.4	8.2	1,854.4	8.4
1985	Jan.	680.5	7.7	1,765.6	8.2	1,846.7	8.4
	Feb.	674.3	8.1	1,768.0	8.8	1,852.8	9.0
	Mar.	679.0	9.0	1,767.8	9.1	1,857.6	9.5
	Apr.	678.7	7.5	1,778.2	8.6	1,868.3	9.0
	May	676.1	6.5	1,773.7	7.8	1,865.0	8.3
	June	701.7	8.3	1,795.9	8.4	1,887.5	8.8
	July	701.4	7.9	1,801.4	7.9	1,896.1	8.3
	Aug.	687.3	7.9	1,797.7	7.7	1,893.6	8.1
	Sep.	704.1	7.7	1,806.6	7.0	1,898.9	7.4
	Oct.	703.2	8.0	1,811.4	7.1	1,903.1	7.6
	Nov.	721.4	8.3	1,825.9	7.0	1,919.2	7.6
	Dec.	752.6	7.0	1,890.6	6.4	1,983.8	7.0
1986	Jan.	721.3	6.0	1,870.4	5.9	1,967.2	6.5
	Feb.	717.1	6.3	1,864.2	5.4	1,963.3	6.0
	Mar.	740.6	9.1	1,875.7	6.1	1,977.9	6.5
	Apr.	738.1	8.7	1,875.0	5.4	1,979.7	6.0
	May	745.0	10.2	1,878.4	5.9	1,984.5	6.4
	June	766.3	9.2	1,898.5	5.7	2,003.9	6.2
	July	767.0	9.3	1,909.6	6.0	2,014.7	6.3
	Aug.	759.0	10.4	1,916.2	6.6	2,022.2	6.8
	Sep.	769.4	9.3	1,922.7	6.4	2,024.8	6.6
	Oct.	765.8	8.9	1,932.5	6.7	2,035.8	7.0
	Nov.	794.9	10.2	1,962.9	7.5	2,067.5	7.7
	Dec.	818.3	8.7	2,017.8	6.7	2,120.1	6.9

Table 4 cont'd

Monetary aggregates [1]

(EUR billions (not seasonally adjusted; end-of-period stocks) and annual percentage changes [2])

		M1		M2		M3	
		Total	Annual percentage change [2]	Total	Annual percentage change [2]	Total	Annual percentage change [2]
1987	Jan.	793.4	10.0	2,008.6	7.4	2,113.9	7.5
	Feb.	783.0	9.2	2,001.0	7.3	2,112.2	7.6
	Mar.	793.7	7.2	2,002.9	6.8	2,117.7	7.1
	Apr.	801.1	8.5	2,018.3	7.6	2,138.1	8.0
	May	810.5	8.8	2,030.3	8.1	2,155.0	8.6
	June	836.1	9.1	2,050.2	8.0	2,170.9	8.3
	July	828.2	8.0	2,053.1	7.5	2,179.0	8.2
	Aug.	822.7	8.4	2,058.2	7.4	2,192.6	8.4
	Sep.	831.1	8.0	2,060.7	7.2	2,194.4	8.4
	Oct.	830.8	8.5	2,072.6	7.3	2,208.6	8.5
	Nov.	858.2	8.0	2,098.7	6.9	2,240.2	8.4
	Dec.	877.1	7.2	2,151.1	6.6	2,290.3	8.0
1988	Jan.	858.7	8.2	2,141.3	6.6	2,287.5	8.2
	Feb.	847.7	8.3	2,131.6	6.5	2,284.5	8.2
	Mar.	846.3	6.6	2,122.5	6.0	2,279.0	7.6
	Apr.	859.5	7.3	2,148.1	6.4	2,311.5	8.1
	May	871.7	7.6	2,161.7	6.5	2,329.0	8.1
	June	894.5	7.0	2,183.9	6.5	2,344.9	8.0
	July	904.9	9.3	2,206.5	7.5	2,370.0	8.8
	Aug.	885.3	7.6	2,204.4	7.1	2,374.3	8.3
	Sep.	885.2	6.5	2,199.9	6.8	2,370.4	8.0
	Oct.	900.5	8.4	2,225.4	7.4	2,399.1	8.6
	Nov.	922.4	7.5	2,249.0	7.2	2,427.3	8.4
	Dec.	951.9	8.5	2,311.6	7.5	2,486.0	8.5
1989	Jan.	924.6	7.7	2,295.2	7.2	2,479.3	8.4
	Feb.	913.4	7.7	2,288.9	7.4	2,483.9	8.7
	Mar.	916.5	8.3	2,288.0	7.8	2,490.3	9.3
	Apr.	925.1	7.6	2,311.1	7.6	2,520.1	9.0
	May	929.3	6.6	2,317.1	7.2	2,531.8	8.7
	June	954.3	6.7	2,342.7	7.3	2,558.9	9.1
	July	968.0	7.0	2,369.1	7.4	2,590.9	9.3
	Aug.	947.0	7.0	2,363.6	7.2	2,591.2	9.1
	Sep.	955.3	7.9	2,368.7	7.7	2,593.5	9.4
	Oct.	962.7	6.9	2,381.0	7.0	2,611.0	8.8
	Nov.	988.0	7.1	2,407.0	7.0	2,643.4	8.9
	Dec.	1,044.0	9.7	2,499.4	8.1	2,736.0	10.1
1990	Jan.	1,001.6	8.3	2,470.5	7.6	2,725.0	9.9
	Feb.	985.4	7.9	2,460.1	7.5	2,726.6	9.8
	Mar.	979.9	6.9	2,443.3	6.8	2,718.7	9.2
	Apr.	994.3	7.5	2,465.2	6.7	2,745.6	9.0
	May	995.7	7.1	2,463.4	6.3	2,750.1	8.6
	June	1,023.3	7.2	2,488.7	6.2	2,778.8	8.6
	July	1,029.0	6.3	2,500.3	5.5	2,797.5	8.0
	Aug.	1,004.2	6.0	2,494.2	5.5	2,797.6	8.0
	Sep.	1,031.5	8.0	2,520.2	6.4	2,820.8	8.8
	Oct.	1,022.4	6.2	2,521.9	5.9	2,831.6	8.5
	Nov.	1,040.2	5.3	2,541.1	5.6	2,858.9	8.2
	Dec.	1,114.0	6.7	2,644.4	5.8	2,961.1	8.2
1991	Jan.	1,049.9	4.8	2,599.0	5.2	2,932.2	7.6
	Feb.	1,041.6	5.7	2,597.5	5.6	2,943.2	7.9
	Mar.	1,043.1	6.5	2,593.2	6.1	2,948.5	8.5
	Apr.	1,050.5	5.6	2,610.8	5.9	2,967.7	8.1
	May	1,046.6	5.1	2,611.2	6.0	2,971.1	8.0
	June	1,085.0	6.0	2,646.9	6.4	3,008.4	8.3
	July	1,074.5	4.4	2,644.6	5.8	3,020.1	8.0
	Aug.	1,053.0	4.9	2,644.8	6.0	3,031.0	8.3
	Sep.	1,067.8	3.5	2,651.9	5.2	3,035.8	7.6
	Oct.	1,056.0	3.3	2,656.0	5.3	3,049.5	7.7
	Nov.	1,085.8	4.4	2,691.7	5.9	3,090.4	8.1
	Dec.	1,155.1	3.7	2,795.9	5.7	3,187.1	7.6

Table 4 cont'd

Monetary aggregates [1]

(EUR billions (not seasonally adjusted; end-of-period stocks) and annual percentage changes [2])

		M1		M2		M3	
		Total	Annual percentage change [2]	Total	Annual percentage change [2]	Total	Annual percentage change [2]
1992	Jan.	1,079.9	2.9	2,736.9	5.3	3,147.1	7.3
	Feb.	1,066.7	2.4	2,730.6	5.1	3,153.9	7.2
	Mar.	1,081.9	3.7	2,737.1	5.5	3,167.5	7.4
	Apr.	1,090.2	3.8	2,762.6	5.8	3,207.6	8.1
	May	1,101.2	5.2	2,774.9	6.3	3,233.5	8.8
	June	1,118.0	3.0	2,786.0	5.3	3,248.8	8.0
	July	1,102.1	2.6	2,783.5	5.3	3,263.5	8.1
	Aug.	1,092.2	3.7	2,787.8	5.4	3,272.5	8.0
	Sep.	1,111.4	4.1	2,809.5	5.9	3,295.1	8.5
	Oct.	1,107.7	4.9	2,813.0	5.9	3,303.4	8.3
	Nov.	1,147.7	5.7	2,849.6	5.9	3,344.9	8.2
	Dec.	1,200.7	3.9	2,926.2	4.7	3,413.7	7.1
1993	Jan.	1,137.0	5.3	2,881.9	5.3	3,391.7	7.8
	Feb.	1,121.7	5.1	2,877.9	5.4	3,398.8	7.8
	Mar.	1,133.1	4.7	2,894.8	5.8	3,433.2	8.4
	Apr.	1,132.8	3.9	2,911.5	5.4	3,447.7	7.5
	May	1,146.5	4.1	2,930.1	5.6	3,467.9	7.3
	June	1,173.6	5.0	2,948.3	5.8	3,474.5	7.0
	July	1,161.4	5.4	2,951.2	6.0	3,477.3	6.6
	Aug.	1,150.4	5.3	2,955.0	6.0	3,484.1	6.5
	Sep.	1,166.7	5.0	2,958.4	5.3	3,474.0	5.4
	Oct.	1,177.1	6.3	2,984.3	6.1	3,504.3	6.1
	Nov.	1,214.0	5.8	3,020.4	6.0	3,540.0	5.8
	Dec.	1,272.6	6.0	3,132.6	7.1	3,628.5	6.3
1994	Jan.	1,228.3	8.0	3,100.9	7.6	3,606.4	6.3
	Feb.	1,219.0	8.7	3,097.3	7.6	3,603.1	6.0
	Mar.	1,235.3	9.0	3,114.6	7.6	3,613.9	5.3
	Apr.	1,236.4	9.2	3,127.8	7.4	3,631.2	5.3
	May	1,236.1	7.8	3,122.4	6.6	3,626.3	4.6
	June	1,268.9	8.1	3,143.9	6.6	3,638.8	4.7
	July	1,257.3	8.3	3,144.8	6.6	3,646.9	4.9
	Aug.	1,239.0	7.7	3,132.5	6.0	3,635.4	4.3
	Sep.	1,248.9	7.0	3,126.2	5.7	3,609.1	3.9
	Oct.	1,255.5	6.7	3,136.3	5.1	3,628.5	3.6
	Nov.	1,273.1	4.9	3,147.6	4.2	3,652.8	3.2
	Dec.	1,328.8	4.4	3,226.3	3.0	3,712.6	2.3
1995	Jan.	1,270.3	3.4	3,178.3	2.5	3,692.4	2.4
	Feb.	1,262.3	3.6	3,174.8	2.5	3,704.3	2.8
	Mar.	1,262.0	2.2	3,171.4	1.8	3,695.1	2.3
	Apr.	1,272.2	2.9	3,188.8	2.0	3,720.9	2.5
	May	1,276.0	3.2	3,193.0	2.3	3,733.8	3.0
	June	1,300.2	2.5	3,212.9	2.2	3,751.5	3.1
	July	1,295.3	3.0	3,213.3	2.2	3,752.7	2.9
	Aug.	1,274.9	2.9	3,216.2	2.7	3,769.9	3.7
	Sep.	1,298.4	4.0	3,229.6	3.3	3,766.8	4.4
	Oct.	1,292.4	2.9	3,239.5	3.3	3,781.9	4.2
	Nov.	1,322.8	3.9	3,269.0	3.9	3,823.3	4.7
	Dec.	1,413.4	6.4	3,386.7	5.0	3,924.6	5.7
1996	Jan.	1,339.2	5.4	3,341.2	5.1	3,909.6	5.9
	Feb.	1,327.0	5.1	3,335.9	5.1	3,920.2	5.8
	Mar.	1,344.2	6.5	3,340.6	5.3	3,929.8	6.4
	Apr.	1,354.8	6.5	3,362.4	5.4	3,948.0	6.1
	May	1,354.4	6.1	3,365.7	5.4	3,952.2	5.9
	June	1,395.8	7.4	3,394.5	5.7	3,964.7	5.7
	July	1,377.1	6.3	3,384.1	5.3	3,954.7	5.4
	Aug.	1,366.1	7.2	3,391.8	5.5	3,971.7	5.4
	Sep.	1,396.1	7.5	3,400.8	5.3	3,965.4	5.3
	Oct.	1,392.8	7.8	3,402.8	5.0	3,967.6	4.9
	Nov.	1,435.4	8.5	3,441.1	5.3	3,998.7	4.6
	Dec.	1,519.2	7.5	3,553.8	4.9	4,079.8	4.0

Table 4 cont'd

Monetary aggregates [1)]

(EUR billions (not seasonally adjusted; end-of-period stocks) and annual percentage changes [2)])

		M1		M2		M3	
		Total	Annual percentage change [2)]	Total	Annual percentage change [2)]	Total	Annual percentage change [2)]
1997	Jan.	1,445.7	8.0	3,505.1	4.9	4,058.0	3.8
	Feb.	1,440.2	8.5	3,498.9	4.9	4,067.1	3.8
	Mar.	1,459.9	8.6	3,498.7	4.7	4,072.1	3.6
	Apr.	1,454.7	7.4	3,504.4	4.2	4,087.7	3.5
	May	1,475.3	8.9	3,520.0	4.6	4,119.0	4.2
	June	1,525.3	9.3	3,546.8	4.5	4,139.2	4.4
	July	1,513.4	9.9	3,545.2	4.8	4,140.4	4.7
	Aug.	1,498.2	9.7	3,543.5	4.5	4,136.3	4.1
	Sep.	1,517.7	8.7	3,536.2	4.0	4,123.0	4.0
	Oct.	1,520.5	9.2	3,548.8	4.3	4,133.6	4.2
	Nov.	1,555.3	8.4	3,581.0	4.1	4,171.9	4.3
	Dec.	1,618.6	6.5	3,672.3	3.3	4,246.4	4.1
1998	Jan.	1,561.5	8.0	3,644.7	4.0	4,238.0	4.4
	Feb.	1,562.4	8.5	3,646.3	4.2	4,245.5	4.4
	Mar.	1,592.0	9.0	3,651.3	4.4	4,255.3	4.5
	Apr.	1,607.0	10.5	3,682.0	5.1	4,290.4	5.0
	May	1,626.4	10.2	3,701.9	5.2	4,313.3	4.7
	June	1,673.7	9.7	3,731.0	5.2	4,334.1	4.8
	July	1,638.4	8.3	3,698.0	4.3	4,326.9	4.5
	Aug.	1,623.9	8.4	3,692.8	4.2	4,312.0	4.3
	Sep.	1,641.3	8.1	3,697.6	4.6	4,307.1	4.5
	Oct.	1,646.7	8.3	3,709.0	4.5	4,339.2	5.0
	Nov.	1,689.9	8.7	3,758.6	5.0	4,368.4	4.7
	Dec. [(p)]	1,767.2	9.2	3,875.6	5.5	4,436.1	4.5

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) Calculated from amounts outstanding.

Euro area statistics

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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 financial sector counterparties in the euro area			
						Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
	1	2	3	4	5	6	7	8
1999 1 Jan.	99,598	230,342	6,704	8,939	185,120	144,924	24,698	6,680
8	99,598	234,128	5,255	8,786	174,769	145,067	22,230	49
15	99,589	235,398	6,541	8,110	173,146	122,898	44,998	0
22	99,589	235,387	7,277	7,238	155,287	106,918	44,998	0
29	99,589	233,019	7,385	9,094	182,912	127,967	44,998	0

2. Liabilities

	Banknotes in circulation	Liabilities to financial sector counterparties in the euro area in euro						Debt certificates issued
			Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	
	1	2	3	4	5	6	7	8
1999 1 Jan.	341,708	87,308	84,437	973	1,886	0	12	13,835
8	336,551	106,002	102,518	3,475	0	0	9	11,651
15	330,796	109,936	107,824	2,110	0	0	2	11,651
22	326,555	87,970	87,733	234	0	0	3	11,651
29	326,534	85,353	84,632	709	0	0	12	11,650

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other lending	Securities of euro area residents in euro	General government debt in euro	Other assets	**Total assets**	
9	10	11	12	13	14	15	16	
0	6,372	26	2,420	21,650	60,125	84,683	697,160	1999 1 Jan.
0	5,434	24	1,966	20,914	60,125	81,554	685,128	8
0	2,655	58	2,537	21,335	60,130	82,743	686,992	15
0	2,111	80	1,180	21,794	60,183	80,867	667,622	22
0	8,700	127	1,120	22,096	60,185	80,358	694,638	29

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	Capital and reserves	Other liabilities	**Total liabilities**	
9	10	11	12	13	14	15	16	
61,477	9,969	595	3,314	5,765	112,498	60,690	697,160	1999 1 Jan.
32,203	11,538	1,051	3,929	5,765	112,488	63,950	685,128	8
33,020	10,899	1,529	4,068	5,767	110,878	68,448	686,992	15
43,442	9,148	1,297	4,344	5,767	110,956	66,492	667,622	22
56,652	14,049	1,618	4,325	5,767	110,937	77,753	694,638	29

Table 1.2

ECB interest rates on standing facilities

(levels in percentages per annum; changes in percentage points)

	Deposit facility		Marginal lending facility	
	Level	Change	Level	Change
	1	2	3	4
1999 1 Jan.	2.00	-	4.50	-
4 Jan. [1]	2.75	0.75	3.25	-1.25
22 Jan.	2.00	-0.75	4.50	1.25

Source: ECB.

1) 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.

Table 1.3

Eurosystem monetary policy operations executed through tenders

(EUR millions; interest rates in percentages per annum)

Main refinancing operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		
				Fixed rate	Marginal rate	Weighted average rate	Running for [...] days
	1	2	3	4	5	6	7
1999 7 Jan.		481,625	75,000	3.00			13
13		563,409	48,000	3.00			14
20		593,418	59,000	3.00			14
27		689,467	69,000	3.00			14
3 Feb.		757,724	62,000	3.00			14

Longer-term refinancing operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		
				Fixed rate	Marginal rate	Weighted average rate	Running for [...] days
	1	2	3	4	5	6	7
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

Other tender operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		
				Fixed rate	Marginal rate	Weighted average rate	Running for [...] days
	1	2	3	4	5	6	7

1999

Source: ECB.

Table 1.4

Minimum reserve statistics

1. Reserve base of credit institutions subject to reserve requirements [1) 2)]

(EUR millions)

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)	Debt securities up to 2 years agreed maturity	Money market paper	Deposits (over 2 years agreed maturity and notice period)	Repos	Debt securities over 2 years agreed maturity
	1	2	3	4	5	6	7
1999 1 Jan.	.	.	.	.	.	.	.

Source: ECB.

1) Liabilities vis-à-vis other credit institutions subject to the 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 2 years and of money market paper held by the institutions mentioned above, it may deduct 10% of these liabilities from its reserve base.

2) The reserve base of credit institutions as at 1 January 1999 is used to calculate the minimum reserves for the maintenance period starting on 1 January 1999 and ending on 23 February 1999. The relevant aggregated data will be reported to the ECB by the end of February 1999.

2. Reserve maintenance [1)]

(EUR millions; 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
1999 Feb.	.	.	.	.	.

Source: ECB.

1) This table will contain data for completed maintenance periods. The first maintenance period of the minimum reserve system ends on 23 February 1999.

2) 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 for each credit institution are then aggregated at the euro area-wide level.

3) Aggregate average daily holdings of credit institutions subject to minimum reserve requirements on their reserve accounts over the maintenance period.

4) 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.

5) 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.

6) 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).

2 Monetary and financial developments in the euro area

Table 2.1

Aggregated balance sheet of the Eurosystem [1) 2)]

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

1. Assets

		Loans to 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	Fixed assets	Remaining assets	**Total assets**
			MFIs	General govern-ment	Other euro area residents		MFIs	General govern-ment	Other euro area residents		MFIs	Other euro area residents				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1997	Sep.	245.1	222.6	21.8	0.6	115.8	0.8	113.7	1.3	2.8	0.5	2.3	278.8	7.1	44.9	694.5
	Oct.	250.7	228.3	21.8	0.6	114.0	0.7	112.0	1.3	2.8	0.5	2.3	278.2	7.2	43.2	696.1
	Nov.	242.1	219.7	21.8	0.6	113.9	0.7	111.7	1.5	2.8	0.5	2.3	280.3	7.2	54.0	700.3
	Dec.	254.3	232.5	21.1	0.6	114.3	0.7	112.1	1.5	2.9	0.5	2.4	288.8	7.0	52.3	719.6
1998	Jan.	238.1	216.5	21.2	0.4	111.9	1.0	109.5	1.5	2.9	0.5	2.5	290.9	7.2	41.2	692.3
	Feb.	261.0	239.2	21.2	0.7	108.3	1.0	105.9	1.5	2.9	0.6	2.4	291.2	7.3	42.5	713.3
	Mar.	246.7	225.3	21.2	0.2	106.7	2.3	103.1	1.3	3.0	0.6	2.5	290.0	7.5	39.6	693.4
	Apr.	241.0	219.4	21.2	0.4	102.5	2.5	99.2	0.9	3.0	0.6	2.5	294.6	7.6	43.9	692.7
	May	243.0	221.6	21.2	0.3	101.9	2.8	98.2	0.9	3.1	0.6	2.5	297.9	7.7	47.0	700.6
	June	325.4	304.1	21.1	0.2	105.4	6.6	98.0	0.8	3.3	0.8	2.5	288.0	7.8	48.0	777.9
	July	338.5	317.2	21.1	0.2	87.8	3.2	83.8	0.8	4.7	2.1	2.6	292.2	8.0	50.1	781.4
	Aug.	339.9	318.5	21.1	0.2	88.1	2.8	84.5	0.9	4.7	2.0	2.7	290.4	8.0	55.1	786.1
	Sep.	326.7	305.4	21.1	0.2	82.7	1.0	81.0	0.7	4.7	2.0	2.7	288.1	8.0	50.3	760.5
	Oct.	326.9	305.6	21.1	0.2	73.3	0.9	71.7	0.7	4.7	2.0	2.7	297.5	8.1	49.9	760.4
	Nov.	322.2	300.7	21.1	0.4	78.0	1.0	76.3	0.6	4.7	2.0	2.7	305.1	8.1	51.5	769.6
	Dec. (p)	225.7	205.2	20.4	0.1	87.8	1.1	86.2	0.5	5.4	1.7	3.7	316.5	8.0	47.6	691.0

2. Liabilities

		Currency in circulation	Deposits of euro area residents				Money market paper	Debt securities issued	Capital and reserves	External liabilities	Remaining liabilities	**Total liabilities**
				MFIs	Central government	Other general government/ other euro area residents						
		1	2	3	4	5	6	7	8	9	10	11
1997	Sep.	337.2	139.6	80.4	55.8	3.3	17.3	16.8	100.8	15.9	67.0	694.5
	Oct.	337.2	144.0	88.6	51.9	3.5	17.0	16.6	99.9	15.7	65.6	696.1
	Nov.	340.7	141.6	82.3	54.5	4.8	13.3	15.6	101.0	15.9	72.3	700.3
	Dec.	352.8	147.0	91.9	52.2	2.9	13.2	15.0	105.6	16.1	69.8	719.6
1998	Jan.	338.7	136.3	83.4	50.7	2.2	13.9	16.3	107.4	16.1	63.5	692.3
	Feb.	338.7	159.2	93.7	61.5	4.0	13.3	16.5	105.6	15.1	64.9	713.3
	Mar.	339.3	137.9	88.4	46.8	2.7	11.3	17.2	104.8	15.3	67.5	693.4
	Apr.	342.6	131.3	84.8	44.3	2.2	12.0	16.9	103.7	16.4	69.6	692.7
	May	344.9	141.9	90.9	47.0	4.0	13.1	15.3	103.5	15.9	66.1	700.6
	June	344.2	208.0	149.3	54.2	4.5	13.5	14.1	111.6	20.8	65.6	777.9
	July	349.2	199.9	132.8	64.0	3.0	13.9	14.3	110.3	24.0	69.9	781.4
	Aug.	343.4	208.8	135.5	69.7	3.5	12.4	13.5	110.2	21.6	76.2	786.1
	Sep.	340.3	195.9	124.4	67.1	4.5	11.2	12.8	106.4	23.2	70.8	760.5
	Oct.	341.1	198.2	129.2	64.7	4.3	11.7	11.8	106.6	22.6	68.4	760.4
	Nov.	342.9	210.5	147.3	56.8	6.4	12.5	11.6	103.3	20.0	68.9	769.6
	Dec. (p)	357.7	146.9	89.1	54.9	2.9	7.2	6.7	97.4	18.5	56.6	691.0

Source: ECB

1) *The ECB was established on 1 June 1998. The data shown for the Eurosystem relate to the ECB (as from June 1998) and the national central banks of Member States in the euro area.*

2) *Data have been revised in the light of new information.*

Table 2.2

Aggregated balance sheet of the other euro area MFIs (excluding the Eurosystem) [1)]

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

1. Assets

		Loans to euro area residents	MFIs	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	MFIs	General government	Other euro area residents	Money market paper	Holdings of shares/ other equity issued by euro area residents	MFIs	Other euro area residents	External assets	Fixed assets	Remaining assets	**Total assets**
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1997	Sep.	8,139.6	2,735.2	814.4	4,590.0	1,888.4	631.1	1,068.9	188.4	104.9	307.0	90.5	216.5	1,553.3	238.4	776.1	13,007.7
	Oct.	8,226.3	2,793.5	816.4	4,616.4	1,891.2	635.4	1,068.1	187.7	105.7	311.8	91.7	220.1	1,540.5	241.3	789.1	13,105.8
	Nov.	8,322.1	2,846.1	834.5	4,641.5	1,903.2	639.7	1,073.4	190.1	103.7	316.6	92.5	224.1	1,597.4	243.9	822.3	13,309.2
	Dec.	8,433.6	2,903.6	821.4	4,708.7	1,865.8	633.9	1,050.3	181.6	98.6	329.8	94.2	235.6	1,592.1	238.9	796.8	13,355.7
1998	Jan.	8,499.5	2,973.0	806.3	4,720.1	1,909.1	647.0	1,073.8	188.4	104.1	351.1	102.2	248.9	1,595.6	236.4	827.2	13,523.0
	Feb.	8,537.0	2,985.5	807.9	4,743.6	1,930.4	650.7	1,086.0	193.6	105.7	363.6	104.6	259.0	1,622.0	236.7	832.6	13,628.1
	Mar.	8,560.1	2,978.7	806.0	4,775.4	1,956.2	654.2	1,103.8	198.2	104.6	384.4	108.9	275.4	1,675.8	238.0	811.1	13,730.2
	Apr.	8,616.1	2,999.1	810.9	4,806.1	1,977.0	663.9	1,114.6	198.5	105.6	396.0	112.1	284.0	1,632.6	238.2	829.4	13,794.9
	May	8,617.8	2,994.1	799.7	4,824.0	1,998.6	670.6	1,126.2	201.8	106.2	403.9	114.4	289.5	1,631.1	247.0	843.7	13,848.4
	June	8,751.6	3,069.9	805.8	4,875.9	2,013.7	680.8	1,137.5	195.3	103.8	400.9	116.2	284.7	1,674.4	240.2	736.3	13,920.8
	July	8,732.2	3,008.7	801.4	4,922.1	2,032.9	694.9	1,137.1	200.9	103.9	392.2	115.4	276.8	1,633.1	235.3	780.7	13,910.4
	Aug.	8,755.1	3,035.2	803.9	4,916.0	2,040.8	703.5	1,136.0	201.4	103.4	386.4	116.4	270.0	1,640.6	236.3	768.8	13,931.6
	Sep.	8,819.6	3,048.5	806.9	4,964.1	2,046.7	709.0	1,135.7	201.9	101.9	379.7	107.8	271.9	1,624.5	237.0	782.1	13,991.5
	Oct.	8,942.9	3,131.7	812.8	4,998.4	2,069.9	709.6	1,154.5	205.8	101.7	386.8	114.2	272.6	1,621.1	239.0	782.1	14,143.5
	Nov.	9,071.2	3,208.7	819.6	5,042.9	2,071.1	719.0	1,151.7	200.3	108.5	401.2	115.2	286.1	1,665.6	241.2	795.0	14,353.8
	Dec. [p]	9,075.1	3,155.6	820.5	5,099.0	2,034.6	729.6	1,109.6	195.4	102.4	424.1	120.3	303.8	1,611.8	243.0	810.4	14,301.3

2. Liabilities

		Currency in circulation	Deposits of euro area residents	MFIs	Central government	Other general government/ other euro area residents	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units	Debt securities issued	Money market paper	Capital and reserves	External liabilities	Remaining liabilities	**Total liabilities**
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1997	Sep.	0.4	7,467.7	2,841.8	95.8	4,530.1	1,140.7	1,897.7	1,284.8	207.0	254.7	1,906.8	143.6	677.1	1,338.8	1,218.7	13,007.7
	Oct.	0.4	7,545.8	2,904.3	99.4	4,542.0	1,141.3	1,907.5	1,286.4	206.8	249.2	1,913.2	146.6	675.5	1,343.1	1,232.0	13,105.8
	Nov.	0.4	7,637.8	2,972.8	88.4	4,576.6	1,169.3	1,902.6	1,289.1	215.6	251.9	1,923.9	145.6	677.7	1,393.7	1,278.2	13,309.2
	Dec.	0.4	7,764.0	2,999.8	102.1	4662.1	1,227.7	1,902.7	1,326.4	205.4	243.4	1,925.1	138.8	687.5	1,383.0	1,213.5	13,355.7
1998	Jan.	0.4	7,781.9	3,029.6	95.6	4,656.6	1,178.0	1,919.3	1,341.9	217.5	247.9	1,944.5	145.2	690.8	1,435.7	1,276.6	13,523.0
	Feb.	0.4	7,830.0	3,066.3	98.4	4,665.3	1,179.8	1,924.0	1,345.2	216.3	250.3	1,967.8	147.2	696.0	1,469.4	1,267.0	13,628.1
	Mar.	0.4	7,836.2	3,076.9	92.8	4,666.5	1,208.8	1,898.9	1,346.5	212.3	251.6	1,985.1	149.5	710.3	1,521.2	1,275.7	13,730.2
	Apr.	0.4	7,866.8	3,079.7	97.2	4,690.0	1,223.2	1,914.1	1,346.1	206.6	254.5	1,999.4	156.3	702.6	1,492.3	1,322.4	13,794.9
	May	0.4	7,890.0	3,092.8	88.2	4,709.0	1,240.0	1,912.8	1,348.0	208.2	257.8	2,012.1	150.9	712.2	1,485.2	1,339.8	13,848.4
	June	0.4	7,999.1	3,174.8	94.0	4,730.3	1,287.9	1,892.3	1,346.7	203.4	257.2	2,041.2	145.9	718.7	1,496.1	1,262.1	13,920.8
	July	0.4	7,962.2	3,163.3	92.4	4,706.5	1,248.5	1,896.4	1,346.1	215.5	258.3	2,061.8	152.8	720.1	1,471.4	1,283.4	13,910.4
	Aug.	0.4	7,981.8	3,183.7	95.4	4,702.7	1,239.7	1,907.0	1,347.8	208.2	262.4	2,072.6	152.9	720.1	1,475.8	1,265.6	13,931.6
	Sep.	0.4	8,013.7	3,212.6	96.3	4,704.8	1,260.6	1,889.7	1,346.9	207.7	258.0	2,074.8	153.2	718.4	1,484.9	1,288.2	13,991.5
	Oct.	0.4	8,105.1	3,285.9	97.0	4,722.2	1,265.7	1,888.1	1,350.1	218.3	256.9	2,077.7	160.2	722.5	1,532.4	1,288.2	14,143.5
	Nov.	0.4	8,213.5	3,370.6	98.2	4,744.7	1,306.0	1,887.6	1,352.7	198.3	257.0	2,093.6	168.6	724.3	1,600.1	1,296.4	14,353.8
	Dec. [p]	0.4	8,261.1	3,312.3	102.2	4,846.6	1,375.5	1,906.2	1,383.7	181.2	242.1	2,090.8	165.3	730.0	1,538.1	1,273.4	14,301.3

Source: ECB.

1) Data have been revised in the light of new information.

Table 2.3

Consolidated balance sheet of the euro area MFIs (including the Eurosystem [1)]) [2)]

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

1. Assets

		Loans to euro area residents	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government	Other euro area residents	Holdings of shares/other equity issued by other euro area residents	External assets	Fixed assets	Remaining assets	**Total assets**
		1	2	3	4	5	6	7	8	9	10	11
1997	Sep.	5,426.8	836.2	4,590.6	1,372.3	1,182.6	189.7	218.9	1,832.1	245.5	792.8	9,888.4
	Oct.	5,455.3	838.2	4,617.1	1,369.0	1,180.0	189.0	222.4	1,818.7	248.4	804.4	9,918.3
	Nov.	5,498.5	856.4	4,642.1	1,376.7	1,185.0	191.6	226.4	1,877.6	251.1	848.1	10,078.4
	Dec.	5,551.8	842.5	4,709.3	1,345.5	1,162.4	183.1	238.0	1,880.9	245.9	814.3	10,076.4
1998	Jan.	5,548.1	827.5	4,720.6	1,373.1	1,183.2	189.9	251.4	1,886.5	243.6	839.5	10,142.1
	Feb.	5,573.4	829.1	4,744.3	1,387.0	1,191.9	195.2	261.4	1,913.3	244.0	846.5	10,225.6
	Mar.	5,602.8	827.2	4,775.6	1,406.3	1,206.8	199.5	277.9	1,965.7	245.5	821.5	10,319.8
	Apr.	5,638.6	832.1	4,806.5	1,413.2	1,213.8	199.3	286.4	1,927.2	245.8	843.9	10,355.1
	May	5,645.2	820.9	4,824.3	1,427.1	1,224.4	202.7	292.0	1,929.0	254.7	861.4	10,409.4
	June	5,703.0	826.8	4,876.2	1,431.7	1,235.5	196.1	287.2	1,962.4	248.0	753.9	10,386.1
	July	5,744.8	822.5	4,922.3	1,422.6	1,221.0	201.7	279.5	1,925.3	243.3	800.6	10,416.2
	Aug.	5,741.2	825.0	4,916.2	1,422.7	1,220.4	202.2	272.7	1,931.0	244.3	793.8	10,405.7
	Sep.	5,792.4	828.0	4,964.4	1,419.3	1,216.7	202.6	274.6	1,912.7	245.0	802.4	10,446.3
	Oct.	5,832.5	833.9	4,998.6	1,432.7	1,226.2	206.5	275.3	1,918.7	247.1	802.6	10,508.8
	Nov.	5,884.0	840.7	5,043.3	1,429.0	1,228.1	201.0	288.8	1,970.7	249.3	816.3	10,638.1
	Dec. [(p)]	5,940.0	840.8	5,099.1	1,391.8	1,195.9	195.9	307.5	1,928.2	250.9	822.7	10,641.0

2. Liabilities

		Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeem-able at notice	Repur-chase agree-ments	Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities	Re-maining liabilities	Excess of inter-MFI liabilities	**Total liabilities**
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1997	Sep.	309.3	151.7	4,533.4	1,143.9	1,897.7	1,284.8	207.1	310.7	1,291.8	687.0	1,354.6	1,285.7	-35.6	9,888.4
	Oct.	309.8	151.3	4,545.6	1,144.6	1,907.6	1,286.4	206.9	307.1	1,293.7	683.3	1,358.8	1,297.7	-28.9	9,918.3
	Nov.	312.9	142.9	4,581.4	1,173.8	1,902.8	1,289.1	215.6	307.2	1,299.0	685.6	1,409.6	1,350.5	-10.6	10,078.4
	Dec.	318.4	154.3	4,665.1	1,230.6	1,902.7	1,326.4	205.4	296.8	1,305.5	698.3	1,399.1	1,283.3	-44.4	10,076.4
1998	Jan.	310.2	146.3	4,658.9	1,180.2	1,919.3	1,341.9	217.5	302.8	1,312.9	695.6	1,451.8	1,340.1	-76.4	10,142.1
	Feb.	310.5	160.0	4,669.3	1,183.7	1,924.0	1,345.2	216.3	305.0	1,332.6	696.5	1,484.5	1,331.9	-64.8	10,225.6
	Mar.	310.6	139.6	4,669.2	1,211.5	1,898.9	1,346.5	212.3	307.8	1,345.8	705.6	1,536.6	1,343.3	-38.7	10,319.8
	Apr.	313.6	141.6	4,692.2	1,225.4	1,914.1	1,346.1	206.6	317.2	1,350.0	693.7	1,508.8	1,392.1	-54.0	10,355.1
	May	315.9	135.1	4,713.0	1,244.0	1,912.8	1,348.0	208.2	315.6	1,354.0	700.7	1,501.2	1,405.8	-32.0	10,409.4
	June	314.2	148.2	4,734.8	1,292.4	1,892.3	1,346.7	203.4	312.9	1,367.9	713.3	1,516.9	1,327.8	-49.9	10,386.1
	July	319.4	156.4	4,709.5	1,251.5	1,896.4	1,346.1	215.5	321.1	1,377.9	713.0	1,495.4	1,353.3	-29.7	10,416.2
	Aug.	313.7	165.2	4,706.2	1,243.2	1,907.0	1,347.8	208.2	324.3	1,379.8	711.9	1,497.4	1,341.8	-34.5	10,405.7
	Sep.	310.6	163.3	4,709.3	1,265.1	1,889.7	1,346.9	207.7	320.5	1,377.5	714.9	1,508.0	1,359.0	-17.0	10,446.3
	Oct.	312.1	161.7	4,726.5	1,270.0	1,888.1	1,350.1	218.3	327.2	1,378.9	713.0	1,555.0	1,356.6	-22.3	10,508.8
	Nov.	313.0	155.0	4,751.0	1,312.2	1,887.6	1,352.7	198.4	329.5	1,385.2	710.4	1,620.1	1,365.3	8.5	10,638.1
	Dec. [(p)]	322.9	157.1	4,849.5	1,378.4	1,906.2	1,383.7	181.2	312.1	1,366.8	705.4	1,556.6	1,330.0	40.6	10,641.0

Source: ECB.

1) The ECB was established on 1 June 1998. The data shown for the Eurosystem relate to the ECB (as from June 1998) and the national central banks of Member States in the euro area.

2) Data have been revised in the light of new information.

Table 2.4

Monetary aggregates [1) 2)]

(EUR billions (not seasonally adjusted; end-of-period stocks) and annual percentage changes)

		M1						M2					
								Total	Annual percentage change [3)]	Repurchase agreements	Money market fund shares/ units and money market paper	Debt securities up to 2 years
		Currency in circulation	Overnight deposits	Total	Annual percentage change [3)]	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months					
		1	2	3	4	5	6	7	8	9	10	11
1997	Sep.	309.3	1,208.4	1,517.7	8.7	899.3	1,119.2	3,536.2	4.0	207.1	310.7	69.0
	Oct.	309.8	1,210.8	1,520.5	9.2	906.5	1,121.7	3,548.8	4.3	206.9	307.1	70.8
	Nov.	312.9	1,242.4	1,555.3	8.4	901.0	1,124.7	3,581.0	4.1	215.6	307.2	68.1
	Dec.	318.4	1,300.2	1,618.6	6.5	894.0	1,159.6	3,672.3	3.3	205.4	296.8	71.9
1998	Jan.	310.2	1,251.3	1,561.5	8.0	905.6	1,177.6	3,644.7	4.0	217.5	302.8	73.1
	Feb.	310.5	1,251.8	1,562.4	8.5	902.2	1,181.7	3,646.3	4.2	216.3	305.0	77.9
	Mar.	310.6	1,281.4	1,592.0	9.0	875.9	1,183.5	3,651.3	4.4	212.3	307.8	83.9
	Apr.	313.6	1,293.4	1,607.0	10.5	889.8	1,185.3	3,682.0	5.1	206.6	317.2	84.5
	May	315.9	1,310.4	1,626.4	10.2	886.2	1,189.3	3,701.9	5.2	208.2	315.6	87.6
	June	314.2	1,359.5	1,673.7	9.7	868.2	1,189.1	3,731.0	5.2	203.4	312.9	86.8
	July	319.4	1,319.0	1,638.4	8.3	869.9	1,189.6	3,698.0	4.3	215.5	321.1	92.3
	Aug.	313.7	1,310.2	1,623.9	8.4	876.2	1,192.7	3,692.8	4.2	208.2	324.3	86.8
	Sep.	310.6	1,330.7	1,641.3	8.1	863.9	1,192.4	3,697.6	4.6	207.7	320.5	81.3
	Oct.	312.1	1,334.5	1,646.7	8.3	866.4	1,195.9	3,709.0	4.5	218.3	327.2	84.7
	Nov.	313.0	1,376.9	1,689.9	8.7	870.2	1,198.4	3,758.6	5.0	198.4	329.5	81.9
	Dec. [(p)]	322.9	1,444.3	1,767.2	9.2	883.2	1,225.1	3,875.6	5.5	181.2	312.1	67.1

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) Data have been revised in the light of new information.

3) Calculated in this issue from amounts outstanding adjusted for incomplete coverage of the data before September 1997. In the near future, the difference in levels will be adjusted for reclassifications, other revaluations and any other changes which do not arise from transactions.

M3			Memo: Non-monetary liabilities of MFIs							
				Deposits					Total	
Total	Annual percentage change [3]	3-month moving average (centered)		With agreed maturity over 2 years	Redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves		
12	13	14	15	16	17	18	19	20		
4,123.0	4.0	4.1	1,215.6	999.0	216.6	1,222.8	687.0	3,125.4	1997	Sep.
4,133.6	4.2	4.2	1,217.7	1,001.7	216.0	1,222.9	683.3	3,123.8		Oct.
4,171.9	4.3	4.2	1,218.6	1,002.5	216.1	1,230.9	685.6	3,135.1		Nov.
4,246.4	4.1	4.3	1,229.0	1,009.2	219.8	1,233.5	698.3	3,160.9		Dec.
4,238.0	4.4	4.3	1,232.0	1,014.3	217.7	1,239.8	695.6	3,167.5	1998	Jan.
4,245.5	4.4	4.4	1,239.9	1,022.4	217.5	1,254.8	696.5	3,191.2		Feb.
4,255.3	4.5	4.6	1,240.5	1,023.7	216.8	1,261.8	705.6	3,208.0		Mar.
4,290.4	5.0	4.7	1,239.7	1,025.0	214.7	1,265.5	693.7	3,198.9		Apr.
4,313.3	4.7	4.8	1,240.2	1,027.2	213.0	1,266.3	700.7	3,207.3		May
4,334.1	4.8	4.7	1,236.7	1,024.7	212.0	1,281.1	713.3	3,231.1		June
4,326.9	4.5	4.5	1,237.8	1,027.0	210.8	1,285.6	713.0	3,236.4		July
4,312.0	4.3	4.4	1,241.1	1,031.2	209.9	1,293.0	711.9	3,246.0		Aug.
4,307.1	4.5	4.6	1,235.6	1,026.3	209.3	1,296.2	714.9	3,246.7		Sep.
4,339.2	5.0	4.7	1,231.2	1,022.1	209.1	1,294.3	713.0	3,238.5		Oct.
4,368.4	4.7	4.7	1,227.4	1,017.9	209.5	1,303.3	710.4	3,241.1		Nov.
4,436.1	4.5	.	1,237.5	1,023.4	214.1	1,299.7	705.4	3,242.6	[p]	Dec.

Table 2.5

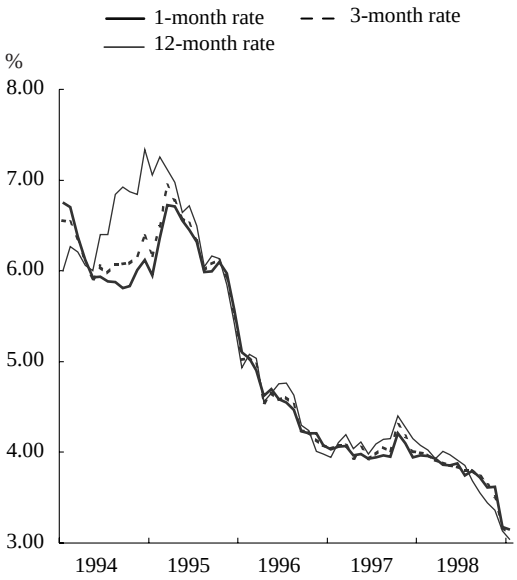
Money market interest rates [1]

(percentages per annum) [2]

	Euro area [3] [4]					United States	Japan
	Overnight deposits 1	1-month deposits 2	3-month deposits 3	6-month deposits 4	12-month deposits 5	3-month deposits 6	3-month deposits 7
1994	5.24	6.12	6.38	6.83	7.34	6.37	2.34
1995	5.62	5.57	5.49	5.62	5.42	5.44	0.50
1996	4.04	4.08	4.08	4.06	3.98	5.43	0.31
1997	3.98	3.94	4.01	4.05	4.15	5.62	0.36
1998	3.09	3.18	3.17	3.14	3.13	5.00	0.18
1998 Jan.	3.89	3.97	4.00	4.08	4.08	5.50	0.41
Feb.	4.22	3.96	3.97	3.98	4.02	5.55	0.48
Mar.	3.83	3.93	3.92	3.89	3.93	5.59	0.50
Apr.	3.76	3.86	3.89	3.93	4.01	5.60	0.45
May	3.79	3.85	3.86	3.89	3.98	5.59	0.37
June	3.76	3.88	3.84	3.85	3.91	5.59	0.43
July	3.77	3.74	3.80	3.82	3.85	5.56	0.34
Aug.	3.78	3.80	3.81	3.72	3.69	5.50	0.37
Sep.	3.81	3.73	3.73	3.64	3.55	5.20	0.12
Oct.	3.66	3.61	3.63	3.53	3.44	5.12	0.68
Nov.	3.40	3.62	3.51	3.43	3.36	5.12	0.68
Dec.	3.09	3.18	3.17	3.14	3.13	5.00	0.18
1999 Jan.	3.14	3.16	3.14	3.10	3.07	4.99	0.35
1999 8 Jan.	3.21	3.22	3.20	3.17	3.14	4.93	0.38
15	3.10	3.16	3.13	3.09	3.04	4.96	0.28
22	3.07	3.09	3.06	3.02	2.99	4.97	0.30
29	3.16	3.12	3.07	3.01	2.98	4.96	0.40

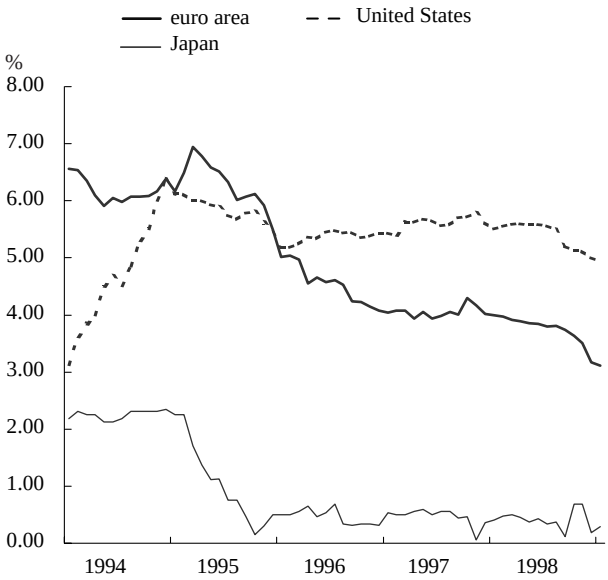
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

1) Interbank deposit bid rates to December 1998; offered rates thereafter.

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

3) Prior to January 1999, synthetic euro area rates were calculated on the basis of national rates weighted by GDP.

4) From January 1999, column 1 shows the euro overnight interest average (EONIA); other euro area money market rates from January 1999 are euro interbank offered rates (EURIBOR).

Table 2.6

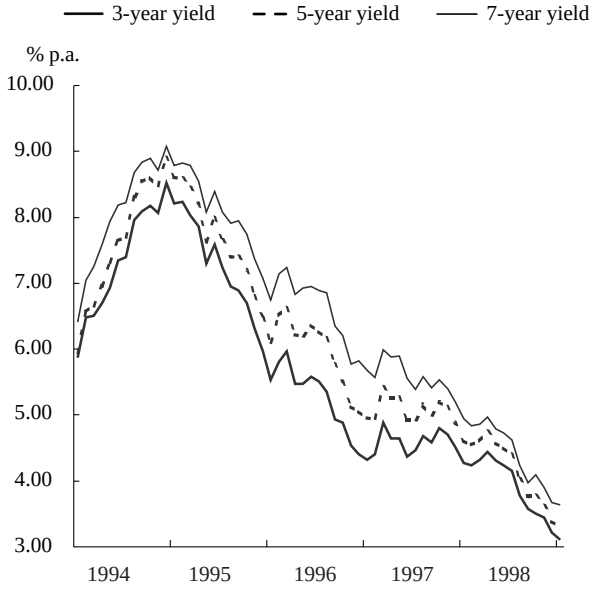
Government bond yields [1)]

(percentages per annum)

	Euro area [2)]					United States	Japan
	2 years	3 years	5 years	7 years	10 years	10 years	10 years
	1	2	3	4	5	6	7
1994	8.08	8.52	8.91	9.08	8.18	7.21	4.24
1995	5.69	5.97	6.48	7.06	8.73	6.69	3.32
1996	4.17	4.41	5.06	5.82	7.23	6.54	3.03
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
1998 Jan.	4.11	4.27	4.61	4.95	5.22	5.63	1.69
Feb.	4.08	4.24	4.55	4.84	5.12	5.65	1.71
Mar.	4.17	4.32	4.61	4.86	5.01	5.73	1.56
Apr.	4.26	4.44	4.75	4.97	5.00	5.72	1.57
May	4.13	4.30	4.58	4.79	5.06	5.73	1.30
June	4.08	4.24	4.50	4.73	4.91	5.58	1.22
July	4.04	4.16	4.41	4.62	4.82	5.53	1.36
Aug.	3.68	3.78	4.01	4.24	4.59	5.41	1.17
Sep.	3.55	3.58	3.77	3.98	4.27	4.87	0.88
Oct.	3.39	3.51	3.77	4.09	4.25	4.58	0.82
Nov.	3.33	3.44	3.62	3.90	4.24	4.89	0.89
Dec.	3.16	3.22	3.38	3.67	3.95	4.69	1.39
1999 Jan.	2.98	3.11	3.30	3.64	3.82	4.78	2.07
1999 8 Jan.	3.06	3.12	3.33	3.67	3.85	4.91	2.08
15	2.96	3.06	3.28	3.61	3.80	4.72	1.91
22	2.92	3.02	3.26	3.58	3.76	4.71	1.99
29	2.94	3.02	3.26	3.59	3.77	4.75	2.25

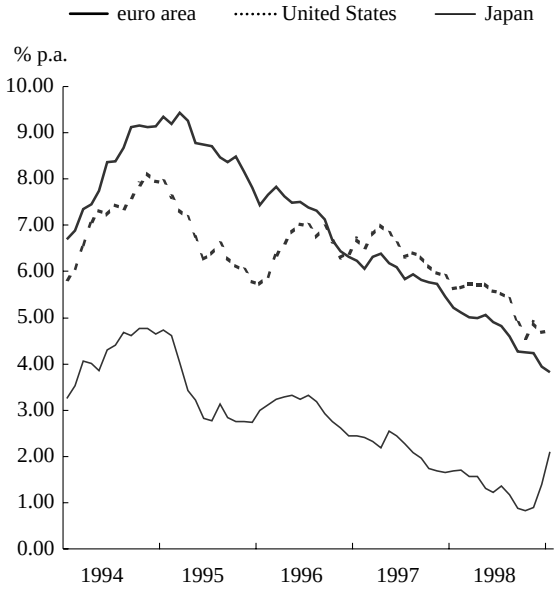
Euro area government bond yields

(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 2.7

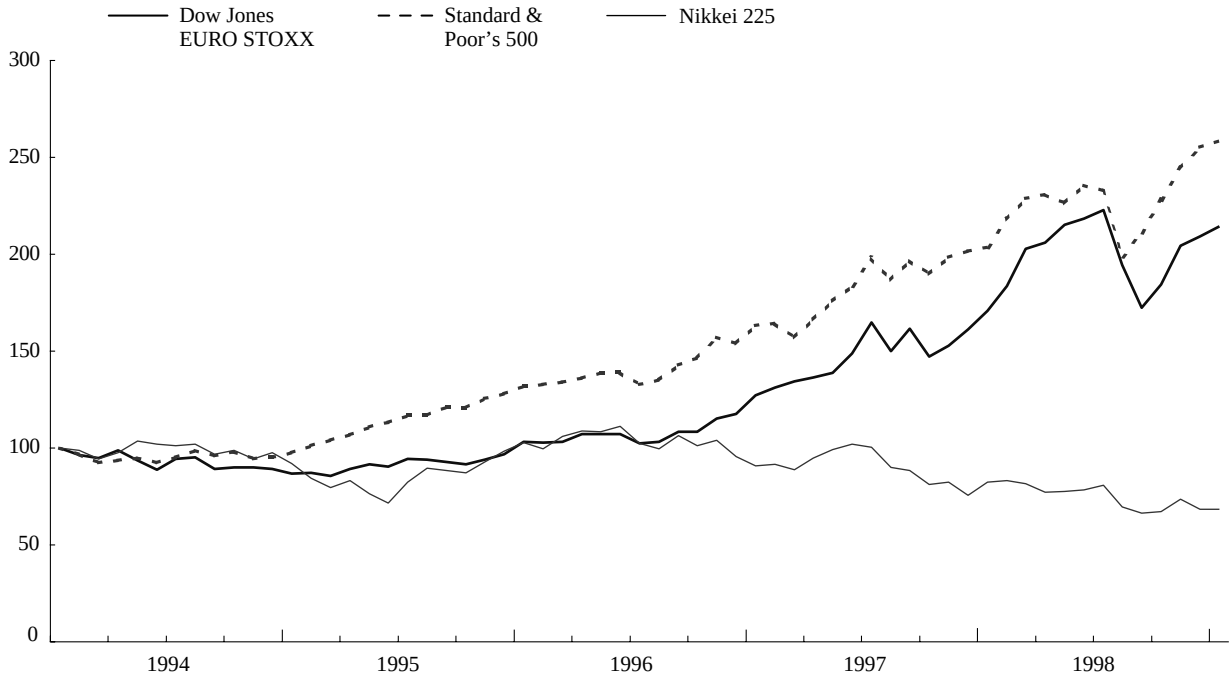
Stock market indices

(index levels in points) [1)]

		Dow Jones EURO STOXX indices											United States	Japan
		Benchmark		Main economic sectors										
		Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Conglom-erates	Industrial	Techno-logy	Utilities	Standard & Poor's 500	Nikkei 225
		1	2	3	4	5	6	7	8	9	10	11	12	13
1994		127.33	1,320.59	145.88	107.82	143.90	125.92	109.29	125.91	132.31	128.66	122.60	455.19	19,299.47
1995		138.37	1,506.82	137.78	111.06	181.13	145.46	117.66	133.05	136.18	145.57	152.09	614.57	19,417.95
1996		167.75	1,850.32	145.11	120.25	274.94	180.64	137.84	156.11	171.05	153.17	192.40	743.25	20,147.27
1997		229.86	2,531.99	166.33	159.82	324.06	249.22	188.87	210.33	204.75	248.37	225.11	962.37	15,917.07
1998		298.37	3,342.32	147.10	156.74	485.39	232.87	250.29	218.78	283.76	353.38	329.50	1,229.23	13,842.17
1998	Jan.	243.93	2,676.03	173.71	167.26	338.43	247.28	203.90	220.86	218.99	275.99	242.74	963.36	15,929.69
	Feb.	262.29	2,878.04	185.29	179.88	367.60	252.05	225.29	222.68	234.57	303.85	247.81	1,023.74	16,797.69
	Mar.	289.46	3,153.32	196.69	197.27	390.26	278.01	249.55	239.23	270.77	335.91	268.38	1,076.83	16,840.31
	Apr.	293.96	3,195.43	204.90	202.37	386.70	270.47	266.59	238.17	276.74	354.64	275.98	1,112.20	15,941.29
	May	307.44	3,357.77	211.08	207.22	401.14	280.40	276.07	248.87	302.71	378.82	285.79	1,108.42	15,514.28
	June	311.58	3,406.82	198.55	204.62	430.65	275.47	270.69	244.59	299.67	387.80	294.99	1,108.39	15,231.29
	July	318.06	3,480.63	182.52	195.81	436.13	255.90	291.41	226.39	301.26	417.31	305.08	1,156.58	16,370.17
	Aug.	277.73	3,050.59	151.13	167.11	413.58	217.55	240.10	194.28	262.30	360.33	279.30	1,074.62	15,243.98
	Sep.	246.31	2,670.97	131.62	137.37	379.55	230.22	187.86	182.29	240.51	279.90	277.86	1,020.64	14,140.69
	Oct.	263.49	2,887.11	138.21	147.48	419.19	223.71	206.17	197.45	250.98	300.39	295.80	1,098.67	13,564.51
	Nov.	291.73	3,232.44	147.95	153.01	442.91	237.51	236.66	208.39	270.40	339.22	306.30	1,176.46	14,883.70
	Dec.	298.37	3,342.32	147.10	156.74	485.39	232.87	250.29	218.78	283.76	353.38	329.50	1,229.23	13,842.17
1999	Jan.	306.01	3,486.40	146.59	152.92	498.08	226.40	254.13	229.20	301.23	367.41	339.23	1,246.89	13,859.26
1999	8 Jan.	318.46	3,627.62	152.73	161.74	508.39	236.35	268.78	241.32	307.40	381.20	348.66	1,269.73	13,391.81
	15	292.89	3,328.38	143.53	147.85	486.14	221.62	241.76	220.24	290.95	349.77	328.87	1,212.19	13,738.86
	22	299.42	3,436.85	141.48	147.73	490.01	219.17	247.81	225.07	301.86	361.09	332.80	1,235.16	14,154.40
	29	309.01	3,545.89	143.79	146.41	506.00	215.06	253.02	239.68	311.95	380.47	342.52	1,265.37	14,499.25

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

(base month: January 1994 = 100; monthly)



Source: Reuters.

1) End-of-period values to December 1998; period averages thereafter.

Table 2.8

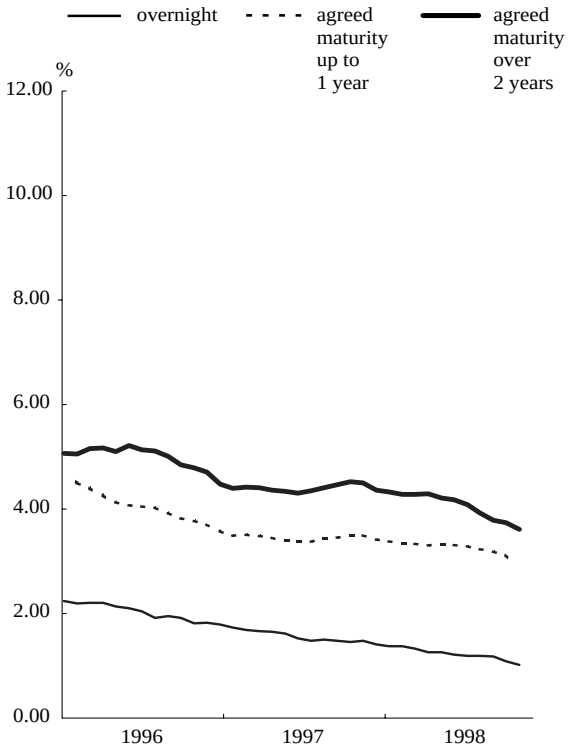
Retail bank interest rates

(percentages per annum; lending interest rates are provisional)

		Deposit interest rates						Lending interest rates			
		Overnight	With agreed maturity			Redeemable at notice		To enterprises		To households	
			Up to 1 year	Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	Up to 1 year	Over 1 year	Consumer lending	For house purchase
		1	2	3	4	5	6	7	8	9	10
1996		1.94	4.09	4.69	5.04	3.02	3.16	8.90	.	11.03	7.76
1997		1.47	3.41	3.63	4.40	2.80	3.09	7.54	6.69	9.97	6.81
1998		1.10	3.20	3.22	4.06	2.63	3.25	6.69	5.94	9.39	5.98
1997	Dec.	1.36	3.44	3.53	4.49	2.79	3.39	7.12	6.42	9.77	6.64
1998	Jan.	1.29	3.36	3.41	4.34	2.77	3.35	7.07	6.36	9.70	6.53
	Feb.	1.25	3.32	3.36	4.31	2.78	3.30	7.03	6.30	9.69	6.41
	Mar.	1.25	3.30	3.33	4.26	2.75	3.32	6.99	6.19	9.63	6.31
	Apr.	1.20	3.27	3.30	4.26	2.74	3.30	6.89	6.12	9.49	6.17
	May	1.12	3.24	3.26	4.27	2.73	3.33	6.81	6.09	9.46	6.15
	June	1.12	3.27	3.28	4.19	2.61	3.34	6.74	6.04	9.46	6.08
	July	1.08	3.25	3.26	4.15	2.58	3.29	6.61	6.00	9.39	5.94
	Aug.	1.06	3.23	3.23	4.05	2.56	3.30	6.58	5.91	9.39	5.88
	Sep.	1.05	3.17	3.18	3.88	2.54	3.21	6.56	5.78	9.37	5.75
	Oct.	1.04	3.12	3.12	3.74	2.52	3.14	6.45	5.65	9.15	5.58
	Nov.	0.94	3.06	3.05	3.70	2.51	3.12	6.34	5.57	9.03	5.52
	Dec.	0.87	2.82	2.82	3.57	2.45	3.03	6.17	5.26	8.92	5.38

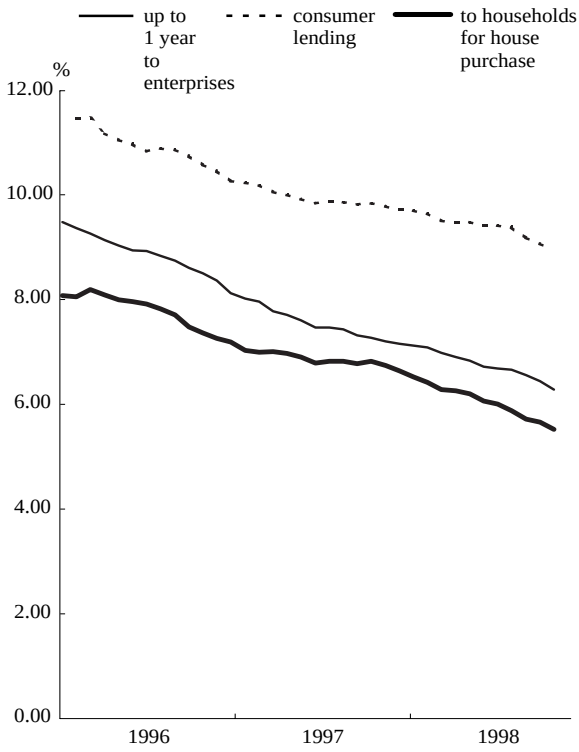
Deposit interest rates

(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 for analysing 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 the monthly 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.

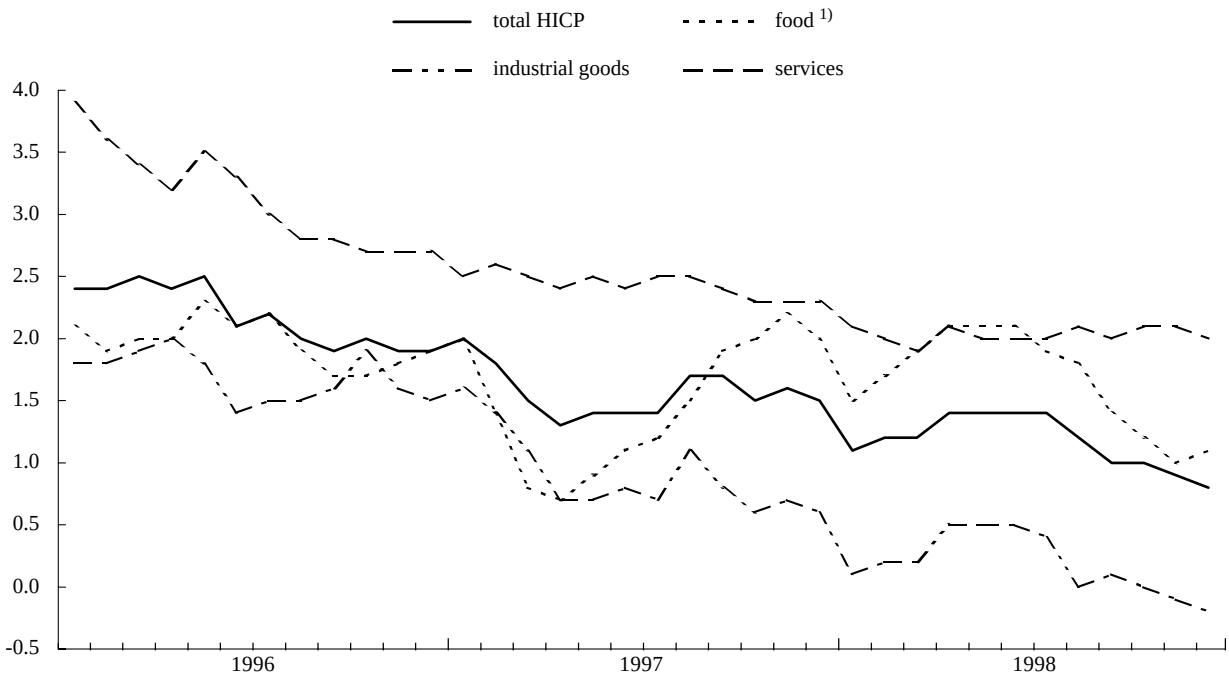
4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices

(annual percentage changes, unless otherwise indicated)

		Total (index, 1996 = 100)	Total	Goods							Services
					Food [1]			Industrial goods			
						Processed food [1]	Unprocessed food		Non-energy industrial goods	Energy	
	Weight in the total (%) [2]	100.0	100.0	65.4	22.9	13.5	9.4	42.5	33.7	8.8	34.6
		1	2	3	4	5	6	7	8	9	10
1995		97.9	-	-	-	-	-	-	-	-	-
1996 [3]		100.0	2.2	1.8	2.0	2.0	1.9	1.7	1.5	2.4	3.1
1997		101.6	1.6	1.1	1.5	1.5	1.5	0.9	0.5	2.6	2.4
1998		102.7	1.1	0.7	1.6	1.4	2.0	0.2	0.9	-2.6	2.0
1997	Q4	102.0	1.5	1.1	2.1	1.5	2.9	0.6	0.5	1.0	2.3
1998	Q1	102.2	1.2	0.7	1.7	1.3	2.3	0.2	0.6	-1.5	2.0
	Q2	102.8	1.4	1.1	2.1	1.6	2.9	0.5	1.0	-1.3	2.0
	Q3	103.0	1.2	0.7	1.7	1.5	2.1	0.2	1.1	-3.2	2.0
	Q4	102.9	0.9	0.3	1.1	1.2	0.8	-0.1	1.0	-4.3	2.0
1997	Dec.	102.1	1.5	1.1	2.0	1.3	2.9	0.6	0.6	0.5	2.3
1998	Jan.	102.0	1.1	0.6	1.5	1.3	1.8	0.1	0.5	-1.4	2.1
	Feb.	102.3	1.2	0.7	1.7	1.3	2.2	0.2	0.6	-1.4	2.0
	Mar.	102.4	1.2	0.8	1.9	1.4	2.7	0.2	0.7	-1.7	1.9
	Apr.	102.6	1.4	1.1	2.1	1.4	3.1	0.5	0.9	-0.9	2.1
	May	102.9	1.4	1.1	2.1	1.7	2.7	0.5	1.0	-1.4	2.0
	June	102.9	1.4	1.1	2.1	1.6	2.8	0.5	1.0	-1.6	2.0
	July	103.0	1.4	0.9	1.9	1.6	2.4	0.4	1.0	-1.9	2.0
	Aug.	103.0	1.2	0.7	1.8	1.5	2.3	0.0	1.1	-3.8	2.1
	Sep.	102.9	1.0	0.5	1.4	1.3	1.5	0.1	1.1	-3.8	2.0
	Oct.	102.9	1.0	0.4	1.2	1.3	1.0	0.0	1.0	-4.0	2.1
	Nov.	102.9	0.9	0.3	1.0	1.3	0.6	-0.1	1.0	-4.3	2.1
	Dec.	102.9	0.8	0.2	1.1	1.2	0.9	-0.2	0.9	-4.7	2.0



Source: Eurostat.

1) Including alcoholic beverages and tobacco.

2) Referring to index period 1998.

3) Annual percentage changes in 1996 include France for the overall index, but do not cover France for all components of the HICP.

Table 4.2

Selected other price and cost indicators

(annual percentage changes, unless otherwise indicated)

1. Industry and commodity prices

		Industrial producer prices									World market prices of raw materials [1]	
		Total excluding construction (index, 1995 = 100)	Total excluding construction	Manufacturing	Intermediate goods	Capital goods	Consumer goods			Construction [2]	Total	Total excluding energy
								Durable consumer goods	Non-durable consumer goods			
		1	2	3	4	5	6	7	8	9	10	11
1995		100.0	3.6	3.9	5.0	1.7	2.1	1.4	2.4	.	0.2	2.1
1996		100.6	0.6	1.0	-0.6	1.3	1.6	1.3	1.8	1.2	6.5	-6.9
1997		101.7	1.0	0.6	1.0	0.2	1.0	0.2	1.4	1.4	10.0	13.0
1998		.	.	.	.	.	.	.	.	.	-21.2	-12.5
1997	Q4	102.1	1.1	1.0	1.0	0.3	1.2	0.1	1.8	1.4	1.8	14.1
1998	Q1	101.7	0.4	0.6	-0.1	0.2	0.9	-0.2	1.6	0.4	-14.1	-0.1
	Q2	101.3	-0.2	0.0	-0.8	0.3	.	.	0.9	0.2	-16.6	-10.7
	Q3	100.6	-1.3	-1.1	-2.6	0.4	.	.	0.2	-0.2	-24.3	-18.1
	Q4	.	.	.	.	.	.	.	.	.	-30.0	-20.5
1998	Jan.	101.8	0.6	0.8	0.1	0.3	1.1	-0.2	1.7	-	-12.7	5.4
	Feb.	101.7	0.5	0.6	-0.1	0.2	0.9	-0.3	1.6	-	-13.8	-0.5
	Mar.	101.5	0.3	0.5	-0.3	0.3	0.8	-0.2	1.4	-	-15.9	-4.8
	Apr.	101.4	0.1	0.4	-0.4	0.2	0.7	-0.2	1.2	-	-12.2	-6.0
	May	101.3	-0.2	-0.1	-0.9	0.3	0.5	0.0	0.8	-	-18.6	-12.8
	June	101.1	-0.5	-0.3	-1.3	0.3	.	.	0.8	-	-18.9	-13.3
	July	100.9	-0.8	-0.6	-1.9	0.4	.	.	0.6	-	-21.1	-14.4
	Aug.	100.6	-1.4	-1.2	-2.8	0.4	.	.	0.3	-	-26.3	-19.0
	Sep.	100.4	-1.6	-1.5	-3.0	0.3	.	.	-0.2	-	-25.4	-20.9
	Oct.	100.1	-2.0	-1.8	-3.6	0.3	.	.	-0.3	-	-30.6	-23.6
	Nov.	99.8	-2.3	-2.0	-4.1	0.2	.	.	-0.6	-	-28.6	-18.4
	Dec.	.	.	.	.	.	.	.	.	-	-30.8	-19.5
1999	Jan.	.	.	.	.	.	.	.	.	-	-23.3	-17.2

2. Deflators of gross domestic product and indicators of labour costs

		Deflators of GDP (s.a.)					Unit labour costs in whole economy	Compensation per employee in whole economy	Earnings per employee in manufacturing
		GDP (index, 1995 = 100)	GDP	Private consumption	Government consumption	Gross fixed capital formation			
		12	13	14	15	16	17	18	19
1995		100.0	2.7	2.6	3.0	2.1	1.7	3.5	3.7
1996		102.0	2.0	2.4	2.4	0.7	1.8	3.4	3.5
1997		103.4	1.4	1.8	2.0	0.9	0.6	2.6	3.0
1996	Q1	101.4	2.6	2.5	3.3	1.2	2.6	3.6	4.1
	Q2	101.8	2.1	2.6	2.2	0.7	2.0	3.3	3.2
	Q3	102.2	1.7	2.3	2.1	0.5	1.7	3.5	3.6
	Q4	102.6	1.5	2.1	2.2	0.4	1.5	3.3	2.8
1997	Q1	102.8	1.4	2.0	2.1	0.6	1.8	2.9	3.1
	Q2	103.2	1.3	1.6	2.3	0.7	0.3	2.9	3.4
	Q3	103.6	1.4	1.9	1.9	1.1	-0.1	2.3	2.7
	Q4	104.0	1.4	1.7	1.9	1.0	-0.3	2.2	2.8
1998	Q1	104.3	1.4	1.4	1.4	0.6	-2.3	1.0	2.2
	Q2	104.8	1.5	1.5	1.5	0.2	-0.7	1.1	2.8
	Q3	105.2	1.5	1.1	1.8	-0.3	-0.7	1.1	2.6

Sources: Eurostat, except columns 10 and 11 (HWWA-Institut für Wirtschaftsforschung, Hamburg), columns 12 to 16 (ECB calculations based on deflators in national currency) and columns 17 to 19 (ECB calculations based on non-harmonised national data).

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

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

5 Real economy indicators in the euro area

Table 5.1

Output and demand indicators

1. Gross domestic product and its components

(ECU billions, seasonally adjusted, at 1990 prices) [1]

		GDP	Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports [2]	Imports [2]
		1	2	3	4	5	6	7
1995		4,495.9	4,401.3	2,761.3	708.2	908.0	1,443.5	1,348.9
1996		4,567.8	4,450.1	2,812.7	720.1	912.1	1,509.8	1,392.1
1997		4,683.9	4,538.5	2,854.1	721.8	929.8	1,663.3	1,517.9
1997	Q3	1,177.8	1,136.6	713.9	181.2	233.6	429.6	388.4
	Q4	1,184.9	1,147.7	720.1	178.7	235.9	431.8	394.6
1998	Q1	1,195.2	1,164.6	726.6	181.4	239.9	431.9	401.4
	Q2	1,201.5	1,167.2	730.3	181.8	237.1	440.8	406.5
	Q3	1,209.7	1,172.4	736.8	181.4	241.0	445.4	408.1

(annual percentage changes) [1]

		GDP	Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports [2]	Imports [2]
		8	9	10	11	12	13	14
1995		2.2	1.9	1.9	0.1	3.3	8.1	7.5
1996		1.6	1.1	1.9	1.7	0.5	4.6	3.2
1997		2.5	2.0	1.5	0.2	1.9	10.2	9.0
1997	Q3	2.8	2.0	1.2	0.3	1.8	13.1	11.6
	Q4	3.1	2.6	2.1	-0.8	2.4	11.2	10.3
1998	Q1	3.7	3.9	2.7	0.3	5.1	10.2	11.5
	Q2	2.9	3.0	2.5	0.5	2.2	7.5	8.4
	Q3	2.7	3.2	3.2	0.1	3.2	3.7	5.1

2. Selected other real economy indicators

(annual percentage changes, unless otherwise indicated)

		Industrial production [3]								Retail sales at constant prices	New passenger car registrations
		Total excluding construction (index (s.a.), 1995 = 100)	Total excluding construction	Manu-facturing	Intermediate goods	Capital goods	Durable consumer goods	Non-durable consumer goods	Construction		
		15	16	17	18	19	20	21	22	23	24
1995		100.0	3.4	3.5	2.5	7.3	-0.7	1.7	0.0	2.0	0.3
1996		100.1	0.0	-0.2	-0.7	1.7	0.0	-0.8	-2.5	1.1	6.6
1997		104.2	4.1	4.7	5.4	4.2	1.0	2.2	-1.2	0.8	3.9
1998		.	.	.	.	.	.	.	.	.	7.7
1997	Q4	106.5	5.7	6.4	7.2	6.1	3.5	2.9	-0.2	2.1	11.3
1998	Q1	107.6	6.3	7.3	7.3	9.2	8.6	1.3	2.9	2.8	12.6
	Q2	108.5	4.4	5.0	4.2	6.6	7.9	2.1	0.4	1.8	3.3
	Q3	109.4	4.0	4.4	3.3	7.1	7.9	2.0	-1.7	3.0	7.5
	Q4	.	.	.	.	.	.	.	.	.	7.7
1997	Dec.	106.9	6.5	7.8	8.4	6.4	4.6	4.5	-1.7	3.6	13.9
1998	Jan.	107.0	5.8	7.7	7.6	8.1	5.8	2.2	11.6	3.0	10.7
	Feb.	107.8	6.0	6.9	7.1	8.0	8.6	1.1	0.1	2.2	9.8
	Mar.	108.1	6.9	7.3	7.1	11.2	11.1	0.8	-1.5	3.1	16.5
	Apr.	108.2	3.2	3.8	3.4	5.0	5.5	0.8	-2.4	0.8	-1.8
	May	109.0	6.8	7.7	6.1	10.4	12.4	4.3	3.6	1.9	6.9
	June	108.2	3.2	3.7	3.2	4.7	6.4	1.4	0.0	2.7	5.3
	July	109.7	4.2	4.6	3.5	7.8	8.1	2.4	-0.4	3.6	7.3
	Aug.	109.7	4.8	5.2	4.0	8.0	8.9	2.4	-0.8	2.5	7.3
	Sep.	108.8	3.3	3.5	2.6	5.8	7.1	1.1	-3.6	2.8	7.9
	Oct.	109.6	3.2	3.6	1.8	7.7	10.4	0.8	.	1.9	1.3
	Nov.	109.4	2.8	2.7	2.4	5.2	6.4	0.7	.	4.0	15.5
	Dec.	.	.	.	.	.	.	.	.	.	7.7

Sources: Eurostat, except column 23 (ECB calculation based on non-harmonised national data) and column 24 (ACEA/A.A.A.).

1) Components exclude changes in inventories.

2) Exports and imports cover goods and services and include internal cross-border trade in the euro area.

3) Adjusted for variations in the number of working days.

Table 5.2

Labour market indicators

(seasonally adjusted)

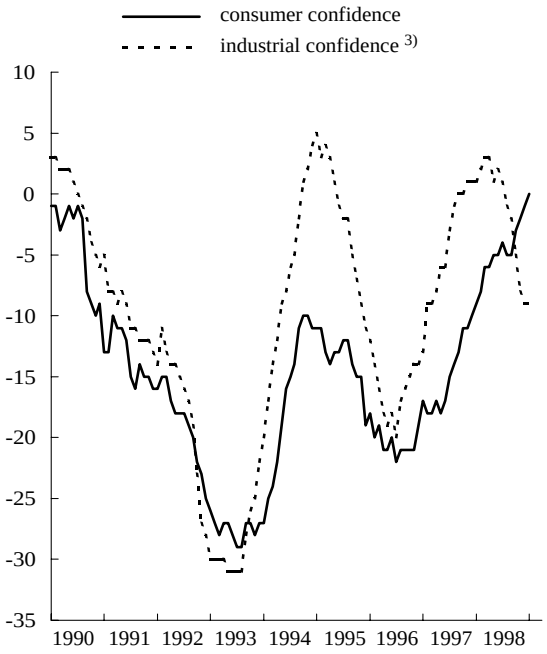
		Employment [1]				Unemployment [2]		Labour productivity [1]	
		Whole economy		Manufacturing		Millions	% of labour force	Whole economy (annual percentage changes)	Manufacturing (annual percentage changes)
		Index, 1995 = 100	Annual percentage changes	Index, 1995 = 100	Annual percentage changes				
		1	2	3	4	5	6	7	8
1995		100.0	0.4	100.0	-0.8	14.401	11.4	1.8	4.4
1996		100.2	0.2	98.6	-1.4	14.821	11.6	1.6	1.2
1997		100.5	0.3	97.9	-0.8	14.925	11.7	2.1	5.6
1998		.	.	.	.	14.168	11.1	.	.
1997	Q4	100.7	0.5	98.5	0.5	14.828	11.6	2.6	6.0
1998	Q1	101.1	1.0	99.6	2.2	14.515	11.3	3.3	5.0
	Q2	101.5	1.1	100.4	2.9	14.258	11.1	1.7	2.1
	Q3	101.9	1.3	100.8	2.8	14.053	11.0	1.8	1.5
	Q4	.	.	.	.	13.846	10.8	.	.
1997	Dec.	-	-	-	-	14.739	11.5	-	-
1998	Jan.	-	-	-	-	14.555	11.3	-	-
	Feb.	-	-	-	-	14.534	11.3	-	-
	Mar.	-	-	-	-	14.455	11.3	-	-
	Apr.	-	-	-	-	14.330	11.2	-	-
	May	-	-	-	-	14.275	11.1	-	-
	June	-	-	-	-	14.169	11.1	-	-
	July	-	-	-	-	14.103	11.0	-	-
	Aug.	-	-	-	-	14.073	11.0	-	-
	Sep.	-	-	-	-	13.982	10.9	-	-
	Oct.	-	-	-	-	13.885	10.8	-	-
	Nov.	-	-	-	-	13.828	10.8	-	-
	Dec.	-	-	-	-	13.825	10.8	-	-

Chart 5.3

Opinion surveys

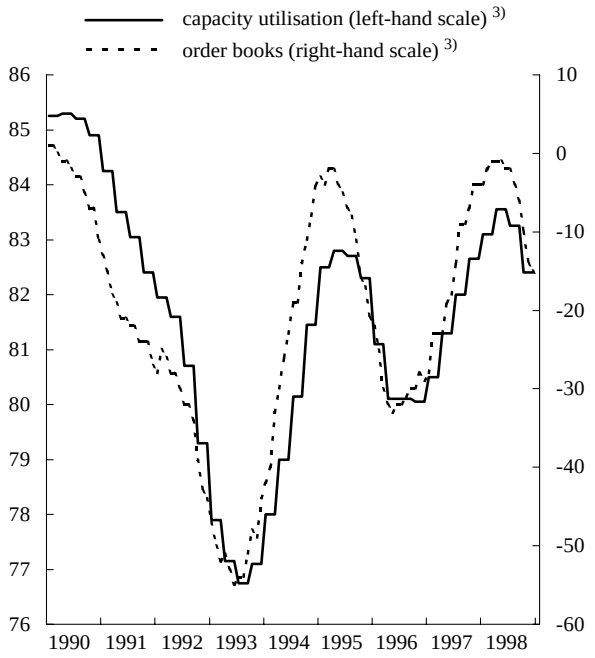
Consumer and industrial confidence indicators

(percentage balances, monthly; seasonally adjusted)



Capacity utilisation and order books

(capacity utilisation, percentages, quarterly; order books, percentage balances, monthly; seasonally adjusted)



Sources: ECB calculations based on available national non-harmonised data (columns 1 to 4 and 7 to 8), Eurostat (columns 5 to 6) and European Commission Business and Consumer Surveys (chart data).

1) Quarterly results are based on available data from those countries which compile monthly or quarterly statistics.

2) Calculated according to ILO recommendations.

3) Manufacturing; data on capacity utilisation are collected in January, April, July and October and are shown as 2-quarter moving averages.

6 Saving, investment and financing in the euro area

Table 6

Saving, investment and financing

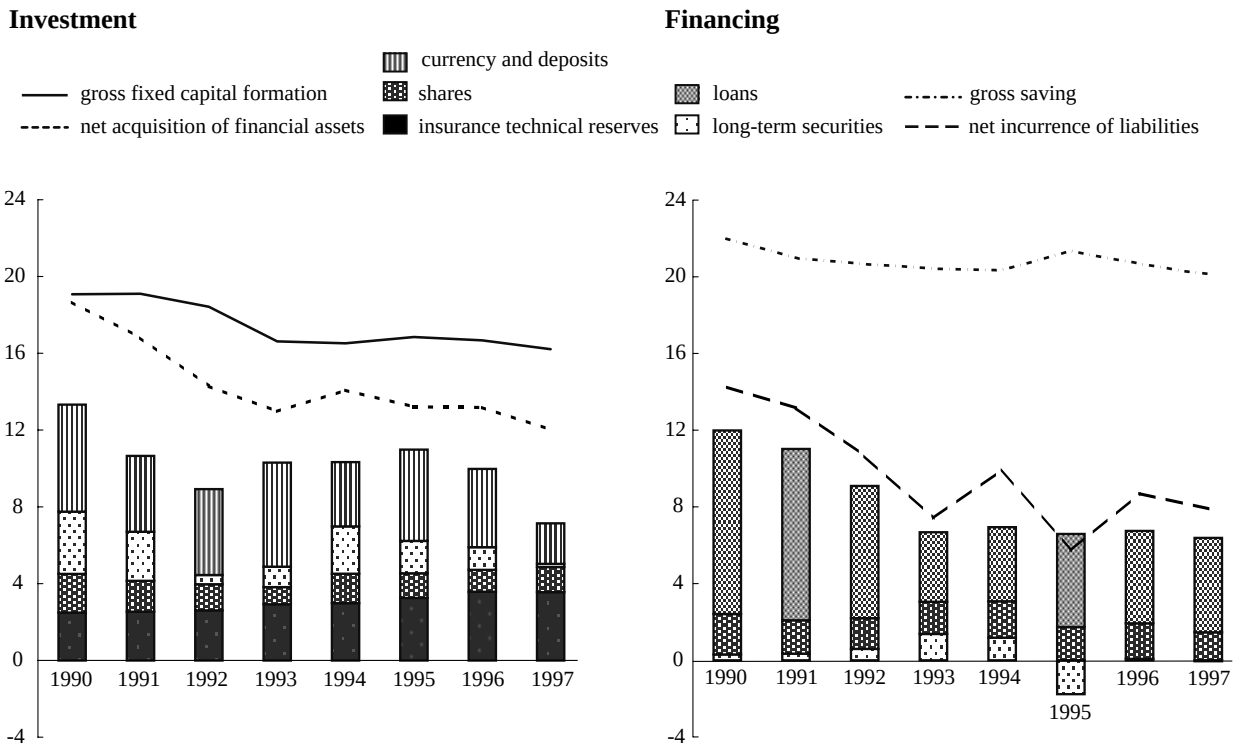
(as a percentage of GDP, unless otherwise indicated)

	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		Net acquisition of financial assets					
					Non-financial corporations		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
1990	23.5	22.8	0.1	19.1	13.7	18.7	5.6	4.4	3.2	2.0	2.5
1991	21.9	22.9	-1.2	19.1	14.2	16.8	4.0	3.0	2.6	1.6	2.5
1992	20.9	22.2	-1.0	18.4	13.6	14.3	4.5	1.7	0.5	1.4	2.6
1993	20.0	20.2	0.5	16.6	12.2	13.0	5.4	0.6	1.1	0.9	2.9
1994	20.4	19.8	0.3	16.5	12.2	14.1	3.3	2.3	2.5	1.5	3.0
1995	21.3	20.0	1.0	16.8	12.6	13.2	4.8	1.9	1.7	1.3	3.3
1996	20.8	19.6	1.4	16.7	12.4	13.2	4.1	0.3	1.2	1.1	3.6
1997	21.4	19.0	2.1	16.2	11.9	12.0	2.1	-0.3	0.2	1.3	3.6

	Financing of private non-financial sectors [1] [2]								Net financial investment	Financial investment as a % of gross investment	Net incurrence of liabilities as a % of financing
	Gross saving	Households	Net incurrence of liabilities	Securities other than shares	Long-term securities	Shares	Loans	Long-term loans			
									(col. 6 - 14)	(col. 6 / (4+6))	(col. 14 / (12+14))
	12	13	14	15	16	17	18	19	20	21	22
1990	22.0	12.0	14.2	0.6	0.3	2.1	9.6	4.5	4.4	49.5	39.3
1991	21.0	12.2	13.2	0.4	0.3	1.7	8.9	4.8	3.6	46.8	38.5
1992	20.7	12.1	10.7	0.7	0.6	1.6	6.9	4.7	3.6	43.7	34.0
1993	20.4	11.5	7.4	1.3	1.4	1.7	3.6	4.3	5.6	43.8	26.6
1994	20.3	10.6	9.9	1.1	1.2	1.9	3.9	3.7	4.1	46.0	32.9
1995	21.3	10.7	5.7	-1.7	-1.8	1.7	4.9	3.0	7.5	44.0	21.1
1996	20.7	10.6	8.7	0.2	0.1	1.9	4.8	3.6	4.5	44.2	29.6
1997	20.1	10.0	7.9	0.0	0.0	1.5	4.9	3.2	4.1	42.6	28.2

Investment and financing of private non-financial sectors [1] [2]

(as a percentage of GDP)



Source: ECB.

1) Selected items of financing and investment.

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

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

Table 7.1

General government fiscal position

(as a percentage of GDP)

1. Euro area [1] - receipts and expenditure

	Current receipts [2]	Direct taxes	Indirect taxes	Social contributions	Current expenditure [2]	Public consumption	Interest	Transfers to households	Net capital expenditure [2]	Investment	Deficit (-) / surplus (+)
	1	2	3	4	5	6	7	8	9	10	11
1990	45.0	12.0	12.9	16.7	45.0	17.5	4.8	18.5	4.1	3.0	-4.1
1991	45.9	12.3	12.9	17.3	46.2	18.1	4.9	19.2	4.2	3.1	-4.4
1992	46.7	12.3	13.0	17.7	47.7	18.5	5.5	19.9	3.6	3.1	-4.6
1993	47.6	12.5	13.2	18.1	49.4	18.8	5.7	20.8	3.9	2.9	-5.6
1994	47.0	12.0	13.4	18.0	48.5	18.5	5.5	20.7	3.6	2.8	-5.1
1995	46.8	12.1	13.3	18.0	48.2	18.2	5.8	20.6	3.6	2.6	-5.0
1996	47.1	12.1	13.4	18.2	48.2	18.3	5.5	20.6	3.2	2.5	-4.2
1997	47.3	12.2	13.5	18.2	47.1	17.9	5.1	20.5	2.7	2.4	-2.5

2. Euro area [1] - deficit and debt

	Primary deficit (-) / surplus (+)	Cyclically adjusted deficit (-) / surplus (+) [2]	Deficit/ debt adjust-ment [3]	Change in debt [4]				Gross nominal consolidated debt			
				Total	Currency, deposits and loans	Short-term securities	Medium/ long-term securities	Total	Currency, deposits and loans	Short-term securities	Medium/ long-term securities
	12	13	14	15	16	17	18	19	20	21	22
1990	0.7	-5.7	1.5	5.6	1.3	1.0	3.3	58.4	18.8	9.4	30.2
1991	0.5	-5.9	0.7	5.2	1.2	0.0	4.0	58.3	18.4	8.5	31.4
1992	0.9	-5.6	2.2	6.8	1.7	0.8	4.2	61.8	19.0	8.9	33.9
1993	0.2	-4.9	2.5	8.0	1.5	-0.3	6.9	68.3	20.0	8.3	39.9
1994	0.4	-4.7	0.8	5.9	0.2	0.6	5.1	70.7	19.2	8.5	43.1
1995	0.8	-4.6	2.3	7.2	2.0	-0.2	5.5	74.6	20.3	7.8	46.5
1996	1.4	-3.5	-0.2	3.9	0.3	0.0	3.6	76.0	19.9	7.6	48.5
1997	2.6	-1.9	-0.3	2.2	0.0	-1.0	3.2	75.3	19.1	6.3	49.9

3. Euro area countries - deficit (-) / surplus (+)

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11
1990	-5.5	-2.1	-4.3	-1.6	-2.3	-11.1	5.0	-5.1	-2.4	-5.1	5.4
1991	-6.3	-3.1	-4.5	-2.1	-2.3	-10.1	1.9	-2.9	-3.0	-6.0	-1.5
1992	-6.9	-2.6	-4.1	-3.9	-2.5	-9.6	0.8	-3.9	-2.0	-3.0	-5.9
1993	-7.1	-3.2	-7.0	-5.8	-2.4	-9.5	1.7	-3.2	-4.2	-6.1	-8.0
1994	-4.9	-2.4	-6.3	-5.8	-1.7	-9.2	2.8	-3.8	-5.0	-6.0	-6.4
1995	-3.9	-3.3	-7.3	-4.9	-2.2	-7.7	1.9	-4.0	-5.1	-5.7	-4.7
1996	-3.2	-3.4	-4.7	-4.1	-0.4	-6.7	2.9	-2.0	-3.7	-3.3	-3.5
1997	-2.0	-2.7	-2.6	-3.0	0.9	-2.7	3.0	-0.9	-1.9	-2.5	-1.1

4. Euro area countries - gross nominal consolidated debt

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI
	12	13	14	15	16	17	18	19	20	21	22
1990	125.7	43.8	44.8	35.5	96.0	98.0	4.7	79.1	57.9	65.3	14.5
1991	127.5	41.5	45.5	35.8	95.3	101.5	4.2	78.9	58.1	67.3	23.0
1992	129.0	44.1	48.0	39.8	92.3	108.7	5.1	79.9	58.0	60.1	41.5
1993	135.2	48.0	60.0	45.3	96.3	119.1	6.1	81.1	62.7	63.1	58.0
1994	133.2	50.2	62.6	48.5	88.2	124.9	5.7	77.9	65.4	63.8	59.6
1995	131.0	58.3	65.6	52.7	80.9	124.2	5.9	79.2	69.2	65.9	58.1
1996	126.8	60.8	70.2	55.7	71.4	124.0	6.6	77.1	69.6	64.9	57.8
1997	121.9	61.5	68.9	58.1	63.4	121.6	6.7	71.4	64.3	61.5	55.1

Sources: European Commission (DG II and Eurostat) and ECB.

1) The transactions among the euro area countries are not consolidated.

2) Euro area excluding Luxembourg for 1990-95.

3) Difference between the annual change in nominal gross consolidated debt and the deficit as a percentage of GDP.

4) Annual change in nominal gross consolidated debt expressed as a percentage of GDP: [debt(t)-debt(t-1)] / GDP(t).

Chart 7.2

General government deficit [1)]

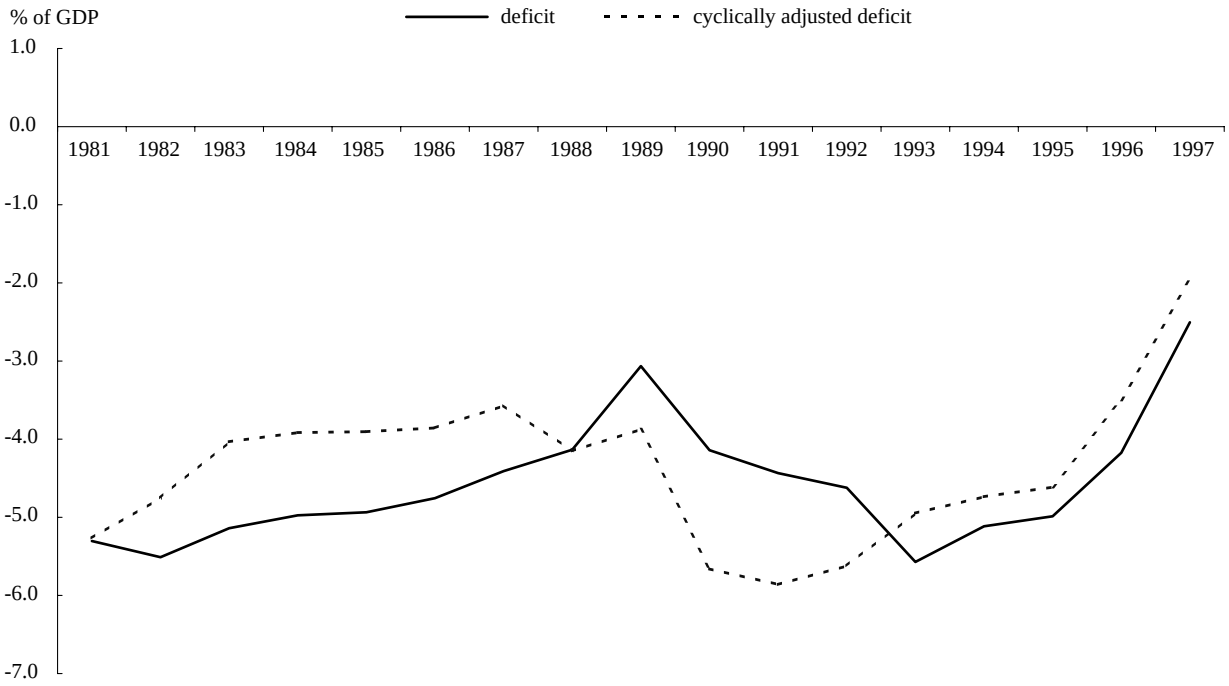
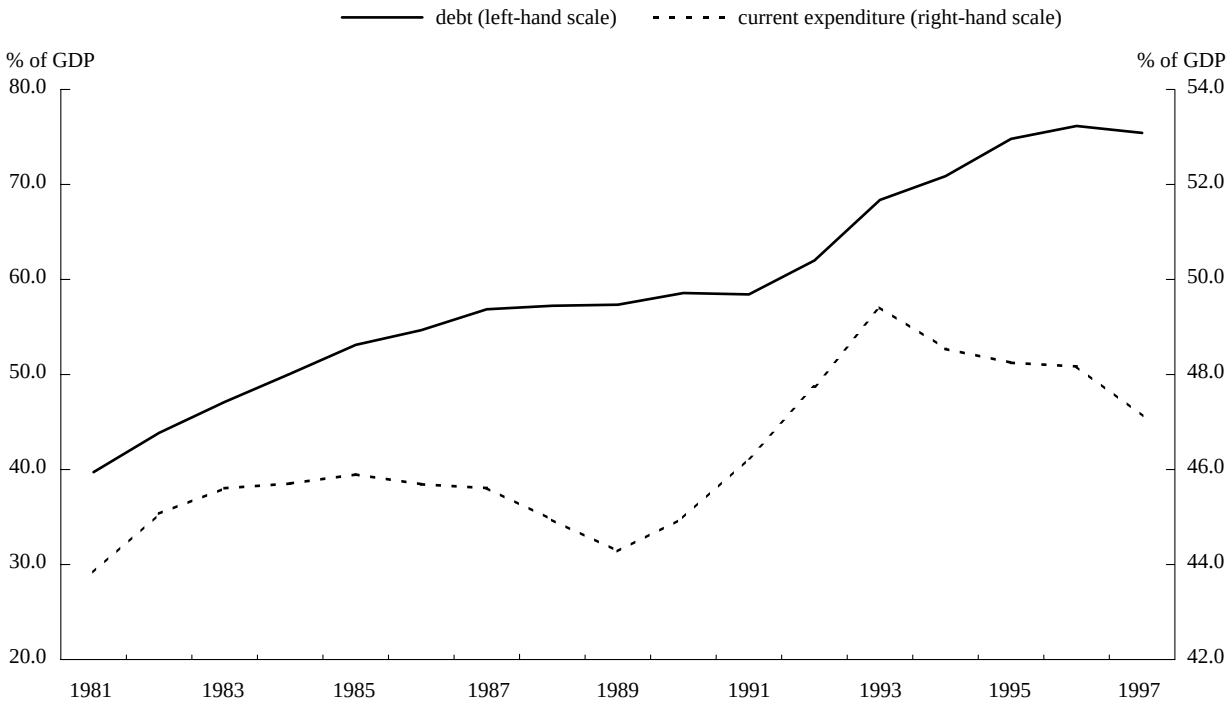


Chart 7.3

General government debt and current expenditure [1)]



Sources: European Commission (DG II and Eurostat) and ECB.
1) Euro area excluding Luxembourg.

9 Trade in goods of the euro area

Table 9.1

Exports

(ECU billions; f.o.b. value)

		Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manufactured articles	Machinery, transport equipment	Other
		1	2	3	4	5	6	7	8
1995		622.46	46.78	14.53	11.14	79.51	182.75	271.32	16.45
1996		667.81	48.66	13.71	12.97	85.09	194.26	293.45	19.68
1997		761.86	52.57	16.23	14.37	98.75	215.78	341.59	22.60
1996	Q1	157.92	11.48	3.44	3.07	20.47	46.11	68.70	4.64
	Q2	165.67	11.94	3.43	3.25	21.26	47.72	73.38	4.69
	Q3	162.41	11.93	3.25	3.15	21.68	48.39	69.35	4.68
	Q4	181.81	13.31	3.59	3.50	21.68	52.04	82.02	5.67
1997	Q1	170.21	11.93	3.80	3.63	22.52	48.56	74.37	5.39
	Q2	191.60	13.28	4.07	3.61	25.09	53.73	86.06	5.78
	Q3	193.51	12.98	4.15	3.43	25.60	55.54	86.29	5.53
	Q4	206.54	14.38	4.21	3.70	25.54	57.95	94.87	5.90
1998	Q1	193.83	13.13	4.12	3.39	26.52	54.30	87.37	5.00
	Q2	203.68	13.93	3.89	3.29	26.93	55.96	94.64	5.03
	Q3	194.11	12.48	3.84	2.89	25.56	54.18	89.45	5.71
1997	Sep.	68.39	4.71	1.49	1.15	8.78	19.54	30.81	1.92
	Oct.	73.20	5.24	1.54	1.27	9.27	21.22	32.65	2.02
	Nov.	66.31	4.63	1.34	1.18	8.20	18.71	30.33	1.92
	Dec.	67.03	4.51	1.33	1.25	8.07	18.02	31.89	1.96
1998	Jan.	58.36	4.04	1.25	1.17	8.36	16.16	25.77	1.60
	Feb.	63.63	4.30	1.36	1.01	8.59	17.99	28.76	1.62
	Mar.	71.84	4.79	1.51	1.21	9.57	20.15	32.84	1.78
	Apr.	67.88	4.68	1.31	1.11	9.16	18.82	30.97	1.83
	May	65.80	4.55	1.26	1.06	8.69	18.06	30.53	1.64
	June	70.00	4.70	1.32	1.12	9.08	19.08	33.14	1.56
	July	72.41	4.49	1.33	1.06	9.26	20.87	33.83	1.57
	Aug.	56.13	3.95	1.23	0.91	7.74	15.43	25.47	1.39
	Sep.	65.57	4.04	1.28	0.92	8.56	17.88	30.15	2.75
	Oct.	68.69	.	.	.	.	.	.	.
Percentage change compared with the corresponding period in the previous year									
Sep. 1998		-4.1	-14.2	-14.1	-20.0	-2.5	-8.5	-2.1	43.2
Cumulative Jan.-Sep. 1998		6.5	3.5	-1.4	-10.3	7.9	4.2	10.0	-5.7

Source: Eurostat; the commodity breakdown is in accordance with the SITC Rev. 3.

Table 9.2

Imports

(ECU billions; c.i.f. value)

		Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manufactured articles	Machinery, transport equipment	Other
		1	2	3	4	5	6	7	8
1995		562.76	46.02	39.81	62.11	52.14	163.71	177.37	21.59
1996		594.36	46.69	36.45	73.85	53.75	166.13	191.36	26.17
1997		672.45	49.44	41.19	80.91	61.61	187.02	226.91	25.41
1996	Q1	148.10	11.73	9.70	16.35	13.61	42.71	47.82	6.22
	Q2	147.42	11.64	9.42	17.53	13.74	40.22	48.69	6.17
	Q3	141.24	11.18	8.29	17.81	12.69	41.76	43.52	5.99
	Q4	157.60	12.14	9.04	22.16	13.71	41.44	51.33	7.79
1997	Q1	158.05	11.29	9.59	20.88	14.51	44.31	51.23	6.23
	Q2	167.59	12.58	11.01	18.62	15.93	46.28	56.99	6.22
	Q3	166.58	12.14	10.01	19.98	15.13	48.62	55.27	5.43
	Q4	180.23	13.43	10.58	21.43	16.04	47.81	63.42	7.53
1998	Q1	180.37	12.64	10.84	17.50	17.58	51.18	64.48	6.18
	Q2	178.62	12.55	11.12	15.87	17.21	50.03	65.76	6.10
	Q3	168.80	11.99	9.60	14.55	16.05	49.49	60.70	6.43
1997	Sep.	60.95	4.26	3.70	6.63	5.57	17.93	21.21	1.65
	Oct.	63.50	4.81	3.68	7.53	5.79	17.33	21.91	2.46
	Nov.	57.99	4.21	3.47	6.84	5.19	15.30	20.65	2.33
	Dec.	58.74	4.41	3.43	7.06	5.06	15.18	20.86	2.74
1998	Jan.	57.86	4.12	3.51	6.16	5.59	16.39	20.10	2.00
	Feb.	58.21	3.95	3.53	5.74	5.53	16.58	20.69	2.20
	Mar.	64.30	4.57	3.80	5.60	6.46	18.21	23.69	1.98
	Apr.	59.95	4.33	3.66	5.42	5.74	16.62	22.24	1.96
	May	57.07	4.03	3.55	5.52	5.56	15.74	20.88	1.79
	June	61.60	4.19	3.91	4.93	5.91	17.67	22.64	2.35
	July	58.88	4.29	3.56	4.91	5.86	17.65	20.75	1.85
	Aug.	49.58	3.68	2.78	4.69	4.66	14.72	17.54	1.52
	Sep.	60.34	4.02	3.26	4.95	5.53	17.12	22.41	3.06
	Oct.	61.15	.	.	.	.	.	.	.
Percentage change compared with the corresponding period in the previous year									
Sep. 1998		-1.0	-5.6	-11.9	-25.3	-0.7	-4.5	5.7	85.5
Cumulative Jan.-Sep. 1998		7.2	3.2	3.1	-19.4	11.6	8.3	16.8	4.6

Source: Eurostat; the commodity breakdown is in accordance with the SITC Rev. 3.

Table 9.3

Trade balance

(ECU billions; exports (f.o.b.) - imports (c.i.f.))

		Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manufactured articles	Machinery, transport equipment	Other
		1	2	3	4	5	6	7	8
1995		59.75	0.76	-25.29	-50.95	27.38	19.07	93.95	-5.15
1996		73.45	1.96	-22.75	-60.90	31.33	28.13	102.13	-6.46
1997		89.44	3.15	-24.98	-66.54	37.17	28.75	114.70	-2.80
1996	Q1	9.81	-0.25	-6.27	-13.28	6.86	3.40	20.90	-1.56
	Q2	18.25	0.30	-5.98	-14.29	7.52	7.51	24.70	-1.48
	Q3	21.19	0.74	-5.05	-14.66	8.99	6.63	25.83	-1.30
	Q4	24.20	1.17	-5.45	-18.67	7.96	10.59	30.70	-2.12
1997	Q1	12.17	0.63	-5.79	-17.25	8.03	4.25	23.14	-0.83
	Q2	24.01	0.72	-6.94	-15.01	9.16	7.44	29.08	-0.43
	Q3	26.94	0.85	-5.87	-16.56	10.47	6.93	31.03	0.09
	Q4	26.32	0.95	-6.38	-17.72	9.51	10.13	31.45	-1.63
1998	Q1	13.46	0.49	-6.71	-14.09	8.94	3.11	22.89	-1.17
	Q2	25.06	1.38	-7.22	-12.58	9.72	5.93	28.88	-1.06
	Q3	25.30	0.50	-5.76	-11.66	9.50	4.70	28.75	-0.72
1997	Sep.	7.45	0.45	-2.21	-5.48	3.21	1.62	9.60	0.27
	Oct.	9.70	0.43	-2.14	-6.26	3.48	3.89	10.74	-0.44
	Nov.	8.33	0.42	-2.13	-5.65	3.01	3.41	9.68	-0.41
	Dec.	8.29	0.10	-2.11	-5.81	3.02	2.83	11.03	-0.78
1998	Jan.	0.50	-0.08	-2.25	-4.98	2.77	-0.24	5.67	-0.39
	Feb.	5.42	0.35	-2.17	-4.73	3.07	1.41	8.07	-0.58
	Mar.	7.54	0.22	-2.29	-4.38	3.10	1.94	9.15	-0.20
	Apr.	7.93	0.35	-2.35	-4.31	3.42	2.20	8.73	-0.13
	May	8.73	0.52	-2.28	-4.46	3.13	2.32	9.65	-0.14
	June	8.40	0.51	-2.59	-3.81	3.17	1.41	10.50	-0.79
	July	13.53	0.20	-2.23	-3.85	3.39	3.23	13.08	-0.28
	Aug.	6.54	0.28	-1.55	-3.78	3.08	0.71	7.93	-0.13
	Sep.	5.23	0.02	-1.98	-4.03	3.03	0.76	7.74	-0.31
	Oct.	7.54	.	.	.	.	.	.	.
Absolute change compared with the corresponding period in the previous year									
Sep. 1998		-2.2	-0.4	0.2	1.5	-0.2	-0.9	-1.9	-0.6
Cumulative Jan.-Sep. 1998		0.7	0.2	-1.1	10.5	0.5	-4.9	-2.7	-1.8

Source: Eurostat; the commodity breakdown is in accordance with the SITC Rev. 3.

10 Exchange rates

Table 10

Exchange rates [1)]

(period averages; units of national currency per ECU or euro (bilateral); index 1990 = 100 (effective))

		Bilateral ECU or euro exchange rates								
		US dollar 1	Japanese yen 2	Swiss franc 3	Pound sterling 4	Swedish krona 5	Danish krone 6	Greek drachma 7	Norwegian krone 8	Canadian dollar 9
1994		1.190	121.3	1.621	0.776	9.16	7.54	288.0	8.37	1.625
1995		1.308	123.0	1.546	0.829	9.33	7.33	303.0	8.29	1.795
1996		1.270	138.1	1.568	0.814	8.51	7.36	305.5	8.20	1.731
1997		1.134	137.1	1.644	0.692	8.65	7.48	309.3	8.02	1.569
1998		1.121	146.4	1.622	0.676	8.92	7.50	330.7	8.47	1.665
1997	Q4	1.123	140.5	1.610	0.677	8.58	7.51	310.2	8.01	1.581
1998	Q1	1.087	139.2	1.604	0.660	8.71	7.53	319.1	8.20	1.554
	Q2	1.100	149.5	1.643	0.665	8.60	7.52	339.9	8.28	1.592
	Q3	1.118	156.3	1.642	0.676	8.95	7.50	332.7	8.54	1.690
	Q4	1.177	140.6	1.600	0.702	9.38	7.44	331.5	8.82	1.814
1998	Jan.	1.088	140.8	1.604	0.665	8.72	7.53	312.3	8.16	1.566
	Feb.	1.088	136.8	1.593	0.664	8.80	7.53	312.4	8.23	1.561
	Mar.	1.084	139.9	1.614	0.653	8.64	7.55	331.6	8.22	1.536
	Apr.	1.091	144.1	1.643	0.653	8.53	7.55	345.0	8.22	1.560
	May	1.109	149.7	1.639	0.677	8.54	7.50	340.3	8.26	1.603
	June	1.101	154.4	1.645	0.667	8.71	7.52	334.8	8.34	1.613
	July	1.098	154.3	1.661	0.668	8.77	7.52	328.7	8.37	1.630
	Aug.	1.102	159.4	1.646	0.675	8.96	7.50	331.6	8.51	1.688
	Sep.	1.154	155.3	1.617	0.687	9.12	7.48	337.9	8.74	1.756
	Oct.	1.194	144.2	1.596	0.705	9.37	7.44	336.5	8.88	1.842
	Nov.	1.164	140.1	1.612	0.701	9.31	7.44	329.1	8.68	1.793
	Dec.	1.172	137.4	1.594	0.702	9.45	7.45	328.8	8.91	1.807
1999	Jan.	1.161	131.3	1.605	0.703	9.08	7.44	323.6	8.65	1.765

		Bilateral ECU or euro exchange rates							Effective exchange rate (EER) of the euro area [2)]	
		Australian dollar 10	New Zealand dollar 11	Hong Kong dollar 12	Korean won 13	Singapore dollar 14	Taiwan dollar 15	Mexican peso 16	Nominal 17	Real 18
1994		1.625	2.002	9.17	957.0	1.810	31.44	4.02	93.2	94.1
1995		1.765	1.993	10.01	999.7	1.833	34.28	8.35	97.8	98.9
1996		1.623	1.847	9.68	1007.9	1.765	34.39	9.52	98.3	99.3
1997		1.528	1.715	8.75	1073.2	1.678	32.50	8.95	90.4	90.8
1998		1.787	2.097	8.69	1568.9	1.876	37.64	10.30	92.3	92.2
1997	Q4	1.621	1.820	8.69	1291.1	1.795	35.15	9.07	90.4	90.5
1998	Q1	1.630	1.879	8.42	1745.8	1.817	36.07	9.17	89.6	89.7
	Q2	1.754	2.063	8.53	1537.0	1.810	37.09	9.55	91.3	91.3
	Q3	1.867	2.199	8.67	1486.8	1.935	38.71	10.62	93.5	93.6
	Q4	1.887	2.236	9.16	1516.6	1.942	38.64	11.84	94.6	94.3
1998	Jan.	1.656	1.876	8.42	1855.8	1.900	37.08	8.94	90.3	90.5
	Feb.	1.615	1.867	8.43	1773.8	1.798	35.89	9.26	89.5	89.7
	Mar.	1.619	1.892	8.41	1615.8	1.757	35.30	9.30	88.9	89.0
	Apr.	1.673	1.971	8.47	1520.2	1.749	36.07	9.29	89.6	89.5
	May	1.762	2.062	8.60	1552.4	1.817	37.13	9.53	92.2	92.1
	June	1.824	2.151	8.53	1539.8	1.866	38.06	9.83	92.2	92.2
	July	1.776	2.116	8.51	1423.6	1.878	37.79	9.78	92.0	92.2
	Aug.	1.868	2.196	8.55	1450.4	1.939	38.33	10.34	93.3	93.5
	Sep.	1.962	2.289	8.97	1592.4	1.994	40.10	11.83	95.2	95.1
	Oct.	1.932	2.284	9.31	1615.7	1.969	39.81	12.21	95.8	95.5
	Nov.	1.834	2.180	9.05	1511.9	1.913	38.08	11.64	94.1	93.8
	Dec.	1.893	2.241	9.11	1426.3	1.941	38.02	11.65	94.0	93.6
1999	Jan.	1.839	2.159	8.99	1362.5	1.950	37.43	11.83	92.7	92.1

Source: ECB.

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

2) BIS calculations; to December 1998, based on weighted averages of the euro area countries' effective exchange rates; from January 1999, based on weighted averages of bilateral euro exchange rates (original BIS figures have been rescaled to 1990=100). Weights are based on 1990 manufactured goods trade with the trading partners whose currencies are shown in the table and capture third-market effects. Real rates are calculated using national CPIs. Where CPI data are not yet available, estimates are used.

11 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 [3] as a % of GDP	Unit labour costs [4]	Real GDP	Industrial production index [5]	Standardised unemployment rate as a % of labour force (s.a.)	Broad money [6]	3-month interest rate [7] as a % per annum
		1	2	3	4	5	6	7	8	9	10	11	12
Denmark													
1995		-	-2.4	73.1	8.27	7.33	1.1	1.7	3.0	4.4	7.2	-2.0	4.60
1996		2.1	-0.7	68.4	7.19	7.36	1.7	1.0	3.3	1.4	6.8	7.2	3.56
1997		1.9	0.5	64.1	6.26	7.48	0.9	2.8	3.1	4.5	5.6	4.7	3.83
1998		1.3	.	.	4.94	7.50	.	.	.	.	5.1	4.6	4.00
1997	Q4	1.6	-	-	5.96	7.51	-1.3	3.1	3.3	6.8	5.4	3.9	3.83
1998	Q1	1.6	-	-	5.30	7.53	-0.7	2.2	4.0	5.6	5.5	3.0	3.75
	Q2	1.4	-	-	5.12	7.52	.	2.0	1.1	-0.8	5.2	5.1	4.00
	Q3	1.2	-	-	4.82	7.50	.	3.5	3.4	2.4	5.1	6.6	4.62
	Q4	1.1	-	-	4.51	7.44	.	.	.	.	4.7	3.8	4.00
1998	July	1.4	-	-	4.91	7.52	-	-	-	3.1	5.2	5.3	4.06
	Aug.	1.1	-	-	4.81	7.50	-	-	-	4.9	5.1	6.2	4.25
	Sep.	1.1	-	-	4.74	7.48	-	-	-	-0.8	4.9	8.4	4.62
	Oct.	1.1	-	-	4.67	7.44	-	-	-	1.6	4.8	4.0	4.43
	Nov.	1.1	-	-	4.59	7.44	-	-	-	0.0	4.6	4.1	4.12
	Dec.	1.1	-	-	4.27	7.45	-	-	-	.	4.6	3.3	4.00
1999	Jan.	.	-	-	4.03	7.44	-	-	-	.	.	.	3.78
Greece													
1995		-	-10.6	110.1	-	303.0	-2.5	11.6	2.1	2.1	7.1	6.4	14.70
1996		7.9	-7.5	112.2	-	305.5	-3.7	10.6	2.7	0.6	7.5	9.8	12.20
1997		5.4	-4.0	109.5	9.92	309.3	.	7.1	3.5	1.0	7.9	14.5	12.50
1998		4.5	.	.	8.48	330.7	.	.	.	.	.	3.7	11.40
1997	Q4	4.7	-	-	10.18	310.2	.	.	.	2.8	7.9	13.6	12.50
1998	Q1	4.2	-	-	10.45	319.1	.	.	.	2.9	8.1	4.6	10.85
	Q2	5.0	-	-	7.90	339.9	.	.	.	6.0	10.3	3.0	12.20
	Q3	4.8	-	-	7.83	332.7	.	.	.	3.1	11.7	1.8	12.25
	Q4	4.0	-	-	7.76	331.5	.	.	.	.	.	5.5	11.40
1998	July	4.8	-	-	7.67	328.7	-	-	-	8.3	11.2	2.3	12.00
	Aug.	4.7	-	-	7.56	331.6	-	-	-	3.2	12.1	2.2	14.00
	Sep.	5.0	-	-	8.25	337.9	-	-	-	-1.4	11.9	1.1	12.25
	Oct.	4.5	-	-	8.45	336.5	-	-	-	0.4	10.4	2.4	11.70
	Nov.	3.9	-	-	7.65	329.1	-	-	-	3.5	.	5.4	11.45
	Dec.	3.7	-	-	7.17	328.8	-	-	-	.	.	8.7	11.40
1999	Jan.	.	-	-	6.32	323.6	-	-	-	.	.	.	11.40
Sweden													
1995		-	-7.0	78.0	10.24	9.33	.	.	3.9	12.6	8.8	-1.3	8.37
1996		0.8	-3.5	77.2	8.02	8.51	.	.	1.3	3.1	9.6	10.0	3.93
1997		1.8	-0.8	76.9	6.62	8.65	2.7	.	1.8	8.1	9.9	4.2	4.68
1998		1.0	.	.	4.99	8.92	.	.	.	.	8.2	3.5	3.42
1997	Q4	2.7	-	-	6.18	8.58	2.1	.	3.3	9.1	9.1	2.0	4.68
1998	Q1	1.9	-	-	5.51	8.71	3.1	.	2.9	4.2	8.7	2.0	4.50
	Q2	1.4	-	-	5.13	8.60	1.2	.	2.3	6.6	8.6	2.6	4.12
	Q3	0.6	-	-	4.82	8.95	2.4	.	3.5	4.3	8.1	4.7	4.12
	Q4	0.1	-	-	4.50	9.38	.	.	.	.	7.5	4.5	3.42
1998	July	1.3	-	-	4.88	8.77	-	-	-	7.2	8.5	5.5	4.12
	Aug.	0.6	-	-	4.80	8.96	-	-	-	6.3	8.2	3.9	4.19
	Sep.	-0.1	-	-	4.79	9.12	-	-	-	0.8	7.6	4.8	4.12
	Oct.	0.1	-	-	4.72	9.37	-	-	-	4.4	7.5	5.9	3.93
	Nov.	0.1	-	-	4.55	9.31	-	-	-	1.8	7.6	5.6	3.50
	Dec.	0.0	-	-	4.22	9.45	-	-	-	.	7.4	2.1	3.42
1999	Jan.	.	-	-	4.02	9.08	-	-	-	.	.	.	3.36
United Kingdom													
1995		-	-5.5	53.9	8.32	0.829	-0.5	1.7	2.8	1.5	8.7	7.2	6.56
1996		2.5	-4.7	54.7	7.94	0.814	-0.2	2.0	2.6	0.4	8.2	9.9	6.56
1997		1.8	-2.1	53.5	7.13	0.692	0.6	3.3	3.5	1.0	7.0	11.2	7.48
1998		1.5	.	.	5.58	0.676	.	.	.	.	6.3	.	6.12
1997	Q4	1.9	-	-	6.57	0.677	0.0	3.5	4.0	0.5	6.6	11.2	7.48
1998	Q1	1.5	-	-	6.10	0.660	-1.6	3.1	3.4	0.1	6.4	10.5	7.47
	Q2	1.8	-	-	5.89	0.665	.	.	2.8	0.9	6.3	9.9	7.59
	Q3	1.4	-	-	5.57	0.676	.	.	2.3	0.4	6.2	9.6	7.27
	Q4	1.4	-	-	4.75	0.702	.	.	.	.	6.2	.	6.12
1998	July	1.5	-	-	5.92	0.668	-	-	-	0.2	6.3	10.4	7.65
	Aug.	1.3	-	-	5.63	0.675	-	-	-	0.5	6.2	9.0	7.50
	Sep.	1.5	-	-	5.16	0.687	-	-	-	0.4	6.2	9.3	7.27
	Oct.	1.3	-	-	4.99	0.705	-	-	-	-0.5	6.2	9.3	7.12
	Nov.	1.4	-	-	4.93	0.701	-	-	-	-0.2	.	8.4	6.62
	Dec.	1.5	-	-	4.33	0.702	-	-	-	.	.	.	6.12
1999	Jan.	.	-	-	4.20	0.703	-	-	-	.	.	.	5.82

Sources: Eurostat (columns 1, 8 and 10 (except Greece)); European Commission (DG II and Eurostat) (columns 2 and 3); Reuters (column 12); national data (columns 4, 5, 6, 7, 9, 10 (Greece) and 11).

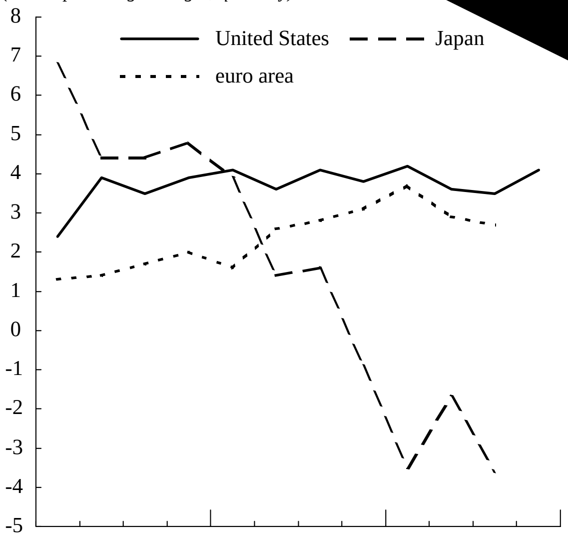
1) *Average-of-period values.*
2) *For more information, see Table 10.*
3) *BPM4; BPM5 for Sweden.*
4) *Whole economy; data for the United Kingdom exclude employers' contribution to social security.*
5) *Manufacturing; adjusted for working days.*
6) *Average of end-month values; M3; M4 for the United Kingdom.*
7) *End-of-period rates to December 1998; period averages thereafter.*

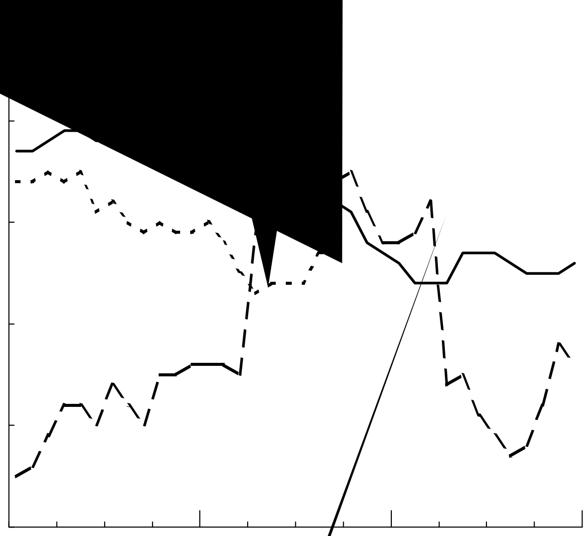
[redacted]nts

[redacted]

[redacted]		[redacted]	[redacted]hange rate [4] [redacted]tional [redacted]rrency ECU [redacted]r euro	Fiscal deficit (-) / surplus (+) as a % of GDP	Gross public debt [5] as a % of GDP
			9	10	11
[redacted]			1.308	-2.3	60.8
			1.270	-1.2	59.9
			1.134	0.1	57.8
			1.121	.	.
			1.123	-	57.8
			1.087	-	57.7
			1.100	-	56.1
			1.118	-	55.2
			1.177	-	.
			1.098	-	-
			1.102	-	-
			1.154	-	-
			[redacted]	-	-
			[redacted]	-	-
			[redacted]	-	-
			[redacted]	-	-
[redacted]			[redacted]	-3.6	.
			[redacted]	-4.3	.
			[redacted]	-3.3	.
			[redacted]	.	.
			[redacted]	-	-
			[redacted]	-	-
			[redacted]	-	-
			[redacted]	-	-
			[redacted]	-	-
[redacted]	[redacted]	[redacted]	154.3	-	-
	[redacted]	[redacted]	159.4	-	-
	Sep.	[redacted]	155.3	-	-
	Oct.	[redacted]	144.2	-	-
	Nov.	[redacted]	140.1	-	-
	Dec.	[redacted]	137.4	-	-
1999	Jan.	. [redacted]	131.3	-	-

Real gross domestic product
(annual percentage changes; quarterly)





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

1) *Manufacturing.*
2) *Average-of-period values, M2 and CDs for Japan.*
3) *For more information, see Tables 2.5 and 2.6.*
4) *For more information, see Table 10.*
5) *Gross consolidated debt for the general government (end of period).*

Table 12.2

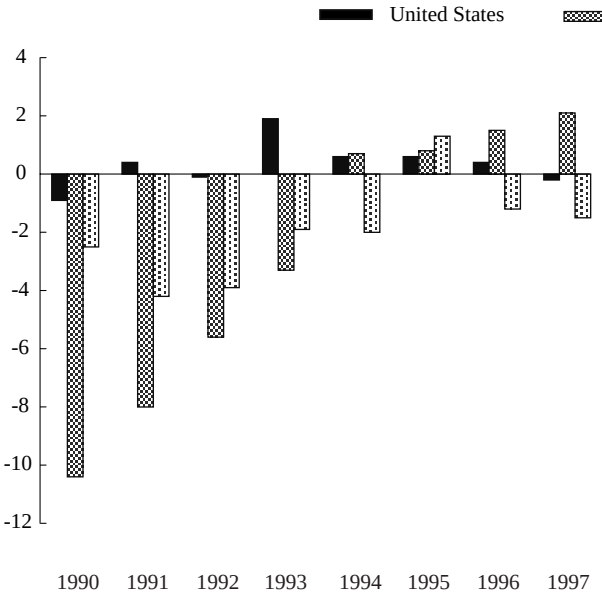
Saving, investment and financing

(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														
1994		15.5	17.5	-1.7	7.4	6.7	4.1	7.9	3.5	1.4	12.4	7.6	13.7	4.5
1995		16.3	17.4	-1.4	7.8	7.2	6.0	8.3	5.4	2.5	12.2	6.7	13.4	4.9
1996		16.6	17.8	-1.6	7.8	7.5	5.2	8.2	4.8	1.4	12.4	5.7	13.3	5.1
1997		17.3	18.4	-1.7	8.4	7.6	4.2	8.2	4.4	1.9	12.3	4.8	12.7	4.9
1997	Q1	17.0	18.1	-1.6	8.2	7.4	6.1	8.1	5.9	1.5	12.4	3.0	12.7	4.5
	Q2	17.6	18.5	-1.5	8.8	7.5	2.4	8.3	2.9	1.4	12.2	5.7	13.2	4.7
	Q3	17.5	18.4	-1.7	8.3	7.7	4.8	8.4	5.2	2.0	12.3	5.7	12.8	5.4
	Q4	17.3	18.5	-2.0	8.4	7.7	3.7	8.1	3.6	2.5	12.3	4.8	12.1	4.9
1998	Q1	17.7	19.1	-2.1	8.9	7.9	5.9	8.2	7.2	2.3	12.5	4.3	11.5	5.6
	Q2	17.2	18.7	-2.5	8.4	8.0	4.4	8.1	5.1	2.7	12.8	6.5	11.5	5.6
	Q3	17.2	18.8	-2.7	8.6	7.9	4.1	8.1	4.8	2.1	12.8	3.8	11.0	5.5
Japan														
1994		31.3	28.7	2.7	12.8	14.5	1.6	12.3	1.0	0.8	7.2	10.3	12.6	1.5
1995		30.8	28.6	2.1	14.9	14.9	3.1	13.5	2.3	0.5	5.3	10.3	13.1	1.9
1996		31.5	30.0	1.4	14.6	15.3	1.7	15.2	0.3	1.0	6.7	6.4	12.7	1.1
1997		30.9	28.7	2.2	15.5	16.1	3.3	15.2	1.2	0.1	5.6	7.1	12.3	0.7
1997	Q1	33.4	29.4	1.5	.	.	0.6	.	-8.1	-1.0	.	-3.3	.	-0.9
	Q2	31.2	26.6	2.3	.	.	2.6	.	-1.9	1.4	.	10.7	.	0.7
	Q3	30.2	30.0	2.2	.	.	3.0	.	3.1	0.4	.	-0.3	.	1.5
	Q4	29.0	29.3	2.6	.	.	6.6	.	10.7	-0.3	.	19.8	.	1.5
1998	Q1	33.2	27.9	2.4	.	.	0.6	.	-15.3	-2.6	.	-5.4	.	-2.3
	Q2	.	24.1	.	.	.	-0.6	.	1.3	2.2	.	12.2	.	0.0
	Q3	.	26.7	.	.	.	3.7	.	-2.2	0.5	.	-2.6	.	0.5

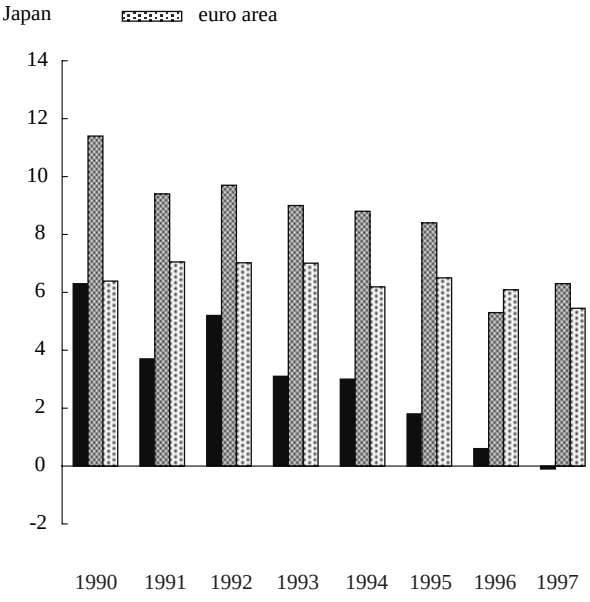
Net lending of non-financial corporations

(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 Planning Agency.

1) Households including non-profit institutions serving households. For Japan, saving of non-profit institutions serving households is included under saving of non-financial corporations.

General notes

The basis for the statistics compiled and published by the European Central Bank (ECB) was laid down in the document entitled the "Statistical requirements for Stage Three of Monetary Union (Implementation Package)" which was made available to banking associations and others involved in statistical preparations for Stage Three by the European Monetary Institute (EMI) and the national central banks (NCBs) in July 1996. The Implementation Package covers money and banking statistics, balance of payments statistics, international investment position statistics, financial accounts statistics, price and cost and other economic statistics.[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 on the ECB's Web site (http://www.ecb.int), and new or expanded data will appear in the ECB Monthly Bulletin as they become available.

Because the composition of the ECU does not coincide with the currencies of the Member States adopting the single currency, amounts expressed in ECU are influenced by the market behaviour of the other currencies. To avoid this effect in the monetary statistics, the pre-1999 data in Tables 2.1 to 2.4 are expressed in units converted from national currencies at the irrevocable fixed exchange rates announced 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.

The cut-off date for the statistics included in this issue was 4 February 1999. Recent data are often provisional and may be revised.

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).*

Monetary policy and financial statistics

Tables 1.1 to 1.4 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations and statistics relating to minimum reserves (not available for this issue). Monetary data relating to Monetary Financial Institutions (MFIs), including the Eurosystem, are shown in Tables 2.1 to 2.3. Table 2.4 sets out monetary aggregates drawn from the consolidated MFI balance sheet. Fuller quarterly data relating to the MFI balance sheet and monetary statistics are planned for the March issue. A complete list of MFIs is published on the ECB's Web site. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual – Guidance for the statistical classification of customers" (EMI, April 1998). 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).

Statistics on money market interest rates, long-term government bond yields and stock market indices (Tables 2.5 to 2.7) are produced by the ECB from wire services. For details concerning the statistics on retail bank interest rates (Table 2.8), see the footnote at the bottom of the relevant page.

Statistics on securities market issues and redemptions (Table 3) are expected to be available in spring 1999.

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 seasonally adjusted data are produced by Eurostat or national sources.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. It is based on national HICPs that follow the same methods in all euro area countries. The implementation of the 1998 EU Council Regulation on short-term statistics will enlarge the range of available euro area data, including timely and comparable data for retail trade turnover, for which, at present, an estimate based on national data is used (Table 5.1).

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the European System of Accounts 1995 (ESA 95) during 1999 and thereafter will pave the way for fully comparable data, including quarterly summary accounts, across the euro area.

Unemployment rates conform to International Labour Organisation (ILO) guidelines. Data on employment are derived from the most recent national sources using similar, but not fully comparable, definitions of employment (Table 5.2).

Opinion survey data (Chart 5.3) draw on the business and consumer surveys of the European Commission.

Financial accounts statistics

The Implementation Package foresaw a need for detailed information covering the financial transactions and balance sheets for the euro area in order to complement monetary analysis and policy research. The aim is to provide a fairly full, though not complete, set of financial accounts for the euro area based on money and banking, balance of payments, capital market, non-MFI financial corporation and government finance statistics, and drawing also on the ESA 95 national accounts. Table 6 shows euro area aggregates based on national capital and financial accounts.

A more detailed and further harmonised set of statistics presenting financial accounts for the euro area is expected to appear in the ECB Monthly Bulletin later in 1999.

General government fiscal position

Table 7.1 shows the euro area general government fiscal position as a percentage of GDP. This is compatible with the data notified by the Member States in the framework of the excessive deficit procedure as laid down in the Treaty establishing the European Community. In addition, government deficit and debt data are shown for individual euro area countries owing to their importance in the framework of the Stability and Growth Pact.

Euro area receipts and expenditure, and the cyclically adjusted deficit, are compiled on the basis of country data provided by the European Commission (DG II). The aggregation is carried out by the ECB. While the data on the deficit/surplus are harmonised, data on receipts and expenditure are not. The breakdown of debt is compiled from data provided by NCBs.

Balance of payments, trade and exchange rate statistics

Balance of payments data for the euro area will be published for the first time in the April issue of the Monthly Bulletin, and international investment position statistics in the autumn, conforming to the 5th edition of the IMF Balance of Payments Manual (October 1993) and the ECB Guideline of 1 December 1998 on the statistical reporting requirements of the European Central Bank (ECB/1998/17). Meanwhile, Tables 9.1 to 9.3 present data on euro area trade in goods only.

From January 1999 onwards, statistics on exchange rates (Table 10) are daily reference rates published by the ECB.

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.

Conventions used in the tables

"-"	not applicable
"."	not available
"…"	nil or negligible
"billion"	10^9
(p)	provisional
s.a.	seasonally adjusted

Chronology of monetary policy measures of the Eurosystem

22 December 1998

The Governing Council of the ECB decides that the first main refinancing operation of the Eurosystem will be a fixed rate tender offered at an interest rate of 3.0%, a level which it intends to maintain for the foreseeable future. This operation will be initiated on 4 January 1999, while the allotment decision will be taken on 5 January 1999 and settlement will take place on 7 January 1999. In addition, the first longer-term refinancing operation will be announced on 12 January 1999 (with a settlement date of 14 January 1999) and will be conducted through a variable rate tender using the single rate allotment procedure.

The Governing Council furthermore decides that the interest rate for the marginal lending facility will be set at a level of 4.5% and the interest rate for the deposit facility at a level of 2.0% for the start of Stage Three, i.e. 1 January 1999. As a transitional measure, between 4 and 21 January 1999, the interest rate for the marginal lending facility will be set at a level of 3.25% and the interest rate for the deposit facility at a level of 2.75%. The Governing Council intends to terminate this transitional measure following its meeting on 21 January 1999.

31 December 1998

In accordance with Article 109l (4) of the Treaty establishing the European Community, the EU Council, acting with the unanimity of the Member States of the European Community without a derogation, upon a proposal from the European Commission and after consultation of the ECB, adopts the irrevocable conversion rates for the euro, with effect from 1 January 1999, 0.00 a.m. (local time).

The ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece decide, in a common procedure involving the European Commission and after consultation of the Monetary Committee, to fix the central rates against the euro for the currencies participating in the exchange rate mechanism which comes into operation on 1 January 1999. Further to this decision on the euro central rates, the ECB, Danmarks Nationalbank and the Bank of Greece establish by common accord the compulsory intervention rates for the Danish krone and the Greek drachma. A fluctuation band of ±2.25% will be observed around the euro central rate for the Danish krone. The standard fluctuation band of ±15% will be observed around the euro central rate for the Greek drachma.

7 January 1999

The Governing Council of the ECB decides that for the two main refinancing operations to be announced on 11 and 18 January 1999 respectively the same conditions will apply as for the first such operation, which was settled on 7 January 1999, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. The Governing Council confirmed its intention to maintain the main refinancing rate at this level for the foreseeable future.

21 January 1999

The Governing Council of the ECB decides to revert to the interest rates on the Eurosystem's two standing facilities which it had set for the start of Stage Three, i.e. to set the interest rate for the marginal lending facility at a level of 4.5% and that for the deposit facility at a level of 2.0% with effect from 22 January 1999. Furthermore, it decides that for the two main refinancing operations to be settled on 27 January and 3 February 1999 respectively the same conditions will apply as for the first three such operations settled earlier in January, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%.

4 February 1999

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 10 and 17 February 1999 the same conditions will apply as for the first such operations settled earlier in the year, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. In addition, the interest rate on the marginal lending facility continues to be 4.5% and the interest rate on the deposit facility remains 2.0%.

Documents published by the European Central Bank (ECB)

This list is designed to inform readers about selected documents published by the European Central Bank. The publications are available to interested parties free of charge from the Press Division. Please submit orders in writing to the postal address given on the back of the title page.

For a complete list of documents published by the European Monetary Institute, please visit our Web site (http://www.ecb.int).

Monthly Bulletin

Articles published from January 1999 onwards:

"The euro area at the start of Stage Three", January 1999.

"The stability-oriented monetary policy strategy of the Eurosystem", January 1999.

"Euro area monetary aggregates and their role in the Eurosystem's monetary policy strategy", February 1999.

Other publications

TARGET brochure, July 1998.

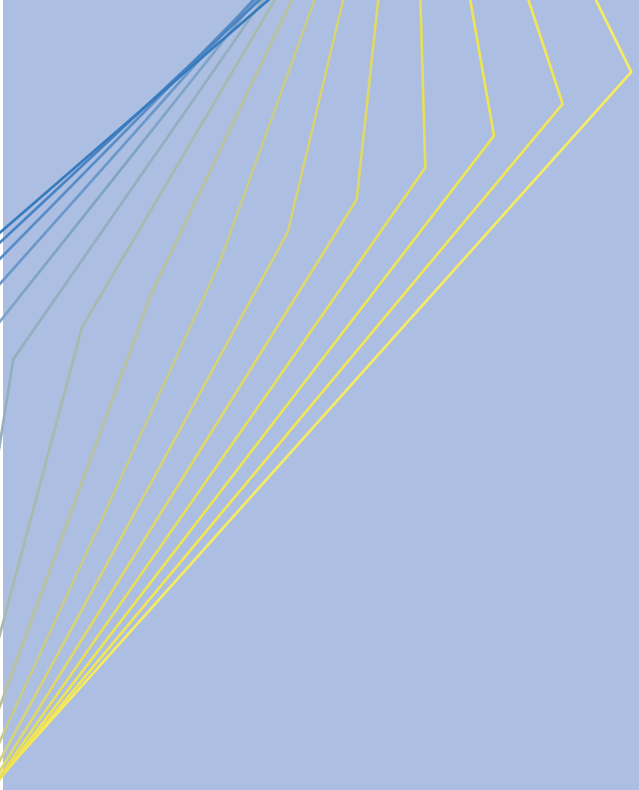
"The TARGET service level", July 1998.

"Report on electronic money", August 1998.

"Assessment of EU securities settlement systems against the standards for their use in ESCB credit operations", September 1998.

"Money and banking statistics compilation guide", September 1998.

"The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures", September 1998.

"Correspondent central banking model (CCBM)", December 1998.

"Possible effects of EMU on the EU banking systems in the medium to long term", February 1999.