

EN

EUROPEAN CENTRAL BANK

MONTHLY BULLETIN January 2000



EUROPEAN CENTRAL BANK

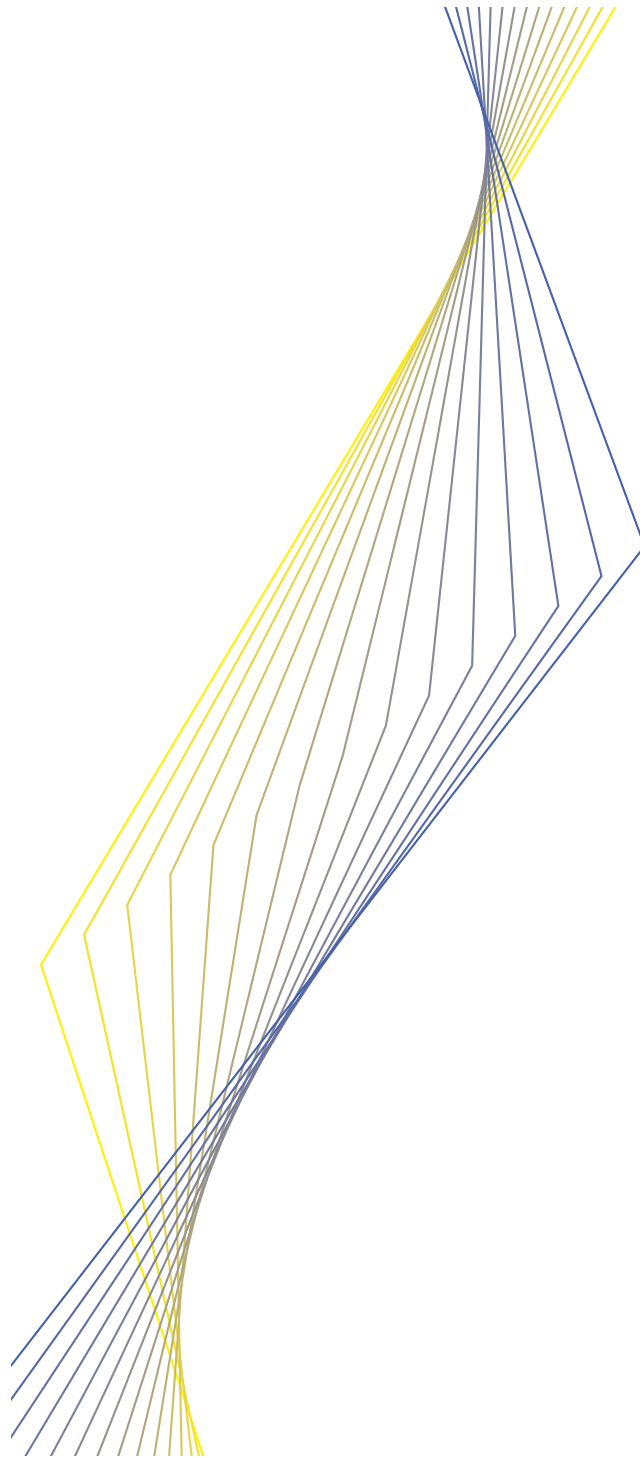
ECB EZB EKT BCE EKP

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

January 2000



**EUROPEAN CENTRAL BANK**



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

**January 2000**

© **European Central Bank, 2000**

<b>Address</b>	<b>Kaiserstrasse 29 D-60311 Frankfurt am Main Germany</b>
<b>Postal address</b>	<b>Postfach 16 03 19 D-60066 Frankfurt am Main Germany</b>
<b>Telephone</b>	<b>+49 69 1344 0</b>
<b>Internet</b>	<b><a href="http://www.ecb.int">http://www.ecb.int</a></b>
<b>Fax</b>	<b>+49 69 1344 6000</b>
<b>Telex</b>	<b>411 144 ecb d</b>

*This Bulletin was produced under the responsibility of the Executive Board of the ECB. Translations are prepared and published by the national central banks.*

*All rights reserved. Reproduction for educational and non-commercial purposes is permitted provided that the source is acknowledged.*

*The cut-off date for the statistics included in this issue was 4 January 2000.*

ISSN 1561-0136

# Contents

Editorial	5
Economic developments in the euro area	7
Monetary and financial developments	7
Price developments	21
Output, demand and labour market developments	23
Exchange rate and balance of payments developments	30
The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure	35
Foreign exchange reserves and operations of the Eurosystem	51
Euro area statistics	I*
Chronology of monetary policy measures of the Eurosystem	53*
Documents published by the European Central Bank (ECB)	57*

## Abbreviations

### Countries

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

### Others

BIS	Bank for International Settlements
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 Organization
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 Bulletin using the alphabetical order of the country names in the national languages.**

## Editorial

At its meetings held on 15 December 1999 and 5 January 2000 the Governing Council of the ECB decided, after careful examination of monetary and economic developments and their implications for the risks to price stability in the future, to keep the interest rates on the monetary policy instruments of the Eurosystem unchanged. The interest rate on the main refinancing operations thus remained at 3.0%, while the interest rates on the marginal lending facility and the deposit facility were kept at 4.0% and 2.0% respectively. Furthermore, the Governing Council took note, at its meeting on 5 January, of the smooth transition to the year 2000 of the euro area financial markets. This was the result of both the timely preparations of the banking and financial community and the precautionary measures taken by the Eurosystem, including the provision of ample liquidity to the money market during the period around the century date change. By the time the financial markets opened on 3 January 2000 the risk premia related to market concerns with regard to the transition to the year 2000, which had affected interest rates over recent months, had disappeared.

Monetary data for November 1999 indicated that M3 growth had remained on a gradually rising trend since the beginning of 1999. The latest three-month average of annual M3 growth (covering the period from September to November 1999) was 6.0%, which was slightly higher than the (revised) figure of 5.9% recorded in the previous three-month period ending in October 1999. Hence M3 growth remained around 1½ percentage points above the reference value of 4½%. The most liquid components of M3 continued to grow relatively fast on an annual basis, although less than in previous months. Together with the continuing strong expansion of credit to the private sector, which recorded a rate of around 10%, this indicates that the liquidity conditions in the euro area remained rather generous.

In financial markets, long-term interest rates increased by almost 40 basis points between

end-November 1999 and 4 January 2000, partly in tandem with bond yields in the United States, but also in response to positive news on economic activity in the euro area which supported views of an ongoing economic recovery. The sharp increase in stock prices which occurred in the last quarter of 1999, even though it was partially reversed at the beginning of January 2000, also points to expectations of an improved outlook for economic activity in the euro area.

Real GDP growth at the global level is continuing to gain momentum. Projections for world output and trade growth have been revised upwards recently. Outside the euro area, this reflects not only the sustained strong growth performance of the US economy, but also the widespread upturn in output growth foreseen for other industrialised countries and the strong recovery in Asian emerging market economies. However, in Japan recent signals about the pace of recovery have been more mixed.

The latest developments relating to economic activity in the euro area have also contributed to the improved outlook for the global economy. Eurostat estimates for real GDP growth in the euro area indicate that economic activity significantly accelerated in the third quarter of 1999. Survey data for the industrial sector point to continued solid output growth in the final quarter of 1999 as well. In general, available indicators point to an improved business climate. In addition, the high level of consumer confidence indicates sustained growth of private consumption, which should benefit further from continued employment growth.

The annual inflation rate measured on the basis of the Harmonised Index of Consumer Prices (HICP) edged up by 0.2 percentage point, to 1.6%, in November 1999. A factor contributing to this outcome has been a further increase in the annual rate of change in the energy price component of the HICP. The overall evolution of the HICP was also

influenced in November by an increase in the rate of change in services prices, which may, however, be only temporary. The annual rate of change in the HICP excluding energy prices and seasonal food rose somewhat in November, to a level of 1.0%.

The nominal effective exchange rate of the euro remained broadly unchanged during December 1999, rising slightly in early January 2000. The past depreciation of the nominal effective exchange rate of the euro and the rise in oil prices during 1999 have increased the cost of imports for the euro area. This has resulted in, inter alia, short-term upward pressures on the energy price component of the HICP and possibly also on intermediate goods prices. Past developments in the exchange rate and in oil prices will, as such, lead to some fluctuations in the series of the annual rate of HICP inflation during 2000, partly as a result of base effects. Assuming that these factors do not continue to produce further upward pressures on consumer prices in the period ahead, the year-on-year rate of increase in the HICP would be expected to reach a peak in early 2000 and to fall thereafter. Therefore, an upward movement in the year-on-year rate of increase in the HICP in the next few months related only to these developments should not give cause for concern regarding higher inflation of a more permanent nature. The risks to price stability over the medium term mainly depend on the reaction of wages to these short-term developments in consumer prices.

Overall, recent data confirm the Governing Council's previous assessment regarding the outlook for price developments and the risks to price stability. The monetary data up to November 1999 confirmed that liquidity conditions remain generous. The increase in oil prices and the depreciation of the exchange rate of the euro which occurred during 1999 will affect the outlook for price developments in the short run. In terms of the outlook for price stability in the medium term, it is essential that the immediate upward movement in consumer prices does not translate into general inflationary pressures and, in particular, that it does not trigger second round effects such as excessive wage claims. Against this background, the Governing Council of the ECB remains both confident and vigilant.

This issue of the ECB Monthly Bulletin contains two articles. The first is entitled "The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure". This article reviews the main structural features of the euro area economy one year after the start of Stage Three of Economic and Monetary Union, focusing in particular on changes which occurred in the financial structure of the euro area in 1999. The second article provides information on the foreign exchange reserves and operations of the Eurosystem.

# Economic developments in the euro area

## I Monetary and financial developments

### Monetary policy decisions of the Governing Council of the ECB

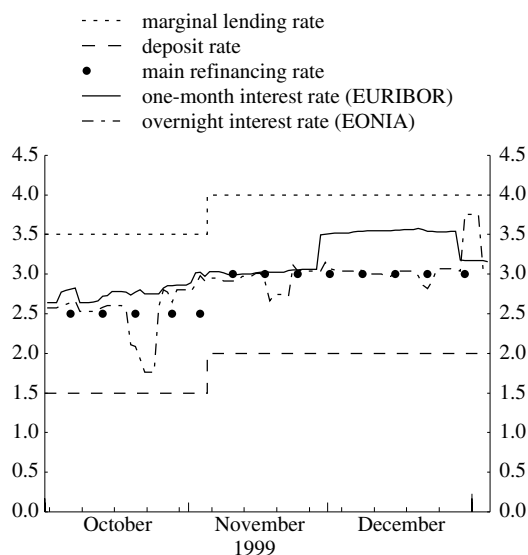
At its meetings held on 15 December 1999 and 5 January 2000 the Governing Council of the ECB confirmed the prevailing levels of ECB interest rates. The interest rate on the main refinancing operations of the Eurosystem was thus left at 3.0%, and the interest rates on the marginal lending facility and on the deposit facility were maintained at 4.0% and 2.0% respectively (see Chart 1).

### M3 growth remained strong in November

In November 1999 the annual rate of growth in the broad monetary aggregate M3 increased to 6.2%, from 5.8% in the previous month (the latter figure was revised downwards from 6.0%). The three-month average of the annual growth rates of M3, covering the period from September to November 1999, was, at 6.0%, slightly higher than the figure recorded for the period from

### Chart 1 ECB interest rates and money market rates

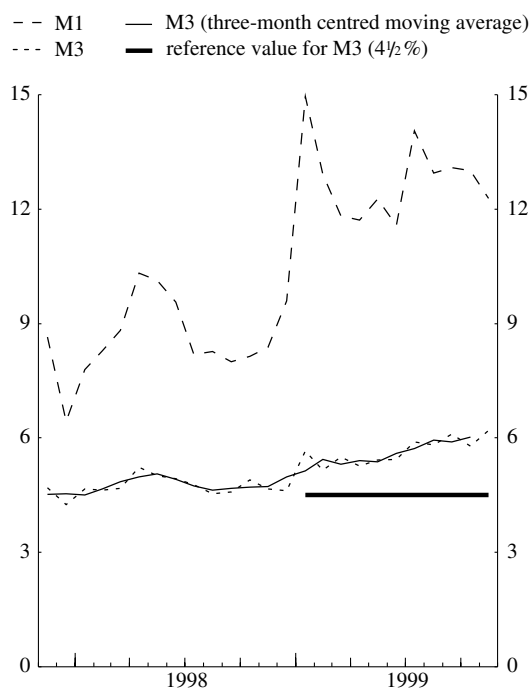
(percentages per annum; daily data)



Source: ECB.

### Chart 2 Monetary aggregates in the euro area

(annual percentage changes)



Source: ECB.

August to October 1999 (5.9%, revised downwards from 6.0%); it thus remained around 1½ percentage points above the reference value of 4½%.

The annual growth rate of M3 continued to reflect, to some extent, the exceptionally strong increase in overnight deposits recorded in January 1999, which was only partially reversed in February. However, it was also the result of a protracted monetary expansion in subsequent months. This is illustrated by the fact that over the nine-month period from March to November, which was not influenced by the volatility experienced at the beginning of 1999, the seasonally adjusted and annualised growth rate of M3 was 5.9%. As can be seen from Chart 2, annual M3 growth rates tended gradually to depart from the reference value in the course of 1999.

On the basis of non-seasonally adjusted monthly changes, the outstanding amount of



**Table 1****M3 and its main components***(end-of-month levels and seasonally adjusted month-on-month changes)*

	Nov. 1999 levels	Sep. 1999 change		Oct. 1999 change		Nov. 1999 change		Sep. to Nov. 1999 average change	
	EUR billions	EUR billions	%	EUR billions	%	EUR billions	%	EUR billions	%
<b>M3</b>	4,689.0	27.4	0.6	18.1	0.4	24.2	0.5	23.2	0.5
Currency in circulation and overnight deposits (= M1)	1,907.4	12.4	0.7	8.4	0.4	4.5	0.2	8.4	0.4
Other short-term deposits (= M2 - M1)	2,120.5	4.4	0.2	4.9	0.2	0.3	0.0	3.2	0.1
Marketable instruments (= M3 - M2)	661.1	10.6	1.7	4.8	0.8	19.4	3.0	11.6	1.8

*Source: ECB.**Note: Due to rounding, the sum of the components of M3 in euro (billions) may not add up to the total reported for M3.*

M3 rose by €47 billion in November; around half of this increase was due to seasonal influences. Corrected for the influence of seasonal factors, the rise in M3 in November 1999 compared with October 1999 was €24 billion, or 0.5% (see Table 1). The seasonally adjusted rise in M3 mirrored increases in the components of M1 (currency in circulation and overnight deposits) and in the marketable instruments. The seasonally adjusted monthly change in M1 was €5 billion, or 0.2%, and that in the marketable instruments was €19 billion, or 3.0%. The outstanding amount of other short-term deposits was broadly unchanged.

The annual rate of increase in currency in circulation declined slightly in November 1999, to 5.3%, from 5.5% in October. The annual growth rate of overnight deposits decreased more substantially, to 13.9%, from 14.8% in the previous month. The decline in the demand for the most liquid components of M3 in November may be seen, at least in part, against the background of the rise in short-term market interest rates after end-September, which tended to increase the opportunity costs of holding these liquid instruments. As a consequence of these developments, the annual growth rate of M1 declined to 12.3% in November, from 13.0% in October. Nonetheless, the annual growth rate of this narrow monetary aggregate remained high, relating to the aforementioned

exceptionally strong increase in overnight deposits at the beginning of 1999, the relatively low level of short-term interest rates prevailing in 1999 and the ongoing recovery in economic activity in the euro area.

The annual rate of growth of short-term deposits other than overnight deposits also declined in November, to 1.8%, from 2.4% in the previous month. The slowdown in this component of M3 was due to both a more pronounced rate of decline in deposits with an agreed maturity of up to two years (2.5%, from 2.0% in October) and a slower annual growth rate of deposits redeemable at a period of notice of up to three months (5.0%, compared with 5.6% in the previous month). The widening spread between short-term market interest rates and retail bank rates on these deposits during October and November may have temporarily spurred some substitution towards short-term securities, including those in M3. The annual growth rate of the intermediate monetary aggregate M2, which includes currency in circulation and all short-term deposits, declined significantly, from 7.1% in October to 6.5% in November.

By contrast with the aforementioned developments, a major upturn took place in the demand for the marketable instruments included in M3. The annual rate of growth of this component rose to 4.0% in November –

the highest figure recorded in the past 12 months – from -2.2% in the previous month. This rise in the annual growth rate was determined by a very pronounced monthly increase in November (see Table I), reflecting developments in all the instruments included in this component of M3. A significant increase was recorded in the annual growth rate of both money market fund shares and money market paper (17.7% in November, from 13.8% in October) and debt securities issued with a maturity of up to two years (9.4%, from 6.8% in October). In addition, the annual rate of decline in repurchase agreements slowed down (to 20.2%, from 28.3% in the previous month). As noted above, the heightened demand for the marketable instruments included in M3 might have been related to the recent rise in short-term market interest rates. In this context, there is some evidence that the higher growth of money market fund shares and money market paper in November was partly the result of purchases by non-euro area residents. Although the concept of M3 only refers to the monetary holdings of euro area residents, statistical limitations do not permit a separate identification of those negotiable securities issued by MFIs which are held by non-residents. This suggests that caution must be exercised in interpreting the strong growth of marketable instruments recorded in November.

### **High growth of loans to the private sector continued**

With regard to the counterparts of M3 in the consolidated balance sheet of the MFI sector, total credit extended by MFIs to euro area residents expanded at a more rapid pace in November 1999, with the annual growth rate increasing to 8.5%, from 8.0% in October. This reflected stronger growth of credit granted to both the private sector and the public sector. The annual growth rate of credit extended to the private sector increased to 11.0% in November (from 10.5% in October). However, this evolution mainly reflected an increase in the growth rate of

MFI holdings of securities other than shares issued by the private sector (from 1.6% in October to 8.4% in November) and only to a small degree a higher growth rate of loans to households and corporations (10.1% in November, as compared with 9.9% in the previous month). The annual growth rate of MFI holdings of shares and other equity, albeit moderating somewhat, remained strong (at around 27%).

During the autumn of 1999 the higher bank lending rates should – taken by themselves – have had a moderating impact on the demand for loans. However, other factors were working in the opposite direction. In particular, the economic recovery and favourable economic prospects, the intense merger and acquisition activity in the euro area and the interaction with rising property prices in several euro area countries are likely to have contributed to the high growth of borrowing by households and corporations. Box I shows that the strong expansion of loans to the private sector was broadly based in the third quarter of 1999, with the pace of expansion being particularly pronounced in the case of both longer-term loans to households for house purchase and short and medium-term loans to non-financial corporations.

The annual growth rate of credit extended to general government rose to 1.8% in November, from 1.3% in October. This pick-up mainly reflected an increase in the growth rate of loans to general government.

Among the other counterparts of M3, the annual growth rate of longer-term MFI liabilities rose from 6.9% in October to 7.2% in November. This was mainly due to a higher demand for deposits with a maturity of over two years, the annual growth rate of which reached 5.5% after having been 4.1% in October. The growth rate of capital and reserves also increased, from 8.6% in October to 9.1% in November. By contrast, debt securities issued with an original maturity of over two years grew at a rate of 8.8% in November, down from 9.3% in the

## **Box 1**

### **The structure of MFI loans to the non-financial sector in the third quarter of 1999**

A complete set of quarterly data on MFI loans granted to the non-financial sector is now available, broken down by counterpart, type of loan and original maturity, from the first quarter of 1998 up to the third quarter of 1999 (see Table 2.5 in the “Euro area statistics” section). As emphasised previously (see Box 1 on page 10 of the October 1999 issue of the ECB Monthly Bulletin), the annual growth rates discussed in this box are not directly comparable with those reported for the total of MFI loans in the main text. In particular, they are not corrected for the effect of changes in value not related to transactions, even if some reclassifications have been accounted for in the table shown below. Moreover, these distortions may differ in size across counterpart sectors, types of loans, or maturities, thus making comparisons across these categories problematical. Therefore, the reported figures should be interpreted with caution. Work is currently under way to improve the quality of these quarterly data and their consistency with the monthly data on loans.

At the end of the third quarter of 1999 94% of the outstanding MFI loans to non-MFI counterparts resident in the euro area were granted to the non-financial sector (with the remaining 6% covering loans to insurance corporations, pension funds and other non-monetary financial intermediaries). Among the loans to the non-financial sector, loans granted to households (including non-profit institutions serving households) had a 46% share. Loans to non-financial corporations accounted for 40% and loans to general government represented 14% of the total loans to the non-financial sector. As regards the maturity breakdown, it is notable that loans extended to households were mostly (80%) characterised by an original maturity of more than five years. Three-quarters of these long-term loans to households were for house purchase. Loans to non-financial corporations with an original maturity of over five years amounted to 49% of the total loans to this counterpart sector and those with a maturity of up to one year represented 35%. Finally, 90% of loans to state and local governments had a maturity exceeding five years. (No maturity breakdown is available for loans to central government.)

The table below presents both outstanding levels and annual growth rates of MFI loans to the non-financial sector (excluding non-profit institutions serving households). The annual rate of growth of loans to households was broadly stable at 9.7% in the third quarter of 1999. This overall stability masked a reduction in the rate of growth of consumer credit (which nonetheless remained high, in particular for loans with a medium-term maturity of over one and up to five years) and a slight increase in the growth rate of loans for house purchase. The latter occurred against a background of rising mortgage rates (see Table 3.4 in the “Euro area statistics” section), which nevertheless still remained low by historical standards. In addition, the stronger trend of loans for house purchase took place in a context of rising property prices in several euro area countries.

The annual growth rate of loans to non-financial corporations fell from 8.1% in the second quarter to 7.0% in the third quarter of 1999. This was mainly a consequence of a reduced rate of increase in loans with an original maturity exceeding five years (which was 6.0% in the third quarter of 1999, compared with 8.2% in the second quarter), while the rate of expansion in short-term loans (with a maturity of up to one year) remained virtually unchanged and that in medium-term loans (with a maturity of over one year and up to five years) strengthened a little. The continued rapid expansion of short and medium-term business loans was probably influenced by the ongoing economic recovery and the enhanced pace of mergers and acquisitions in the euro area, whereas the decline in the growth of longer-term loans may reflect the impact of higher bank lending rates (see Table 3.4 in the “Euro area statistics” section).

The outstanding amount of loans granted to general government was broadly unchanged in the third quarter of 1999 from the level recorded in the third quarter of 1998. The annual growth rate of loans to general government was lower than in the second quarter of 1999 (0.2%, compared with 1.3%), reflecting a more pronounced rate of decline in loans to central government (4.9% in the third quarter, after 2.3% in the second

quarter), a more moderate rate of expansion in loans to state government and a significantly lower rate of increase in loans to social security funds. By contrast, the rate of change in loans to local authorities turned positive.

### MFI loans to the non-financial sector by counterpart, type and original maturity<sup>1)</sup>

(outstanding amounts in EUR billions; annual growth rates as percentages)

#### Loans to households and non-financial corporations

	Households <sup>2)</sup>									Non-financial corporations <sup>2)</sup>				
		Consumer credit <sup>3)</sup>			Lending for house purchase <sup>3)</sup>			Other lending		Up to 1 year	Over 1 and up to 5 years	Over 5 years		
		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years							
Outstanding amounts <sup>4)</sup> 1999 Q3	2,642	435	85	154	195	1,636	19	67	1,550	571	2,338	829	364	1,145
Annual growth rate 1999 Q2	9.6	10.1	9.0	13.3	8.5	10.1	13.4	-2.8	10.5	8.5	8.1	9.0	7.5	8.2
Q3	9.7	8.3	6.5	11.4	7.1	10.4	11.8	-2.7	10.8	9.1	7.0	8.8	8.1	6.0

#### Loans to general government

	General government											
		Central government <sup>2)</sup>	Other general government								Social security funds <sup>2)</sup>	
			State government <sup>2)</sup>			Local government <sup>2)</sup>			Social security funds <sup>2)</sup>			
			Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years				
Outstanding amounts <sup>4)</sup> 1999 Q3		830	206	279	11	21	247	328	19	11	298	18
Annual growth rate 1999 Q2		1.3	-2.3	2.9	35.3	-2.1	2.1	-2.1	1.0	-79.8	15.0	203.5
Q3		0.2	-4.9	2.2	37.2	5.7	0.9	1.1	7.9	-78.9	16.4	18.4

Source: ECB.

1) Growth rates are calculated on the basis of changes in outstanding amounts. They cannot be derived from the stock data displayed in Table 2.5 in the "Euro area statistics" section of this ECB Monthly Bulletin, as they have been corrected for the effect of some reclassifications made at the start of Stage Three of EMU.

2) Corresponding to ESA 95 definitions.

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

4) Differences between some subtotals and their components are due to rounding.

previous month. The decline in the annual growth rate of these debt securities may be related, in part, to base effects arising from the volatility in the demand for these instruments in the aftermath of the financial turmoil in the autumn of 1998 (with a rather exceptional decline in outstanding amounts in October and a recovery in November 1998). Finally, the rate of decline in deposits redeemable at a period of notice of over three months was broadly unchanged at 8.1% in November 1999.

During November the net external asset position of the MFI sector declined by €14 billion in absolute and non-seasonally adjusted terms (after a decrease of €33 billion in October 1999). This decline resulted from a stronger increase in MFI external liabilities (€16 billion) than in external assets (€2 billion).

Overall, during the 12 months up to November 1999 the outstanding amount of M3 rose by €272 billion (see Table 2). Over this period credit to the private sector

**Table 2****M3 and its main counterparts***(EUR billions)*

	Amounts out-standing	12-month flows					
		1999 Nov.	1999 June	1999 July	1999 Aug.	1999 Sep.	1999 Oct.
1 Credit to the private sector	6,086.8	588.0	578.3	587.4	573.2	572.4	602.7
2 Credit to general government	2,085.3	-5.4	-4.1	-3.4	14.3	25.7	36.0
3 Net external assets	269.0	-227.6	-202.1	-241.3	-223.7	-199.3	-197.9
4 Longer-term financial liabilities	3,531.9	177.5	183.4	180.2	182.5	223.7	235.8
5 Other counterparts (net liabilities)	220.4	-58.7	-67.3	-88.8	-82.9	-76.9	-67.0
M3 (≡1+2+3-4-5)	4,689.0	236.2	256.0	251.3	264.2	252.1	272.0

*Source: ECB.**Note: Due to rounding, the sum of the counterparts of M3 in euro (billions) may not add up to the total reported for M3.*

expanded by €603 billion, while credit to general government rose by only €36 billion. These developments were accompanied by a reduction in the net external assets of the MFI sector (€198 billion) and an increase in longer-term MFI liabilities (€236 billion). The other counterparts (net liabilities) declined by €67 billion over the 12-month period up to November 1999.

### Debt securities issuance activity picked up in September

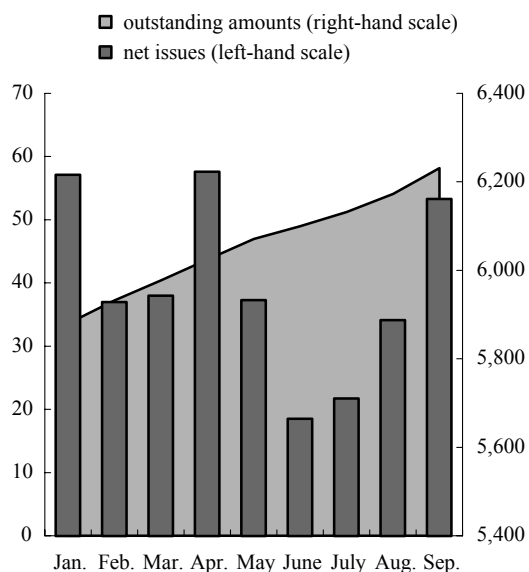
In September 1999 the gross issuance of debt securities by euro area residents totalled €315.4 billion. This was above the monthly average of gross issuance during the first eight months of 1999 (€302.8). Since redemptions of debt securities in September were €262.0 billion, net issuance amounted to €53.3 billion. Chart 3 indicates that this was more than the average monthly level of net issuance seen during the first eight months of 1999 (€37.7 billion). By the end of September the total amount of outstanding debt securities issued by euro area residents was €6,231.1 billion.

The bulk (92%) of net issues in September were long-term, as was the case for most months in 1999. The share of securities

denominated in euro in total net issuance was 80% in September. This compares with an average share of net euro-denominated debt securities issues in total net issues of 92% during the first eight months of 1999.

**Chart 3**

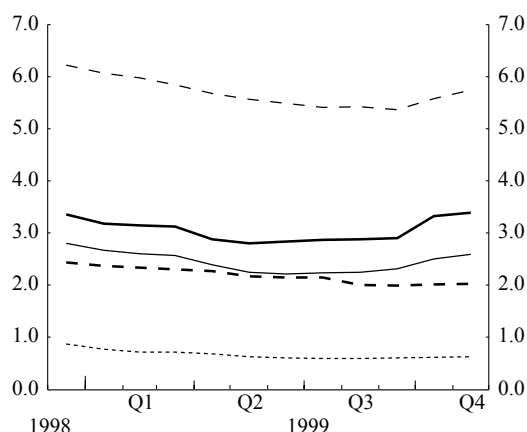
### Debt securities issued by euro area residents in 1999

*(EUR billions)**Source: ECB.**Note: Net issues differ from the change in amounts outstanding owing to valuation changes, reclassifications and other adjustments.*

## Chart 4 Short-term retail bank interest rates

(percentages per annum; monthly averages)

- three-month money market rate
- - loans to enterprises with a maturity of up to one year
- deposits with an agreed maturity of up to one year
- - deposits redeemable at notice of up to three months
- ..... overnight deposits



Source: ECB aggregation of individual country data.

### Retail bank interest rates rose slightly at shorter maturities in November

Short-term retail bank interest rates in the euro area increased slightly in November 1999, following the increase in ECB interest rates in early November, although the increases since the summer months were smaller than the increases in short-term market interest rates. At the same time, longer-term retail bank interest rates in the euro area, which had shown a tendency to increase after May, were stable or declined slightly in November against the background of the declines in long-term capital market interest rates around the time of the increase in ECB interest rates.

Over the period from August to November 1999 the euro area average interest rates on overnight deposits, deposits redeemable at a period of notice of up to three months and consumer loans all remained broadly stable, at around 0.6%, 2.0% and 9.3% respectively (see Chart 4). However, other short-term retail bank interest rates increased in November. The euro area average interest rate on shorter-term time deposits with maturities of up to one year

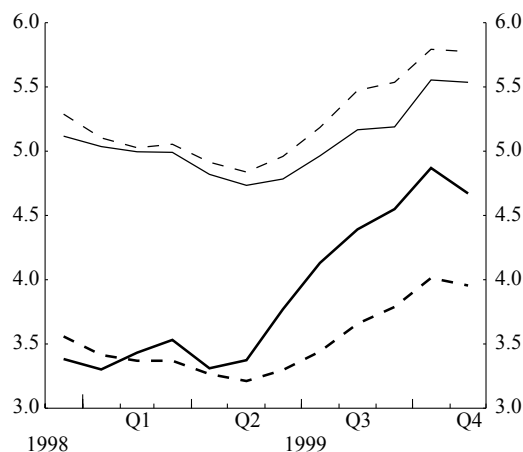
increased by around 10 basis points during November, to 2.6%. This brought the cumulative increase in this interest rate to around 35 basis points since August. Similarly, the euro area average short-term rate for lending to enterprises increased by 17 basis points in November, bringing the cumulative increase in this rate to 32 basis points since August.

Slight declines were seen in some retail bank interest rates at longer maturities during November 1999 against the background of a decline in capital market interest rates (see Chart 5). This partially reversed the trend increases observed in longer-term deposit and lending rates from the early summer months onwards. The euro area average rate on time deposits with an agreed maturity of more than two years declined by 6 basis points in November, to 3.95%, leaving the cumulative increase in this rate since May at 74 basis points. The euro area average interest rates on loans to households for house purchase and on longer-term loans to enterprises both remained broadly stable in November, at around 5.8% and 5.5% respectively. These rates showed cumulative increases of 90 and 80 basis points respectively in comparison with May.

## Chart 5 Long-term retail bank interest rates

(percentages per annum; monthly averages)

- five-year government bond yields
- - loans to households for house purchase
- - deposits with an agreed maturity of over two years
- loans to enterprises with a maturity of over one year



Source: ECB aggregation of individual country data.

### **Money market interest rates normalised as market concerns about the transition to the year 2000 unwound**

The evolution of money market interest rates at the turn of the year was influenced by the unwinding of financial market concerns about the transition to the year 2000. As noted in previous issues of the ECB Monthly Bulletin, a risk premium on financial transactions spanning the turn of the year existed during most of 1999 (see Box 3 on page 19 of the December 1999 issue of the ECB Monthly Bulletin). The pattern followed by short-term interest rates around the turn of the year indicated that this risk premium had declined substantially in the last week of December 1999 and had disappeared by the time the financial markets opened on 3 January 2000.

In the course of December 1999, until and including the 29th, the overnight interest rate, as measured by the EONIA rate, was mostly quoted close to 3.0%. However, on 30 December, i.e. the last trading day before the end of 1999, it increased to 3.75% (see Chart 1). While an increase in the overnight rate at year-end is a normal phenomenon, owing to the efforts of banks to adjust their balance sheets, the rise in the overnight rate observed at end-1999 was considerably larger than in previous years. This reflected heightened uncertainty in connection with the transition to the year 2000. However, although banks made significant recourse to the marginal lending facility of the Eurosystem on that day, the EONIA rate remained below the rate of 4.0% applied to this facility. By 3 January 2000, the first trading day of the new year, the EONIA rate had already returned to 3.06%, and it declined further to 3.01% on the following day. Looking back, the millennium spike turned out to be far smaller than had been feared by some observers over the past few months.

The relatively mild impact on the overnight interest rate was also accounted for by the precautionary measures taken by the ECB, both to ensure that ample liquidity would be available in the money market at the time of

the century date change and to eliminate potential problems arising from the maturing and renewal of large refinancing operations around the turn of the year. In respect of the latter, the Governing Council had decided to implement certain changes to the calendar of the main and longer-term refinancing operations earlier in 1999. As early as May 1999 it was decided to bring forward the redemption date of the longer-term refinancing operation to be settled on 30 September, from 30 to 23 December 1999. Accordingly, the longer-term refinancing operation which was originally intended to be settled on 30 December was also rescheduled for settlement one week earlier, on 23 December 1999 (see Box 2). Furthermore, in September 1999 the ECB announced that, instead of conducting a regular main refinancing operation in the first week of 2000, it would lengthen the maturity of the last two main refinancing operations of 1999 to three weeks. The rescheduling of these operations contributed to reducing *ex ante* the risks for financial market participants around the turn of the year.

Of particular importance for the development of the EONIA rate around the turn of the year was the ECB's policy of providing the money market with sufficient liquidity. As early as October 1999 it was decided to raise the amount of funds allotted in the last three regular monthly longer-term refinancing operations in 1999 from €15 billion to €25 billion. Moreover, in the main refinancing operation which was allotted and settled on 30 December 1999, the ECB provided an amount of funds large enough to take account of the potential liquidity needs of euro area banks in the event of serious disruptions materialising in the money market at the start of the year 2000. Following the successful transition, however, there was no further need to prolong a situation of abundant liquidity. On 4 January 2000, when it was clear that normal market conditions had been restored and a substantial expansion of liquidity due to autonomous factors was recorded, the ECB pre-announced the execution of a fine-tuning operation – the

**Box 2****Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 December 1999****Allotments in monetary policy operations**

During the reserve maintenance period which lasted from 24 November to 23 December 1999, the Eurosystem conducted four main refinancing operations and two longer-term refinancing operations. The main refinancing operations were all conducted at a fixed interest rate of 3.00%. The allotted volume varied between €57.0 billion and €92.0 billion. The amounts of bids submitted to the main refinancing operations ranged between €287 billion and €1,505 billion; the latter amount was related to the operation conducted on 22 December 1999, the first main refinancing operation maturing in 2000. The average amount of bids submitted to a main refinancing operation decreased to €988.1 billion, from €1,171.7 billion in the previous maintenance period. The allotment ratios in the main refinancing operations varied between 6.1% and 19.9% compared with a range of 2.8% to 18.3% in the preceding maintenance period.

With the exception of a few days, the EONIA rate fluctuated smoothly around the main refinancing rate, as it remained in a range of between 2.97% and 3.07%. On the last three business days of the reserve maintenance period the EONIA rate dropped somewhat, also reflecting the liquidity surplus prevailing at that time.

The Eurosystem conducted longer-term refinancing operations on 24 November and on 22 December 1999. The peculiarity of having two longer-term refinancing operations conducted and settled in one maintenance period was the result of the rescheduling of the allotment of the second operation from 30 December to 22 December 1999, which was made in order to alleviate the working procedures for the financial market participants at the turn of the year. Both operations were conducted by means of a variable rate tender with a pre-announced allotment volume of €25 billion. A total number of 321 bidders participated in the operation of 24 November and 301 bidders participated in the operation of 22 December. The total amount of bids was €75.0 billion and €91.1 billion respectively. The marginal rate was set at 3.18% and 3.26% respectively, while the weighted average rate of allotment was 3.27% and 3.29%. The spread between the marginal rate and the weighted rate narrowed further when compared with the operation conducted on 27 October, when it amounted to 23 basis points, even though it was still higher than the level of 1 basis point observed in earlier longer-term refinancing operations which were maturing before the transition to the year 2000. The narrowing of the spread indicated a reduction in uncertainty associated with the century date change.

**Contributions to the banking system's liquidity**

(EUR billions)

Daily average during the reserve maintenance period from 24 November to 23 December 1999

	<i>Liquidity providing</i>	<i>Liquidity absorbing</i>	<i>Net contribution</i>
<b>(a) Monetary policy operations of the Eurosystem</b>	<b>215.7</b>	<b>1.0</b>	<b>+ 214.7</b>
Main refinancing operations	150.4	-	+ 150.4
Longer-term refinancing operations	65.0	-	+ 65.0
Standing facilities	0.3	1.0	- 0.7
Other operations	0.0	0.0	0.0
<b>(b) Other factors affecting the banking system's liquidity</b>	<b>351.7</b>	<b>460.8</b>	<b>- 109.1</b>
Banknotes in circulation	-	354.3	- 354.3
Government deposits with the Eurosystem	-	59.0	-59.0
Net foreign assets (including gold)	351.7	-	+ 351.7
Other factors (net)	-	47.5	- 47.5
<b>(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)</b>			<b>105.6</b>
<b>(d) Required reserves</b>			<b>104.9</b>

Source: ECB.

Totals may not add up due to rounding.



### Use of standing facilities

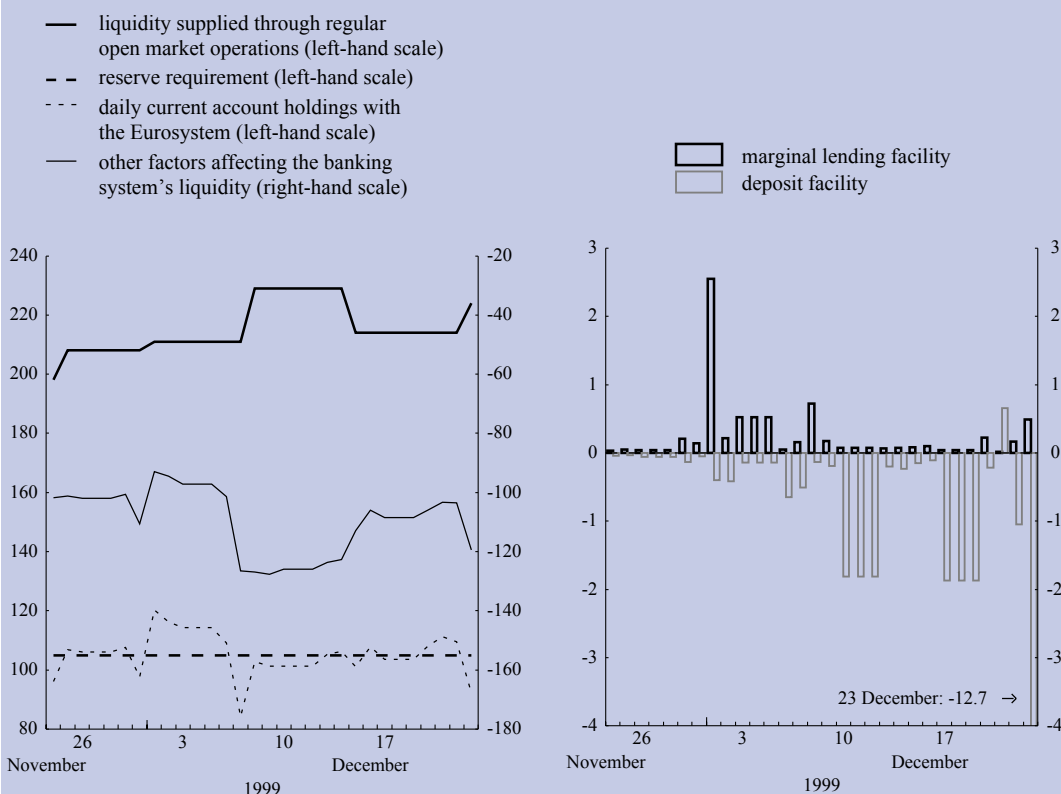
The average recourse to the marginal lending facility amounted to €0.3 billion, i.e. €0.1 billion less than in the previous reserve maintenance period. The average recourse to the deposit facility was €1.0 billion, i.e. €0.6 billion more than in the previous maintenance period. The greatest use of the deposit facility was observed on the last day of the reserve maintenance period, when recourse amounted to €12.7 billion.

### Liquidity factors not related to monetary policy

The net liquidity-absorbing impact of the autonomous factors (i.e. the factors not related to monetary policy) on the banking system's liquidity (item (b) in the table above) was €109.1 billion on average, i.e. €18.9 billion more than in the previous reserve maintenance period. This is mainly explained by the seasonal increase in banknotes in circulation, which was over €11 billion higher on average than in the previous maintenance period. In addition, government deposits were €7.5 billion higher on average. The sum of autonomous factors fluctuated between €92.9 billion and €127.7 billion.

### Factors contributing to the banking system's liquidity during the reserve maintenance period ending on 23 December 1999

(EUR billions; daily data)



Source: ECB.

### Current account holdings of counterparties

The average current account holdings amounted to €105.6 billion and the reserve requirements to €104.9 billion. The difference between the average current account holdings and the reserve requirements therefore amounted again to €0.7 billion, as in the previous reserve maintenance period. About €0.2 billion of this amount was due to current account holdings not contributing to the fulfilment of reserve requirements and €0.5 billion was related to excess reserves.

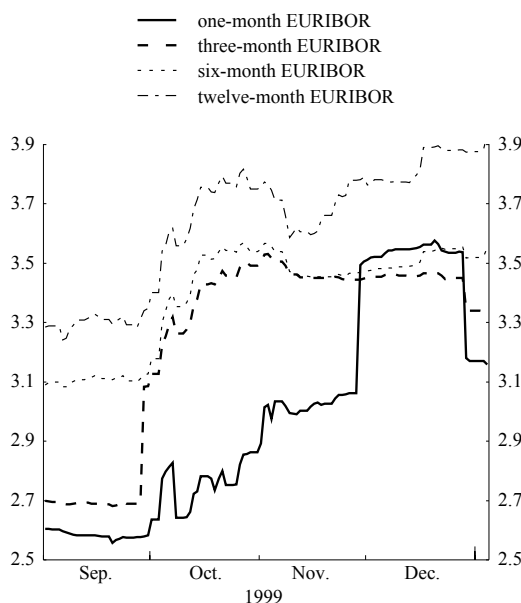
first operation of this kind since the inception of the single currency – in order to withdraw the excess amount of liquidity. Taking into account the fact that the next main refinancing operation would not be settled until 12 January, this liquidity-absorbing operation was conducted and settled on 5 January in the form of a quick variable rate tender for the collection of fixed-term deposits with a maturity of one week. In this operation, the ECB withdrew €14 billion from the money market. This measure was aimed at restoring more normal liquidity conditions and contributing to a smooth development of the money market in the remainder of the reserve maintenance period ending on 23 January 2000.

Other money market interest rates declined markedly on 29 December 1999, as on that day they reflected interbank deposit rates for settlement on 3 January 2000. As expected, the largest declines were observed for interest rates at the short end of the money market yield curve. The one-week EURIBOR interest rate dropped by around 100 basis points, while the one-month and three-month EURIBOR interest rates fell by approximately 25 and 10 basis points respectively (see Chart 6). By contrast, the six-month and twelve-month EURIBOR rates declined only marginally.

On 4 January 2000 the three-month EURIBOR rate stood at 3.34%, a level which was slightly lower than that prevailing at the end of November 1999. The six-month and twelve-month EURIBOR interest rates increased somewhat between the end of November 1999 and the beginning of January 2000, reaching 3.55% and 3.95% respectively on 4 January. The three-month EURIBOR interest rate implied in futures contracts maturing in March, June and September 2000, which were not affected by fears regarding the transition to the year 2000, increased in December 1999 and early January 2000 by 10 to 25 basis points; on 4 January 2000 they were equal to 3.66%, 4.05% and 4.35% respectively.

**Chart 6**  
**Short-term interest rates in the euro area**

(percentages per annum; daily data)



Source: Reuters.

#### Long-term bond yields increased in the course of December

Long-term bond yields in the euro area declined during the first half of December 1999. Subsequently, however, this decline was reversed and the yields once again displayed significant increases during the second half of the month and in the first few days of 2000 (see Chart 7). Compared with end-November 1999, the average level of ten-year bond yields had increased by around 35 basis points, to 5.63%, by 4 January 2000. This brought long-term yields in the euro area to a level around 60 basis points above the trough observed in mid-November, shortly after the increase in ECB interest rates, and back to the peak levels observed in late October.

As was the case for much of 1999, the factors behind recent developments in euro area bond markets seem to relate to both domestic aspects and spillovers from international bond markets. In particular, the sizeable increases in long-term bond yields in the United States seen during the second half

of December appear to have induced considerable upward pressure on euro area yields. Compared with end-November 1999 the spread between US and euro area ten-year bond yields on 4 January 2000 was little changed, at 103 basis points.

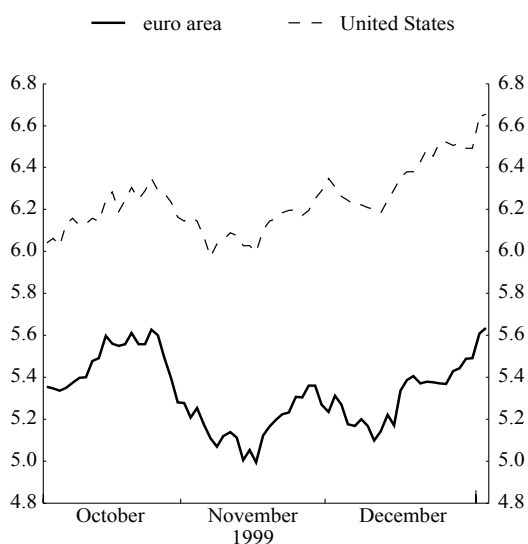
Focusing first on the influence of developments in international bond markets on domestic bond markets, long-term bond yields in the United States increased significantly during the second half of December 1999, following a slight downward movement during the first half of the month. All in all, the US ten-year bond yield increased by around 35 basis points between end-November 1999 and 4 January 2000, when yields reached 6.66%. This represented the highest level in US ten-year bond yields observed since mid-1997, and was around 200 basis points higher than the levels recorded at end-1998. One of the principal factors behind the further increase in US bond yields in December 1999 appeared to be doubts on the part of financial market participants about the ability of the US economy to continue growing at a robust pace without triggering a build-up of inflationary pressure. This shift in expectations seemed to occur in tandem with an almost uninterrupted flow of data pointing to continued robust growth and a generally tight situation in the labour market.

In Japan ten-year bond yields declined by 10 basis points, to 1.73%, between end-November 1999 and 4 January 2000. This decline in long-term interest rates occurred in an environment where data releases provided a somewhat mixed picture of the pace of recovery in Japan.

With regard to developments in euro area bond markets, in addition to the upward movement in US bond yields occurring during the second half of December, other factors also seemed to contribute to placing upward pressure on bond yields. In particular, following a trend that has been evident throughout recent months, economic data releases during December generally pointed

**Chart 7**  
**Long-term government bond yields in the euro area and the United States**

(percentages per annum; daily data)



Source: Reuters.

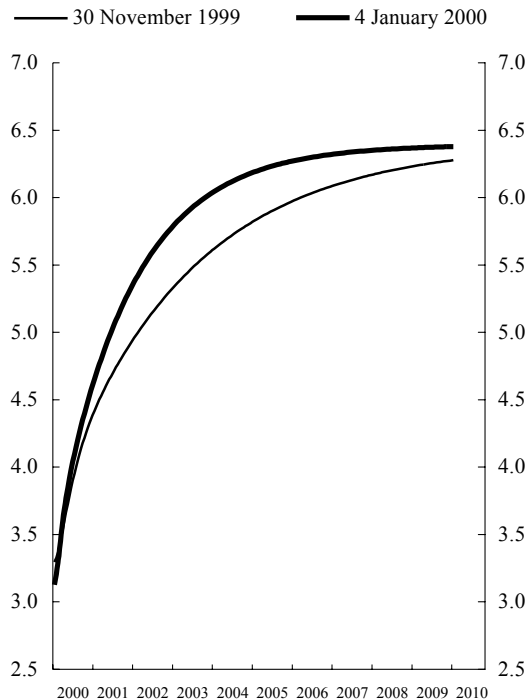
Note: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity.

to more optimistic prospects for euro area economic growth. Furthermore, as financial market participants have revised their growth expectations upwards, they may, at the same time, have become less certain of the implications for future price developments. In the light of the aforementioned developments in euro area bond markets, the euro area forward yield curve became somewhat steeper during December, displaying yield increases at medium-term and long-term maturities (see Chart 8).

Recent developments in the pricing of French index-linked bonds provide some additional indications regarding relevant factors behind euro area nominal bond yield movements. Between end-November 1999 and 4 January 2000 the French ten-year real yield increased by around 10 basis points. At the same time, the ten-year "break-even" inflation rate, i.e. the differential between nominal and real ten-year yields, increased by 25 basis points. These developments are consistent with improved growth expectations, as well as with an increase in uncertainty on the part of market participants

**Chart 8**  
**Implied forward euro area overnight interest rates**

(percentages per annum; daily data)



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

regarding the pace of future price increases. However, as discussed in previous issues of the ECB Monthly Bulletin, some caution should be exercised when analysing inflation expectations based on developments in the French index-linked bond market, since any interpretation is contingent on a number of assumptions.

**Stock prices in the euro area showed further significant increases in December**

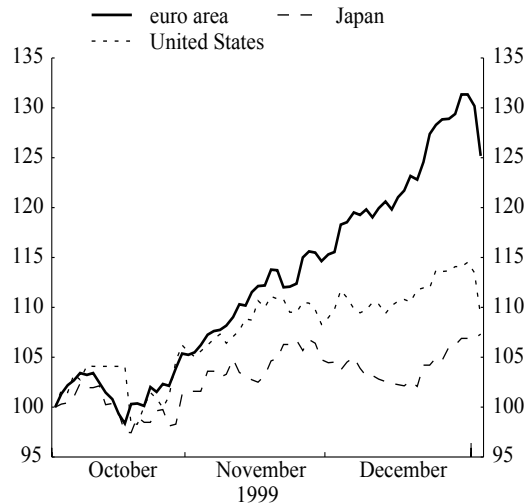
Continuing a trend that seemed to get under way in mid-October 1999, against a background of increasing optimism on the part of market participants regarding the prospects for economic growth in the euro area, stock prices in the euro area exhibited further considerable increases in December

(see Chart 9). The increases witnessed over the past two to three months followed on from relatively limited increases in earlier months of 1999. According to the broad Dow Jones EURO STOXX index, stock prices in the euro area increased by more than 9% over the period from end-November 1999 to 4 January 2000. This brought the cumulative increase in this index over the period from end-1998 to 4 January 2000 to around 33%. Stock prices showed little change in the United States between end-November 1999 and early January 2000, while they increased slightly in Japan over this period. This indicates that domestic factors have played the predominant role in explaining the recent evolution of stock prices in the euro area.

With regard to the global stock market environment, stock prices in the United States, as measured by the Standard and Poor's 500 index, increased by less than 1% over the period from end-November 1999 to 4 January 2000. This brought the cumulative increase in this index since the end of 1998 to around 14% by 4 January 2000. The principal factors that seemed to account for this performance were the positive influence of evidence seen in December of a continuation of the robust performance of the US economy and a positive assessment on the part of market participants of the implications of this for future corporate profitability, which was partly offset by the influence of rising long-term interest rates. In addition, as had been the case for much of 1999, continued optimism about the prospects for future earnings growth in the technology sector, which led to an increase of around 16% in the Nasdaq 100 index over the period from end-November 1999 to 4 January 2000, also played a contributory role. This latter development brought this index, by 4 January 2000, to a level around 93% higher than that recorded at end-1998. In Japan an increase in the Nikkei 225 index of approximately 2% brought the cumulative increase in this index between the end of 1998 and 4 January 2000 to around 37%. This overall performance of the Japanese stock market during December 1999 seemed to

**Chart 9**  
**Stock price indices in the euro area, the United States and Japan**

(1 October 1999 = 100; daily data)



Sources: Reuters for the euro area and the United States; national data for 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.

reflect the countervailing influences of declines in long-term interest rates and the

somewhat conflicting indications about the pace of economic recovery provided by different economic indicators.

A notable feature of the considerable rise in euro area stock prices was that it occurred in an environment of rising long-term interest rates and of a sharp increase in implied volatility derived from options contracts on the broad Dow Jones EURO STOXX index. While these developments in the stock market were in line with the view that market participants were becoming increasingly optimistic about the prospects for the euro area economy during December, the recent increases were not spread evenly across different sectors of the economy. In particular, a relatively large proportion of the increase in December was due to substantial rises in stock prices in the technology and telecommunications sectors (including Internet service provision), where stock prices increased by around 20% each. These rises brought the cumulative increases in these two sectors, when compared with end-1998, to 125% and 94% respectively by 4 January 2000.

## 2 Price developments

### Consumer price increases edged up further in November

Continuing the gradual upward movement that had been observed since mid-1999, the rate of inflation as measured by the year-on-year increase in the overall Harmonised Index of Consumer Prices (HICP) rose further by 0.2 percentage point to 1.6% in November 1999, compared with 1.4% and 1.2% in October and September 1999 respectively (see Table 3). These developments are in line with expectations, in as far as they are attributable to the predictable effects of oil price developments. The rate of increase in services prices also moved upwards in November, leading to a rise in the annual

change in the HICP excluding seasonal food and energy to 1.0%.

As mentioned above, overall price developments are currently strongly influenced by the rise in energy prices. Having remained steady at 6.4% in September and October, the annual rate of increase in energy prices rose to 7.2% in November (see Chart 10). This increase of 0.8 percentage point mainly resulted from a rise in oil prices to €23.5 per barrel in November compared with €20.8 per barrel in October. The oil price increase was mostly reflected in the price of fuels, while the other energy components of the HICP were either more stable or subject to downward pressure. In

**Table 3**  
**Price and cost developments in the euro area**

(annual percentage changes, unless otherwise indicated)

	1997	1998	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
				Q1	Q2	Q3	Q4	July	Aug.	Sep.	Oct.	Nov.	Dec.
<b>Harmonised Index of Consumer Prices (HICP) and its components</b>													
Overall index	1.6	1.1	.	0.8	1.0	1.1	.	1.1	1.2	1.2	1.4	1.6	.
<i>of which:</i>													
Goods	1.1	0.6	.	0.3	0.6	0.9	.	0.7	0.9	1.1	1.3	1.4	.
Food	1.4	1.6	.	1.3	0.6	-0.1	.	-0.1	-0.2	-0.1	0.4	0.5	.
Processed food	1.4	1.4	.	1.2	0.9	0.7	.	0.7	0.7	0.7	0.9	0.9	.
Unprocessed food	1.4	2.0	.	1.5	0.3	-1.4	.	-1.4	-1.6	-1.2	-0.4	-0.2	.
Industrial goods	1.0	0.1	.	-0.2	0.6	1.5	.	1.1	1.5	1.7	1.8	2.0	.
Non-energy industrial goods	0.5	0.9	.	0.8	0.6	0.5	.	0.6	0.6	0.4	0.5	0.5	.
Energy	2.8	-2.6	.	-3.8	0.8	4.9	.	3.2	5.0	6.4	6.4	7.2	.
Services	2.4	2.0	.	1.7	1.6	1.5	.	1.6	1.5	1.4	1.3	1.5	.
<b>Other price and cost indicators</b>													
Industrial producer prices <sup>1)</sup>	1.1	-0.8	.	-2.6	-1.3	0.6	.	-0.1	0.6	1.3	2.1	.	.
Unit labour costs <sup>2)</sup>	0.7	0.0	.	1.6	1.7	.	.	-	-	-	-	-	-
Labour productivity <sup>2)</sup>	1.7	1.5	.	0.2	0.4	.	.	-	-	-	-	-	-
Compensation per employee <sup>2)</sup>	2.4	1.6	.	1.8	2.1	.	.	-	-	-	-	-	-
Total hourly labour costs <sup>3)</sup>	2.6	1.7	.	2.0	1.9	.	.	-	-	-	-	-	-
Oil prices (EUR per barrel) <sup>4)</sup>	17.1	12.0	17.1	10.3	15.0	19.7	23.0	18.1	19.2	21.8	20.8	23.5	24.8
Commodity prices <sup>5)</sup>	12.9	-12.5	-3.1	-16.0	-8.2	1.1	14.0	-2.3	-0.5	6.6	10.7	11.9	19.3

Sources: Eurostat, national data, International Petroleum Exchange, HWWA – Institut für Wirtschaftsforschung (Hamburg) and ECB calculations.

1) Excluding construction.

2) Whole economy.

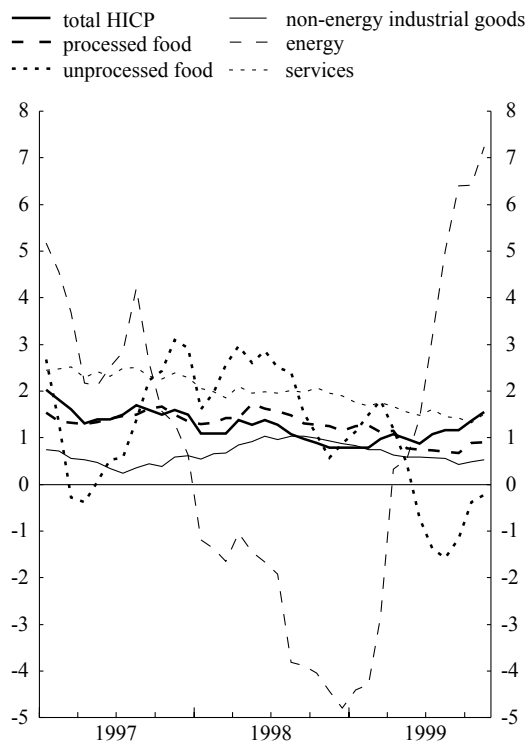
3) Whole economy (excluding agriculture, public administration, education, health and other services).

4) Brent Blend (for one-month forward delivery). In ECU up to December 1998.

5) Excluding energy. In euro; in ECU up to December 1998.

**Chart 10**  
**Breakdown of HICP inflation in the euro area by components**

(annual percentage changes; monthly data)



Source: Eurostat.

particular, the electricity component showed evidence of further price declines linked to the impact of deregulation in some euro area countries. Looking to the immediate future, there will most likely be further increases in overall HICP inflation in the coming months. Oil prices rose again in December 1999 to €24.8 per barrel and it is likely that this will result in a further rise in the year-on-year change in energy prices, particularly given the base effect associated with the trough in energy prices in early 1999.

Moreover, unprocessed food prices are no longer acting as a significant counterweight to rising energy prices, as the year-on-year decline in unprocessed food prices slowed further in November to 0.2%. This contrasts with the situation between June and September 1999, when these prices were declining more strongly year-on-year. The

most recent developments reflect the end of a stronger than average seasonal decline in vegetable prices and a steady recovery in meat prices (for further information on this see Box 5 entitled “Recent developments in unprocessed food prices” in the December 1999 issue of the ECB Monthly Bulletin).

The exclusion of energy and seasonal food from the HICP does not, in general, remove all price developments which are likely to be of a transitory or one-off nature. In particular, the higher rate of increase of 1.5% in services prices in November – up 0.2 percentage point compared with October – was largely accounted for by an increase in a single volatile component (i.e. package holidays) which will probably subsequently be reversed. Apart from this, in most euro area countries the annual change in services prices either remained stable in November or, in some cases, declined further as a result of continued downward pressure associated with liberalisation in sectors such as telecommunications. Hence recent developments do not provide a clear indication that the steady decline in the rate of increase in services prices – observed since the end of last year – has come to an end. By contrast with the above developments, the annual rates of increase in both non-energy industrial goods and processed food prices remained unchanged between November and October, at 0.5% and 0.9% respectively.

**Industrial producer prices rose mainly as a result of oil price increases**

With regard to the other main indicators of price and cost developments in the euro area, industrial producer prices increased by 2.1% year-on-year in October 1999, up from 1.3% in September (see Table 3). This mainly reflected the impact of oil prices on the price of intermediate goods and also, perhaps, the effect of the depreciation in the euro’s nominal effective exchange rate on non-oil commodity prices in the course of 1999. Consumer and capital goods prices also contributed to the increase in industrial

producer prices, although to a far lesser extent. Meanwhile, the annual growth in total hourly labour costs was recently revised downwards to 2.0% and 1.9% for the first and second quarters of 1999 respectively, compared with previous estimates of 2.3% and 2.1%. This general pattern of moderate wage growth during the first half of 1999 is broadly confirmed by early estimates – based on available national data – of growth in compensation per employee in the first and second quarters of 1999. However, as a result of a decline in productivity growth in the first half of 1999, the year-on-year change in unit labour costs is estimated to have risen to

1.6% and 1.7% in the first and second quarters respectively.

Overall, the recent increase in oil prices is likely to exert continued upward pressure on the HICP inflation rate in the coming months. However, assuming that oil prices have reached their peak, this increase will remain transitory, as the effects of earlier oil price increases will no longer contribute to the year-on-year changes. As a result, overall consumer price inflation would then decline again from spring 2000 onwards, provided that forthcoming wage rounds do not result in permanent upward pressure on prices.

### 3 Output, demand and labour market developments

#### Real GDP growth stronger in the third quarter of 1999

Since the December issue of the ECB Monthly Bulletin, Eurostat has released first estimates of euro area national accounts for the third quarter of 1999. These estimates point to a

further strengthening of economic growth in the euro area after the first half of the year, broadly in line with forecasts compiled in the autumn of 1999. The quarter-on-quarter rate of growth in euro area real GDP is estimated to have risen to 1.0% in the third quarter of 1999, from growth rates of 0.5% and 0.6% in

**Table 4**  
**Composition of real GDP growth in the euro area**  
(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates <sup>1)</sup>									Quarterly rates <sup>2)</sup>				
	1996	1997	1998	1998	1998	1999	1999	1999	1999	1998	1998	1999	1999	1999
				Q3	Q4	Q1	Q2	Q3	Q3	Q4	Q1	Q2	Q3	
Real gross domestic product	1.3	2.2	2.7	2.6	1.9	1.7	1.8	2.3	0.5	0.2	0.5	0.6	1.0	
<i>of which:</i>														
Domestic demand	0.9	1.7	3.3	3.5	3.0	2.7	2.7	2.4	0.9	0.7	0.7	0.4	0.6	
Private consumption	1.4	1.4	2.9	3.3	3.1	2.8	2.3	2.4	0.7	0.7	0.6	0.3	0.8	
Government consumption	1.8	0.5	1.3	1.1	1.1	1.4	1.1	1.6	0.0	-0.1	1.4	-0.2	0.5	
Gross fixed capital formation	0.9	2.1	4.3	4.6	3.5	3.7	5.0	3.8	2.2	0.2	2.0	0.6	1.0	
Changes in inventories <sup>3)4)</sup>	-0.5	0.3	0.4	0.4	0.3	0.0	0.1	-0.1	0.0	0.2	-0.4	0.2	-0.2	
Net exports <sup>3)</sup>	0.5	0.6	-0.5	-0.8	-1.0	-0.9	-0.8	0.0	-0.3	-0.5	-0.2	0.2	0.4	
Exports <sup>5)</sup>	4.5	10.0	6.3	4.5	1.6	0.2	0.8	3.9	-0.2	-1.1	0.2	1.9	2.9	
Imports <sup>5)</sup>	3.1	8.7	8.5	7.7	5.0	3.1	3.5	4.3	0.9	0.3	0.8	1.5	1.7	

Sources: Eurostat and ECB calculations.

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

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

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

4) Including acquisitions less disposals of valuables.

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



the first and second quarters of 1999 respectively (see Table 4).

The first estimates indicate that higher euro area GDP growth in the third quarter of 1999 was a result of both a further upturn in net exports and a recovery in domestic demand, which had been subject to somewhat weaker growth in the second quarter. In particular, the quarter-on-quarter rate of growth in exports of goods and services (including intra-euro area trade) rose to 2.9%, resulting in a contribution from net exports to GDP growth of 0.4 percentage point, up from 0.2 percentage point in the previous quarter. The contribution to growth from domestic demand increased to 0.6 percentage point from 0.4 percentage point in the previous quarter; this is close to the rates of growth observed in the first and second quarters of 1999. The contribution of final domestic demand (i.e. excluding inventory changes) was even a little higher. The strengthening of domestic demand in the third quarter reflected higher contributions to growth from both private and government consumption, as well as fixed capital formation. The increase further suggests that the weakening in domestic demand, in particular private consumption growth, in the second quarter was of a temporary nature. This is also underlined by the current

strength of business and consumer sentiment, which is discussed below.

In the third quarter the contribution to quarter-on-quarter growth from changes in inventories was slightly negative, although a further build-up of stocks would be expected in a period of resumed growth (see Box 3 for a discussion of recent developments in inventory changes and some of their implications).

### Continuing upturn in industrial activity

Industrial production data from Eurostat up to September 1999, as reported in the December 1999 issue of the ECB Monthly Bulletin, confirm the continuation of the upturn in industrial production (excluding construction). In the third quarter of 1999 industrial production excluding construction was 0.9% higher than in the second quarter, following a quarter-on-quarter increase of 0.4% in the second quarter and industrial production remaining unchanged in the first quarter of 1999 (see Table 5). Growth in the production of durable consumer goods was substantially stronger than that in other categories of manufacturing production, but was subject to some volatility in the most recent months.

**Table 5**  
**Industrial production in the euro area**

(annual percentage changes, unless otherwise indicated)

	1997	1998	1999			1999			1999					
			July	Aug.	Sep.	July	Aug.	Sep.	Apr.	May	June	July	Aug.	
							month-on-month			three-month moving averages				
Total industry excl. construct.	4.4	4.1	0.4	2.6	1.4	-0.1	0.4	0.1	0.7	0.4	0.9	0.9	0.9	
Manufacturing	5.0	4.6	0.3	2.6	1.4	0.1	1.2	-0.7	0.7	0.5	1.1	1.3	1.2	
by main industrial groupings:														
Intermediate goods	5.4	3.7	0.8	2.3	1.9	-0.1	0.5	0.2	0.8	0.5	0.7	0.8	0.8	
Capital goods	5.0	6.7	-1.2	1.1	1.5	0.1	0.2	0.4	-0.1	0.0	0.2	0.4	0.5	
Consumer goods	2.7	3.1	1.3	4.6	0.8	0.5	1.4	-2.2	1.0	0.7	1.6	1.5	1.1	
Durable consumer goods	2.8	6.3	1.5	11.1	0.7	0.1	4.0	-4.0	1.4	1.5	2.2	2.7	2.0	
Non-durable consumer goods	2.6	1.5	1.4	3.1	1.1	0.5	0.5	-0.1	0.5	0.4	0.5	0.8	1.0	

Sources: Eurostat and ECB calculations.

Note: Annual percentage changes are calculated by using data adjusted for variations in the number of working days; percentage changes on the previous month and three-month centred moving averages against the corresponding average three months earlier are calculated by using seasonally and working day adjusted data.

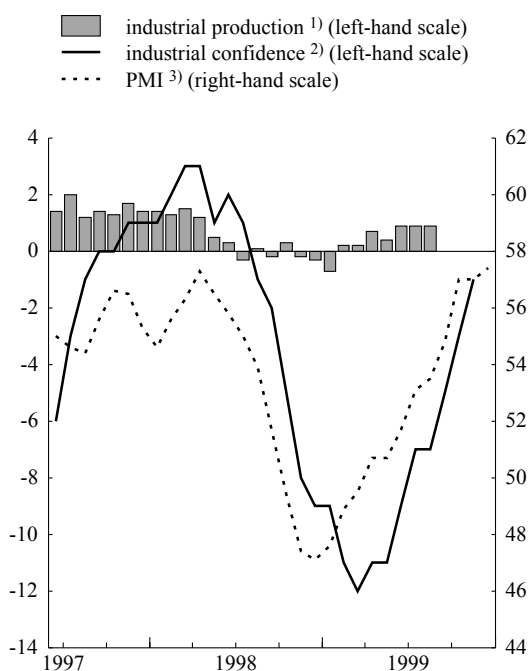
As reported in the December 1999 issue of the ECB Monthly Bulletin, capacity utilisation in the manufacturing sector has seen a slight increase in recent months and stood at 81.9% in October 1999. This was 0.3 percentage point higher than in June, although it is still 0.1 percentage point below the level reached in January 1999.

### Business and consumer confidence increased further in November

The results of the European Commission Business and Consumer Surveys for November 1999 show a further improvement in business and also in consumer confidence (see Table 6). In November industrial confidence reached its highest level since August 1998. The increase in November again reflected an improvement in all sub-components, including the more forward-looking questions on production expectations and the assessment of order books. Consequently, with consumer confidence remaining high, the gap between consumer and business confidence, which emerged in early 1999 and narrowed continuously throughout the second and third quarters of the year, has now largely disappeared. The improving business climate in the manufacturing sector was also confirmed by the results of the Purchasing Managers' Index (PMI). This composite index showed steady improvement in the course

**Chart 11**  
Industrial production, industrial confidence and PMI for the euro area

(monthly data)



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

- 1) Percentage changes compared with the previous three-month moving average; seasonally and working day adjusted data; total industry excluding construction.
- 2) Percentage balances.
- 3) Purchasing Managers' Index.

of 1999 and rose further in December (see Chart 11).

**Table 6**  
Results from EC Business and Consumer Surveys for the euro area

(seasonally adjusted data)

	1996	1997	1998	1998	1999	1999	1999	1999	1999	1999	1999	1999	1999
				Q4	Q1	Q2	Q3	June	July	Aug.	Sep.	Oct.	Nov.
Economic sentiment index <sup>1)</sup>	-2.7	2.4	3.1	-0.7	0.5	-0.4	0.1	0.0	0.5	-0.5	0.2	0.6	0.7
Consumer confidence indicator <sup>2)</sup>	-9	-4	6	9	11	7	7	6	8	7	7	9	10
Industrial confidence indicator <sup>2)</sup>	-8	4	7	1	-3	-2	2	-1	1	1	3	5	7
Construction confidence indicator <sup>2)</sup>	-14	-11	3	7	13	15	15	16	17	13	14	16	22
Retail confidence indicator <sup>2)</sup>	-5	-3	3	3	3	2	-1	-3	0	-1	-1	-3	-3
Capacity utilisation (%) <sup>3)</sup>	80.3	81.4	82.9	82.4	81.9	81.7	81.8	-	81.6	-	-	81.9	-

Source: European Commission Business and Consumer Surveys.

- 1) Percentage changes compared with the previous period; index 1985 = 100.
- 2) Percentage balances; data shown are calculated as deviations from the average over the period since January 1985.
- 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.

### Box 3

#### Recent developments in stock-building in the euro area

Inventory changes tend to be the most volatile component of GDP and, although they represent only a small share of overall GDP, their contribution to growth in individual quarters is often relatively large, in particular during the early stages of downturns and recoveries. Therefore, both the contributions of changes in inventories to GDP growth and their ratio to GDP can convey useful information regarding the short-term economic outlook. This box reviews the nature of inventories in the economic process and discusses recent developments in stock-building, as well as some of their possible implications.

#### The nature of inventories in the economic process

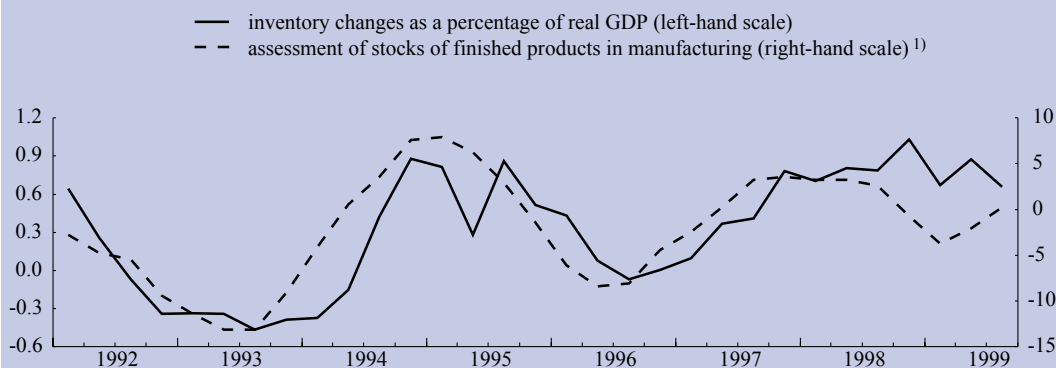
Inventories are mostly viewed as a buffer to enable a smooth production process in the face of changes in both demand and supply. They include final products as well as commodities used as intermediate inputs, and may therefore be related to different stages of the production process. Fluctuations in individual categories of inventories and in individual firms could hence partially offset one another in terms of aggregate changes in inventories. While inventories are also held in the agricultural and government sectors, it is the manufacturing and retail trade sectors, which account for the bulk of total inventories. Firms are usually thought to manage their stocks with a view to a desired ratio of inventories to expected production and sales levels. Changes in inventories will therefore normally reflect differences between actual and expected sales and production. The desired stock-to-sales ratio may be assumed to be fairly constant in the short term, but in the medium term it can be affected by changes in the production process and in logistics, such as “just-in-time” deliveries. Stock-building can hence also be caused by changes in the desired stock-to-sales ratio itself.

#### Changes in inventories in national accounts reflect developments in several types of inventories

Inventory changes recorded in national accounts statistics reflect developments in several categories of inventories, including finished products, goods for resale, materials, and work in progress. In practice, they may also reflect statistical discrepancies, arising in the compilation of overall GDP, thus explaining the relatively large revisions observed at times for this GDP component. Eurostat estimates for area-wide inventory changes include, in addition, the net acquisition of valuables such as precious metals and art objects, but these are unlikely to account for large variations in overall stock-building figures.

#### Inventory changes and the assessment of stocks in the euro area

(percentages, percentage balances; quarterly data)



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

Note: Changes in inventories also include acquisitions less disposals of valuables.

1) Quarterly averages; inverted sign; data are calculated as deviations from the average over the period since January 1985.

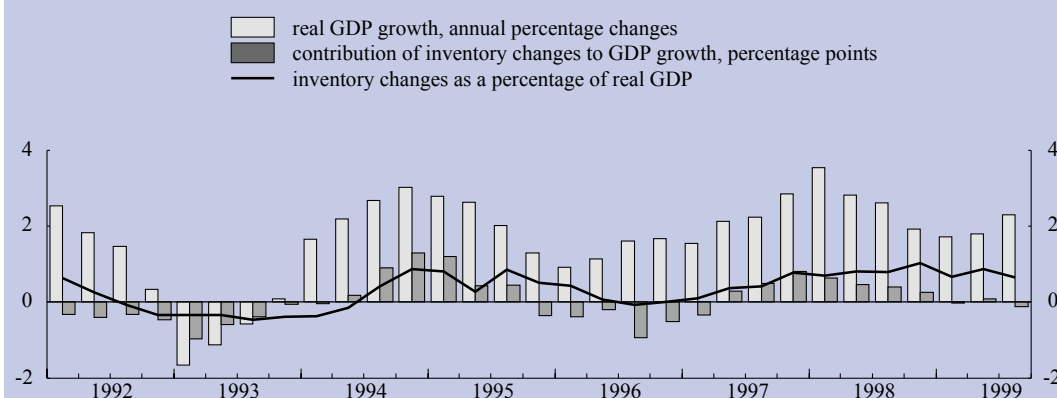
No breakdown is available for aggregate inventory changes in the euro area, but some information on the perception of businesses in the manufacturing and retail trade sectors of stock developments can be derived from the European Commission Business Surveys. The respective assessments for stocks of finished products and stocks of goods for resale may be seen as providing information on current inventory levels relative to desired ones. Notwithstanding some small discrepancies in the most recent past, it appears that the assessment of stocks of finished products in the manufacturing sector reflects the movements in the economy-wide ratio of inventory changes to GDP rather well (see the chart above). At the same time, the assessment of stocks of goods for resale in the retail trade sector does not seem to be closely aligned with movements in the ratio of inventory changes to GDP. When measured as a deviation from their long term averages the survey data for manufacturing and retail trade suggest that businesses currently consider their respective stocks as broadly appropriate.

### Recent data show continued stock-building despite slowdown in GDP growth

Reflecting demand conditions in the euro area, the contribution of inventory changes to real GDP growth in the 1990s turned negative during both the 1993 recession and the 1995/96 slowdown in activity. A small negative contribution to growth was also observed following the 1998 growth slowdown (see the chart below). However, in most of the recent period, stock-building has remained positive, with the ratio of inventory changes to GDP falling only slightly during the recent growth slowdown, implying a continuous rise in the level of inventories. To some extent, this might be a reflection of the statistical discrepancies referred to above, and changes in inventories might be revised downward with subsequent revisions of GDP data. However, this ongoing stock-building may also reflect the upward adjustment of inventories necessary to keep stock-to-sales ratios at their desired levels, as domestic demand growth remained fairly high, despite the noticeable slowdown in overall growth. This would be consistent with firms' recent assessment of stocks, which point to broadly appropriate levels of inventories. With an acceleration of total demand growth, a further increase in the level of stock-building might therefore be expected in the near future.

### Developments in inventory changes and real GDP in the euro area

(quarterly data)



Sources: Eurostat and ECB calculations.

Note: Changes in inventories also include acquisitions less disposals of valuables.

Consumer confidence has also increased compared with the level seen in previous months. While, from a longer-term perspective, the strength of consumer confidence remained at a high level throughout 1999, it was subject to a slight decline in the first half of the year. This decline was, however, largely reversed in the period up to November 1999, so that the consumer confidence indicator in November once again stood very close to its all-time high. To a large degree, both the decline and the subsequent increase reflect changes in the assessment by consumers of the general economic situation.

Reflecting the upturn in both consumer and industrial confidence, the economic sentiment indicator has now returned to the level of the peak experienced in July 1998. The last time this level was surpassed was in July 1990. At the same time, retail confidence shown in the European Commission Surveys was subject to a degree of gradual deterioration throughout 1999. In view of the recovery in private consumption growth in the third quarter, this weakness could reflect developments other than consumer demand, for instance pressure on profit margins as a result of increased competition in the retail trade sector.

Overall, information released recently has confirmed earlier expectations of a

strengthening of real economic activity in the euro area in the second half of 1999. Whereas little information is available as yet for the fourth quarter of 1999, it appears from survey data that the current upswing is likely to continue in line with available forecasts.

### Employment growth unchanged in the third quarter of 1999

On the basis of national data, total employment is estimated to have increased by 0.3% in the third quarter of 1999 compared with the previous quarter (see Table 7). This is unchanged from the quarter-on-quarter rate of growth recorded in the second quarter. It appears that in the third quarter of 1999 the upturn in economic activity had not yet translated into an increase in overall employment growth. However, an improvement in the employment situation had already been recorded in the industrial sector, which is likely to have benefited more than the other sectors from the rebound in exports observed in the third quarter of 1999. According to Eurostat data, employment in industry (excluding construction), which had fallen for three consecutive quarters, stabilised in the third quarter of 1999. This recent development is in line with the available information on employment expectations from the European Commission

**Table 7**  
**Employment growth in the euro area**  
(annual percentage changes, unless otherwise indicated)

	1997 1998		1998 1999				1998 1999				1999 1999		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	July	Aug.	Sep.		
	Quarterly rates <sup>1)</sup>												
Whole economy <sup>2)</sup>	0.6	1.4	1.6	1.6	1.5	1.4	0.4	0.4	0.3	0.3	-	-	-
Total industry	-1.4	0.2	0.4	0.1	-0.1	.	0.1	-0.1	-0.1	.	.	.	.
Construction	-0.4	0.1	2.1	2.6	2.7	.	1.9	0.5	-0.3	.	3.0	2.8	.
Total industry excl. construct.	-1.4	0.4	0.2	-0.2	-0.8	-0.8	-0.2	-0.2	-0.3	0.0	-0.8	-0.8	-0.8
Manufacturing	-1.0	0.8	0.5	0.1	-0.6	.	-0.2	-0.1	-0.3	.	-0.5	-0.5	.

Sources: National data and Eurostat (Short-term Business Statistics).

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

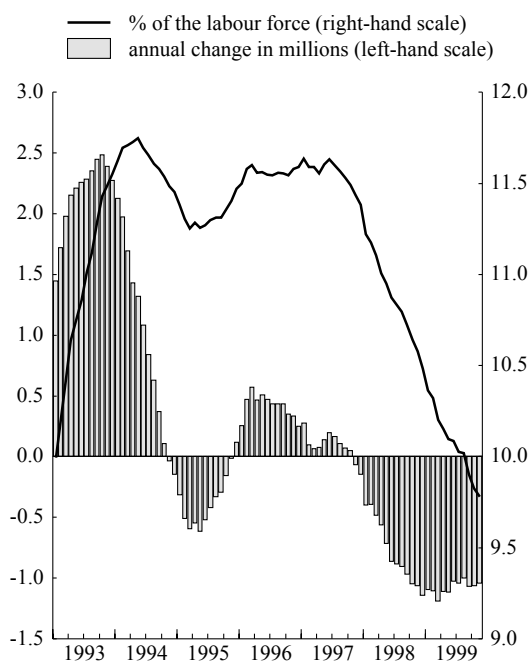
2) Excluding Belgium and Ireland; seasonally adjusted.

Business Surveys. The fact that total employment growth was unchanged suggests that the pace of net job creation in the services sector may have slowed somewhat, possibly as a result of the temporary slowdown in private consumption growth in mid-1999.

In November 1999 the standardised rate of unemployment stood at 9.8% (see Table 8). It was unchanged from the rate recorded in October which, together with the rates for September and August, has been revised downwards by 0.1 percentage point. Therefore, it is now estimated that the unemployment rate fell below 10% – for the first time since December 1992 – in September 1999. The revised data make the slowdown in the decline in unemployment between May and August 1999 less pronounced than previously estimated. It would appear that the resumption of the decline in the rate of unemployment observed since September has been of more benefit to the young than to older people. After having remained virtually unchanged for four months, the unemployment rate for those under 25 years of age fell again by 0.7 percentage point over the three months to November, while over the same period the rate of unemployment for those above 25 years of age declined by only 0.2 percentage point. At the same time, the available data on vacancy and national business surveys indicate that labour shortages have become apparent in a number of sectors.

**Chart 12**  
**Unemployment in the euro area**

(monthly data; seasonally adjusted)



Source: Eurostat.

The pace of net job creation, which was unchanged in the third quarter of 1999, is likely to have gained further momentum in the fourth quarter as a result of the economic upturn. The fact that the unemployment rate has been on a declining trend once again since September 1999 (see Chart 12) is consistent with the picture of a progressive strengthening of employment growth, as indicated in the December 1999 issue of the ECB Monthly Bulletin.

**Table 8**  
**Unemployment in the euro area**

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

	1996	1997	1998	1998 Q4	1999 Q1	1999 Q2	1999 Q3	1999 June	1999 July	1999 Aug.	1999 Sep.	1999 Oct.	1999 Nov.
Total	11.6	11.6	10.9	10.6	10.3	10.1	10.0	10.1	10.0	10.0	9.9	9.8	9.8
Under 25 years <sup>1)</sup>	23.9	23.2	21.3	20.7	20.0	19.3	19.0	19.2	19.2	19.1	18.8	18.5	18.4
25 years and over <sup>2)</sup>	9.8	9.9	9.4	9.2	9.0	8.9	8.7	8.8	8.8	8.8	8.7	8.6	8.6

Source: Eurostat.

Note: According to ILO recommendations.

1) In 1998 this category represented 24.0% of total unemployment.

2) In 1998 this category represented 76.0% of total unemployment.

## 4 Exchange rate and balance of payments developments

### Euro exchange rate broadly unchanged in December

In December 1999 foreign exchange markets were characterised by low levels of activity, which may have contributed to the relatively large intraday currency movements, although there was little change in the bilateral exchange rates of the euro for the month as a whole. In addition to the normal year-end slowdown, the reduction in market activity also reflected worries regarding possible computer-related disruptions as the millennium drew to a close. Throughout the month the euro traded at the lower end of its 1999 range, but it picked up in early January.

Against the US dollar, the euro showed no clear trend in December 1999, fluctuating in a narrow range around USD 1.01 (see Chart 13). Apart from the low level of liquidity

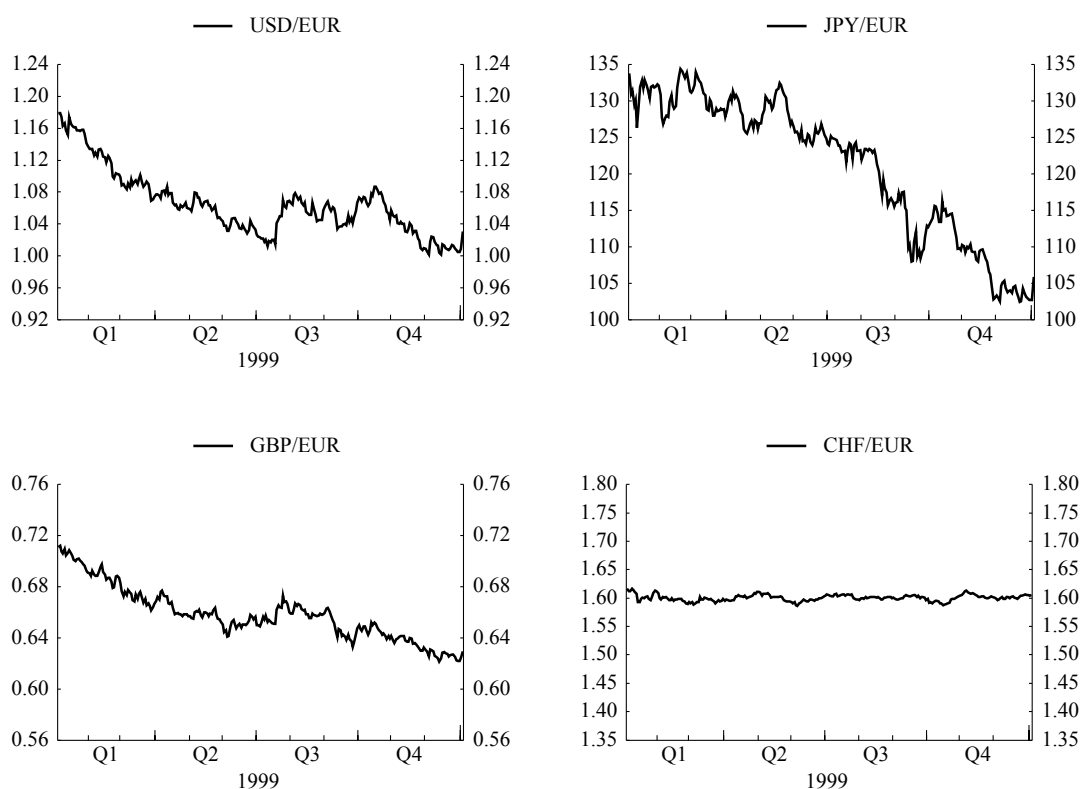
in the market, movements during the month may be attributed to slightly widening long-term interest rate differentials between the United States and the euro area, while data released for the euro area confirmed a strengthening in economic activity. At the beginning of the year 2000 the euro picked up and stood at USD 1.03 on 4 January.

In December 1999 the Japanese yen reached its highest levels of the year against the euro and the US dollar, and fluctuated relatively little compared with earlier months. After its continuous rise owing to improving economic conditions throughout the year, the yen was not significantly affected by the release of relatively weak third-quarter GDP growth figures in Japan. On 4 January the euro also rose against the yen and stood at JPY 106, i.e. around 2½% above the level at the beginning of December.

### Chart 13

#### Patterns in exchange rates

(daily data)



Source: ECB.

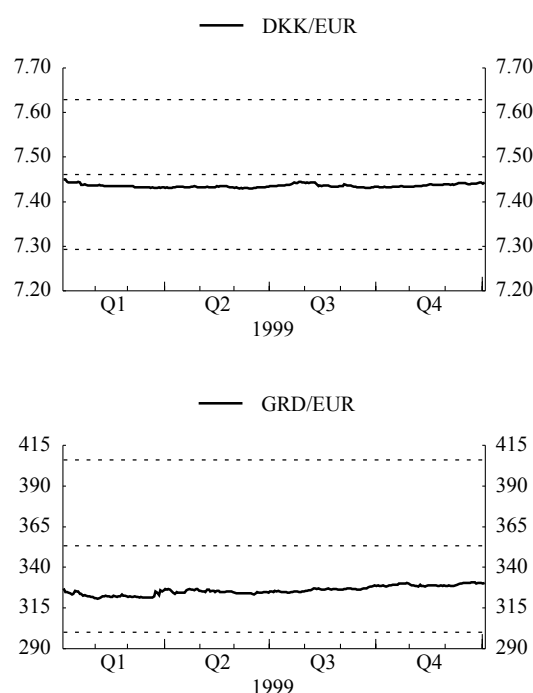
In addition, the pound sterling remained relatively stable against the euro in December 1999. In early December UK long-term interest rates initially declined by 40 basis points to around 5.2%, but later in the month a rise in yields provided support for the pound sterling. At the start of the year 2000 the euro rose slightly and on 4 January it was quoted at GBP 0.630.

The ERM II currencies, the Danish krone and the Greek drachma, remained largely stable against the euro. Despite the reduction in interest rates, the Greek drachma remained at around 7% above its central parity during the reporting period (see Chart 14). The Swedish krona was also broadly stable against the euro in December 1999 and on 4 January 2000 the euro was quoted at SEK 8.62. As in previous months, the Swiss franc remained close to the level of CHF 1.60 against the euro in December.

#### Chart 14

##### Patterns of exchange rates within ERM II

(daily data)



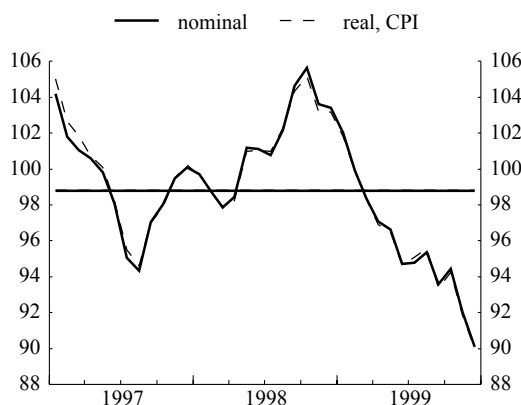
Source: ECB.

Note: The horizontal lines indicate the central parities (DKK 7.46, GRD 353.1) and the respective fluctuation bands ( $\pm 2.25\%$  for DKK and  $\pm 15\%$  for GRD).

#### Chart 15

##### Nominal and real effective exchange rates<sup>1)</sup>

(monthly averages; index 1999 Q1 = 100)



Source: ECB.

1) Data are ECB calculations (see Box 5 in the October 1999 issue of the Monthly Bulletin). An upward movement of the index represents an appreciation of the euro. Horizontal lines are averages over the period shown (January 1997 to December 1999).

In nominal effective terms, the exchange rate of the euro remained broadly unchanged in December. During 1999 as a whole the euro declined by around 13½% and its average level in December was around 10% below the level of the first quarter of 1999 (see Chart 15). The bulk of this decline is attributable to the euro's decline against the US dollar, the pound sterling and the Japanese yen. However, currencies with a smaller weight in the index, such as the Korean won, the Canadian dollar and the Australian dollar, also contributed to the decline in the nominal effective exchange rate index. The latter currencies benefited from the recovery in Asia as well as from the rise in commodity prices. In early January the euro appreciated by around 1.8% compared with its end-1999 level owing to its rise against the US dollar, the pound sterling and the Japanese yen.

#### Current account surplus virtually unchanged in October as exports continue to improve

After recording significant declines in past months, relative to 1998, the current account



surplus of the euro area remained virtually unchanged in October 1999 (€3.6 billion) compared with the same month a year earlier. A slight decline in the goods surplus (by €0.4 billion), along with a higher deficit on the income account, was virtually offset by decreases in the deficits on both services and current transfers (see Table 9).

Although the goods surplus fell in October 1999 compared with the same month in 1998, the decline was far smaller than in previous months, partly reflecting the continued recovery in exports of goods which, in turn, was a result of rising foreign demand as well as improvements in euro area price competitiveness. While the value of exports of goods grew by almost 7% in October compared with the corresponding month a

year earlier, imports rose by 9% over the same period. Increased economic activity in the euro area during recent months, together with the sharp increase in import prices owing to higher oil prices and the decline in the exchange rate of the euro, seem to explain much of the sustained rise in the value of imported goods. As an illustration of the relative impact of oil prices, preliminary calculations suggest that during the first half of 1999 higher oil prices accounted for around one-quarter of the rise in total import prices since the end of 1998, with manufacturing import prices responsible for approximately half of the increase.

In the first ten months of 1999 the surplus in the trade of goods fell by €15.1 billion compared with the same period a year

**Table 9**

**Balance of payments of the euro area <sup>1)</sup>**

(EUR billions, compared with ECU billions for 1998 (not seasonally adjusted))

	1998 Jan. - Oct.	1998 Oct.	1999 Jan. - Oct.	1999 Aug.	1999 Sep.	1999 Oct.
<b>Current account balance</b>	49.8	3.7	38.1	1.5	-1.9	3.6
Credits	1053.0	105.7	1049.5	96.0	106.8	111.2
Debits	1003.2	101.9	1011.4	94.5	108.7	107.6
Goods balance	98.4	10.6	83.3	7.0	6.5	10.2
Exports	643.7	67.1	637.8	57.3	66.6	71.7
Imports	545.4	56.5	554.4	50.3	60.2	61.6
Services balance	-0.7	-1.0	-5.3	-1.1	-1.3	-0.6
Exports	193.3	19.4	192.1	19.9	19.8	19.7
Imports	193.9	20.4	197.4	21.0	21.1	20.4
Income balance	-10.5	-1.0	-7.3	0.4	-2.5	-1.9
Current transfers balance	-37.3	-4.9	-32.7	-4.8	-4.6	-4.0
<b>Capital account balance</b>	9.8	0.8	9.5	0.6	0.4	1.6
<b>Financial account balance <sup>2)</sup></b>	-42.7	-9.7	-34.2	32.9	-32.8	30.5
Direct investment	-64.1	-18.0	-98.3	-5.9	-7.0	-11.6
Abroad	-126.0	-13.0	-151.5	-9.4	-10.5	-18.5
In the euro area	62.0	-5.0	53.2	3.5	3.5	6.9
Portfolio investment <sup>2)</sup>	-76.3	-30.7	-51.1	1.8	20.2	-14.4
Assets	-250.3	-9.6	-223.2	-20.7	-17.2	-15.3
Liabilities	174.1	-21.1	172.1	22.5	37.5	0.8
Financial derivatives <sup>2)</sup>	-5.8	-2.9	-0.9	1.5	-0.7	-1.4
Other investment <sup>2)3)</sup>	104.6	44.8	102.4	34.9	-47.0	57.9
Reserve assets <sup>2)</sup>	-1.1	-2.9	13.7	0.5	1.7	0.1
<b>Errors and omissions <sup>2)</sup></b>	-16.9	5.3	-13.3	-35.0	34.3	-35.7

Source: ECB.

Note: For the financial account, a positive sign indicates an inflow, a negative sign an outflow; for reserve assets, a negative sign indicates an increase, a positive sign a decrease. A more detailed set of tables may be found in Section 8 of the "Euro area statistics" section of this Monthly Bulletin.

1) Figures may not add up due to rounding.

2) Data before end-1998 are not closely comparable with later observations.

3) Flows before January 1999 include estimates. This item is under review.

earlier, which seems to be partly a consequence of rising import prices, but also reflects the low level of exports of goods during the first half of 1999, resulting from the “carry-over” effects of the steep decline in foreign demand in 1998, particularly in Japan and the rest of Asia. Although the shrinking goods surplus explains most of the decline in the current account surplus for the period from January to October 1999 compared with the same period a year earlier, this was partially offset by smaller deficits on both the income and the current transfers accounts.

#### **Continued net capital outflows in the first ten months of 1999**

In the first ten months of 1999 direct and portfolio investment net outflows amounted to €149.4 billion, compared with ECU 140.4 billion in the same period a year ago.

Relative to the same period in 1998, net outflows of direct investment in the first ten months of 1999 increased by more than 50%, from ECU 64.1 billion to €98.3 billion. In particular, euro area residents invested more abroad in the first ten months of 1999 than they did in the same period of the preceding year (€151.5 billion, compared with ECU 126 billion). At the same time, foreign direct investment in the euro area was somewhat lower (€53.2 billion, compared with ECU 62.0 billion in the

first ten months of 1998). In October 1999 direct investment net outflows amounted to €11.6 billion.

By contrast, portfolio investment net outflows declined to €51.1 billion in the first ten months of 1999, compared with ECU 76.3 billion in the same period of the previous year, largely as a result of lower portfolio investment abroad by euro area residents which, in October, reached its lowest level for the year to date (€15.3 billion). Monthly figures for investment by euro area residents in foreign debt instruments show relatively high outflows in the first half of the year, while outflows have been substantially lower in more recent months. This coincided with the narrowing of yield differentials between US and euro area long-term government bonds since the summer. In recent months investment by euro area residents in foreign equity markets has also slowed somewhat, in line with the relatively good performance of the euro area stock market.

Portfolio investment inflows into the euro area remained virtually unchanged in the first ten months of 1999 compared with the same period in the previous year. In October, however, there was a substantial decline in non-residents’ purchases of euro area securities, which dropped to €0.8 billion in October, from €37.5 billion in September, as non-residents reduced their holdings of euro area bonds and notes.



# The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure

*The euro was launched successfully one year ago. The single monetary policy for the euro area conducted by the Governing Council of the ECB since the beginning of 1999 is based on area-wide economic developments. To put into perspective the environment in which the single currency was adopted, some key structural features of the euro area, such as the scale and openness of the economy and the financial structure, were reviewed in an article in the January 1999 issue of the ECB Monthly Bulletin. It was noted that these features are quite distinct from those prevailing in individual Member States before participating in the euro area, and it is therefore important to bear these differences in mind when undertaking an economic analysis of the euro area. Many structural characteristics of the euro area economy as a whole have changed little during the past year, but the introduction of the single currency has already had a significant impact on the structure and development of the euro area financial markets. This article describes key structural features of the euro area economy and the main changes which have occurred in financial markets. These changes include, most notably, the rapid integration of the national money markets into one euro area market and the rapid growth of the euro-dominated private bond market, the latter providing various options for corporate financing in the euro area.*

## I Key macroeconomic features of the euro area

### **The euro area has considerable weight in the global economy**

A number of key macroeconomic features of the euro area are highlighted in Table I, using the latest information available from various sources. Where necessary, comparisons between the euro area, the United States and Japan are generally based on converting national data into a common currency using the exchange rates prevailing in the corresponding period, unless otherwise indicated. As noted in the January 1999 issue of the ECB Monthly Bulletin, the euro area, in a global comparison, is a “large economy” which has significant purchasing power, exceeded only by that of the United States. According to the latest available data, the Member States of the euro area together have a share of world GDP of around 15½%. This is less than that of the United States (at 20¾%), but around twice that of Japan (at around 7½%). By comparison, the largest single euro area country is estimated to have a share of world GDP of only 4½%.

Considering the sectoral breakdown of activity in the euro area as a whole, the latest available data suggest that patterns of production are broadly similar to those of

the United States and Japan. The services sector is the largest, accounting for about 67% of total production; it is thus smaller than that of the United States (at 72%) but higher than that of Japan (at 60%). The industrial sector (including construction) accounts for just below a third of the total activity in the euro area. This is higher than in the United States but somewhat lower than in Japan. Finally, primary production, such as agriculture, fishing and forestry, is similar in all three economies, and limited to around 2% of the total output.

### **The euro area comprises a significant share of world trade**

With regard to its role in world trade, the euro area has the highest share of world trade, with a ratio of exports to total world exports above that of either the United States or Japan (at around 19½% compared with 15% and 8½% for the United States and Japan respectively). The degree of openness, as measured by the average of exports and imports of goods and services as a percentage of GDP, is higher than in the United States or Japan, at 16% compared with 12% and 10½% respectively. At the same time, it remains

true that most trade for individual euro area countries takes place with other euro area countries. From an area-wide perspective this is internal trade and hence is unaffected by exchange rate movements of the euro vis-à-vis other currencies. This constitutes an important distinction, as prior to Monetary Union individual Member States were considered “small or medium-sized open economies”, with significantly higher ratios for the average of exports and imports of goods to GDP. For the euro area as a whole, exports of goods as a percentage of GDP was just over 13% in 1998, while imports of goods were slightly above 11%. External trade in services is significant, but less than that for goods, with exports and imports of services as a percentage of GDP at around 4%.

A further important feature of trade from the perspective of the euro area as a whole is its geographical distribution (see Chart 1). The United Kingdom, the United States, Switzerland and Japan (ranked in order of their trade shares) together account for approximately 43% of overall external trade for the euro area. Other non-euro area EU countries account for a further 8%. In addition, Russia and China are both significant trading partners, while trade with four other Asian economies, namely Taiwan, South Korea, Hong Kong SAR and Singapore, together comprise a further 5½% of the total. The central and eastern European countries account for around 7% of the total. If this trade is examined in terms of its composition, machinery and transport equipment, other

**Table 1**  
**Key characteristics of the euro area**

	Reporting period	Unit	Euro area	United States	Japan
Population <sup>1)</sup>	1998	mn	291	271	126
GDP (share of world GDP) <sup>2)</sup>	1998	%	15.5	20.8	7.4
Sectors of production <sup>3)</sup>					
Agriculture, fishing, forestry	1995	% of GDP	2.2	1.8	1.9
Industry (including construction)	1995	% of GDP	30.8	26.3	38.0
Services	1995	% of GDP	66.8	71.9	60.0
General government					
Receipts	1999	% of GDP	47.1	36.1	30.5
Expenditure	1999	% of GDP	48.6	33.9	38.7
Exports of goods <sup>4)</sup>	1998	% of GDP	13.2	7.9	9.9
Exports of goods and services <sup>4)</sup>	1998	% of GDP	17.1	11.0	11.5
Imports of goods <sup>4)</sup>	1998	% of GDP	11.1	10.8	6.7
Imports of goods and services <sup>4)</sup>	1998	% of GDP	15.1	12.9	9.6
Exports (share of world exports) <sup>4)</sup>	1998	%	19.6	15.0	8.5
Labour force participation rate	1998	%	66.4	77.4	72.6
Employment rate <sup>5)</sup>	1998	%	59.4	73.8	69.5
Unemployment rate (share of labour force) <sup>6)</sup>	Oct. 1999	%	9.9	4.1	4.6
General government					
Surplus (+) or deficit (-)	1999	% of GDP	-1.6	2.2	-8.2
Gross debt	1999	% of GDP	72.9	57.7	127.8
Current account balance	1998	% of GDP	1.0	-2.6	3.2

Sources: Eurostat (population and unemployment), autumn 1999 European Commission economic forecasts (general government data (calendar year basis)), OECD (sectors of production, the labour force participation rate and employment ratio; ECB calculations for the euro area), IMF (shares of world GDP, exports, imports, exports as a percentage of world exports, gross debt for the United States and Japan and the current account balance), national data (for the United States and Japan: unemployment) and ECB (for the euro area: exports, imports and the current account balance).

1) As of 1 January 1999.

2) GDP shares are based on purchasing power parity (PPP) valuation of country GDPs.

3) For euro area: 1995 or latest available annual data; for the United States: 1994.

4) Excluding intra-euro area trade; exports: f.o.b.; imports: c.i.f.

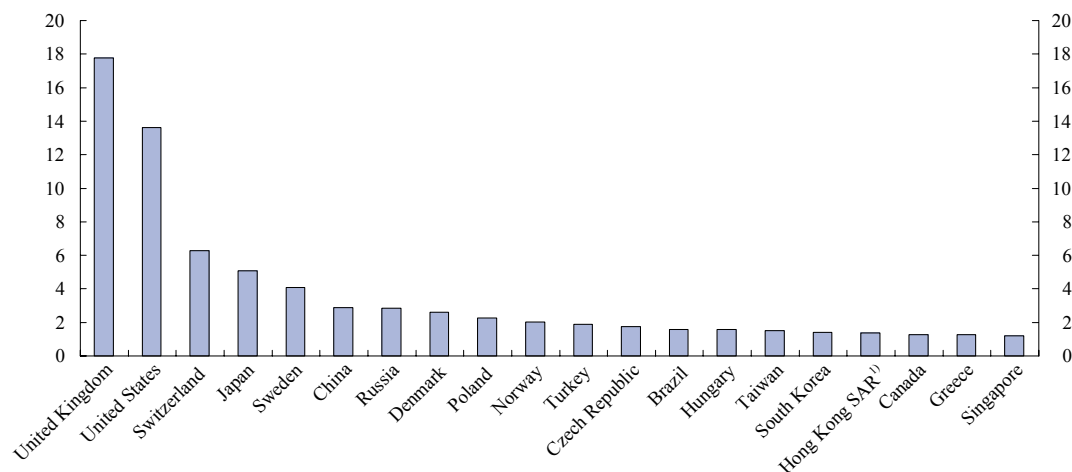
5) As a ratio of persons aged between 15 and 64 years who are in employment and of the working age population.

6) United States: November 1999.

## Chart 1

### Trade weights of the main trading partners of the euro area

(in percentages; average 1995-98)



Source: ECB calculations based on Eurostat trade data.

Note: Sum of exports and imports expressed as a share of total euro area exports and imports.

1) Special administrative region.

manufactured articles and chemicals account for the bulk of trade. The relative importance of other economies for the competitiveness of the euro area depends, however, not only on direct exports and imports, but also on so-called “third market” effects (i.e. taking into account competition faced by European exporters in third markets by other exporters and domestic producers). This is done, for instance, when calculating the ECB effective exchange rate. On this basis, the United States is more important than the United Kingdom, and Asian countries also take on greater significance.

#### Important differences exist in national labour markets in the euro area

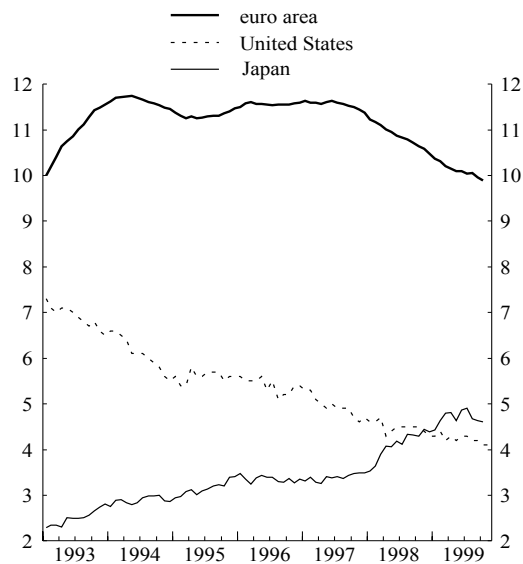
For the euro area as a whole, the average level of unemployment in 1999 was just over 13 million. This represents slightly more than 10% of the labour force, a significantly higher rate of unemployment than in either the United States or Japan. These different labour market performances are a longer-term feature (see Chart 2). Further information on the characteristics of labour markets is given by the participation rate (i.e. the sum of employment and unemployment as a

proportion of the population of working age). For the euro area this is estimated to be around 66½% compared with over 72½% in the case of Japan and more than 77% in the United States. Even greater differences exist in terms of the ratio of employment to the population of working age. In the euro area this is below 60%, compared with almost 70% in Japan, and close to 74% in the United States.

There are important differences in national labour markets across the euro area in terms of structural features, including wage and non-wage labour costs, employment protection legislation, part-time employment and the scale and duration of unemployment benefits. The data for the euro area as a whole mask significant differences across participating Member States, with relatively higher rates of growth and job creation in some countries reflecting the structural reforms in labour and product markets undertaken earlier, as well as differences in cyclical positions. The range of unemployment rates is illustrated by the fact that while unemployment was below that in the United States in only two Member States in 1999 (Luxembourg and the Netherlands), it was over 10% in four others (Spain, France, Italy and Finland).

**Chart 2**  
**Unemployment in the euro area, the United States and Japan**

(% of the labour force; monthly data; seasonally adjusted)



Sources: Eurostat and national data.

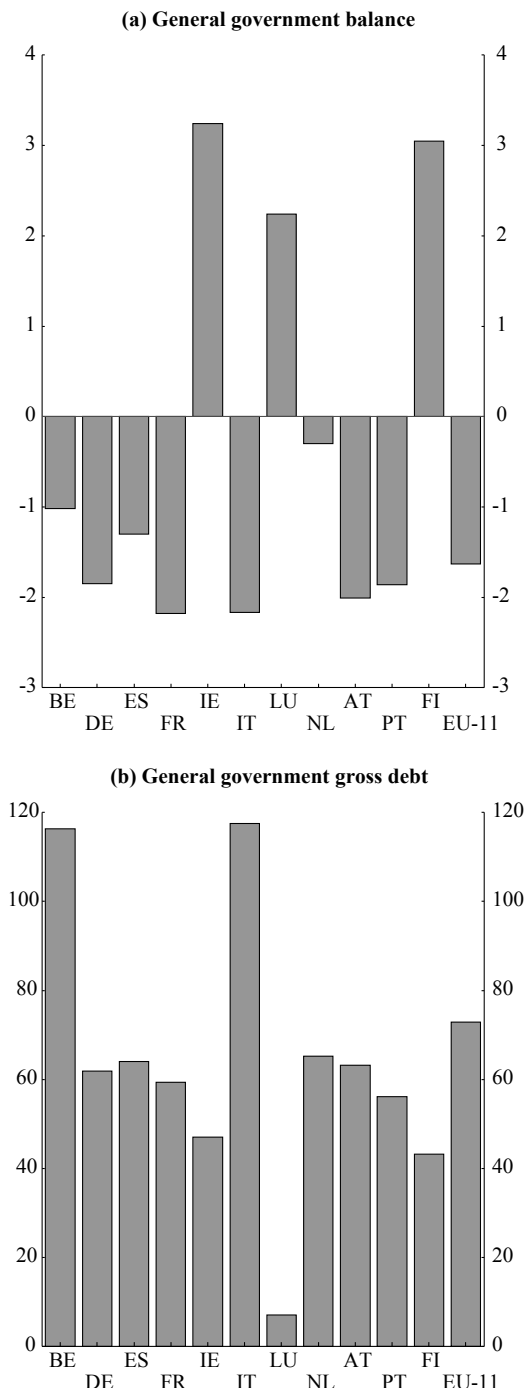
**Further consolidation needed in government budgetary positions**

In the euro area as a whole, the debt-to-GDP ratio is still well above the reference level set by the Treaty establishing the European Community. The average ratio of debt to GDP is estimated by the European Commission to have declined slightly, to 72.9% in 1999. At the same time, there was only a small improvement in the ratio of general government deficits to GDP for the euro area as a whole. The average general government deficit-to-GDP ratio in the euro area is estimated to have been 1.6% in 1999. As Chart 3 shows, there is significant variation across euro area countries in both deficit and debt levels, with only a few countries reporting budget surpluses and debt-to-GDP ratios of below 60% in 1999.

Overall, budgetary imbalances and government debt levels in the euro area as a whole are higher than those of the United States but lower than those of Japan. However, comparisons with the United States and Japan are affected by their very different

**Chart 3**  
**Fiscal positions in the euro area in 1999**

(as a percentage of GDP)



Source: European Commission (autumn 1999 forecasts).  
 Note: Data are estimates.

cyclical positions. It should also be recalled that, in the longer term, the ageing of populations represents a serious challenge to the sustainability of the pay-as-you-go

financed public pension schemes (which exist in all three economies).

The size and structure of the government sector in the euro area differs significantly from that of the United States and Japan. The share of government expenditure in GDP is significantly larger in the euro area than in either Japan or the United States (at 49% compared with 39% and 34% respectively). Government current transfers to households are relatively high in euro area countries, largely owing to the characteristics of the

social security systems. The proportion of GDP devoted to the provision of collective services by governments is also higher in the euro area than in either the United States or Japan. Turning to the structure of government receipts, social security contributions in euro area countries and in Japan are higher than in the United States, amounting to around one-third of governments' current revenue. While the euro area relies more on indirect taxes, direct taxation plays a greater role in the United States and Japan.

## 2 Euro area financial structure

### Predominance of indirect finance in the euro area

Although some changes are taking place in the euro area's financial structure, it can still at present be considered as being close to a bank-oriented financial structure. This is because domestic bank loans represented a larger percentage of GDP in 1999 than financing through domestic debt securities

issues, i.e. 100% versus 89% at end-June. The latter are mostly issued by the public sector (see Table 2). Furthermore, stock market capitalisation in the euro area as a percentage of GDP was 71% in October 1999. By contrast, the financial structure in the United States could be considered as exhibiting more of the features of a securitised structure, with financing through the issuance of domestic debt securities (as a percentage of GDP)

**Table 2**  
**Financial structure in the euro area, the United States and Japan**

	Reporting period	Unit	Euro area	United States	Japan
Bank deposits <sup>1)</sup>	June 1999	EUR billions	4,752.2	4,742.8	4,467.5
	June 1999	% of GDP	77.8	55.2	111.7
Bank loans <sup>2)</sup>	June 1999	EUR billions	6,136.1	4,154.8	4,280.8
	June 1999	% of GDP	100.4	48.4	107.0
Outstanding domestic debt securities	June 1999	EUR billions	5,422.7	14,140.8	5,061.1
	June 1999	% of GDP	88.8	164.6	126.5
– issued by corporates	June 1999	EUR billions	202.3	2,493.8	583.4
– issued by financial institutions	June 1999	EUR billions	1,891.5	3,900.1	753.7
– issued by the public sector	June 1999	EUR billions	3,329.0	7,746.8	3,723.9
Stock market capitalisation <sup>3)</sup>	Oct. 1999	EUR billions	4,346.0	13,861.1	6,275.8
	Oct. 1999	% of GDP	71.1	163.3	137.7

Sources: BIS (domestic debt securities), ECB (bank deposits and MFIs loans for the euro area), IMF (bank deposits and GDP forecasts in Japan and the United States), Eurostat (GDP forecast for the euro area, stock market capitalisation), Federal Reserve (bank loans for the United States), Bank of Japan (bank loans for Japan).

1) For the euro area, data cover demand deposits, deposits with an agreed maturity and deposits redeemable at notice of MFIs other than NCBs and the ECB. For the United States, data include demand, time and savings deposits from all banking institutions, while for Japan, data include demand and time deposits from deposit money banks. For Japan, other banking institutions which offer close substitutes to deposits are not included.

2) For the euro area, data cover loans to euro area residents from the consolidated balance sheet of euro area MFIs. For the United States, data cover total loans at commercial banks, saving institutions and credit unions (from the Flow of Funds accounts of the United States from the Federal Reserve), while for Japan data cover total lending at deposit money banks from the monetary survey from the Bank of Japan.

3) Owing to the use of different reporting rules and calculation methods, data are not entirely comparable.



being considerably larger than via banks (165% versus 48% in June 1999). Compared with the euro area and relative to GDP, the outstanding amount of domestic debt securities and stock market capitalisation in the United States are substantially larger. The financial structure of Japan appears to be less securitised than in the United States, but more than in the euro area. The latter partly reflects the relatively high proportion of outstanding debt securities issued by the public sector in total outstanding debt securities in Japan.

The following section discusses the ongoing trend of consolidation in the financial industry in the euro area. Thereafter, the main changes regarding both euro area money markets, in which short-term debt instruments (i.e. those with a maturity of less than one year) are traded, and capital markets, which concentrate on long-term finance (bonds and equities), are set out, based on indicators such as size, breadth and depth. The emergence of new euro-denominated financial instruments is also described. Finally, the structure of the euro foreign exchange market is outlined. The findings draw, in part, on analysis carried out by the ESCB.

### ***Consolidation of financial services industry continues***

During 1999 there has been significant further consolidation of the financial services industry in the euro area. Over the period from December 1998 to November 1999, the number of Monetary Financial Institutions (MFIs) in the euro area decreased by about 4% from 9,856 to 9,443. The number of the largest group of MFIs – credit institutions – declined by almost 5% from 8,320 at the end of 1998 to 7,906 in November 1999. This decline in the number of credit institutions has been an ongoing trend for more than a decade.

The consolidation trend in the banking sector reflects the response of banks to changing market conditions in Europe, which, in turn,

are driven by a number of factors. Of these factors, most frequently mentioned are technological developments, deregulation, liberalisation and globalisation. The introduction of the euro is seen as strengthening these driving forces. It is important to emphasise that changes in market conditions vary considerably between different areas of banking activities. The most notable changes have taken place in wholesale banking, with the creation of a large and integrated interbank market in the euro area. Changes in retail banking activities are seen to be more gradual. The emergence of large domestic players was one of the main developments in this area in the course of 1999.

### **Developments in the money market**

Responding to the introduction of the euro and the new monetary policy framework, the money market has undergone a process of deep integration and standardisation throughout the euro area. Nevertheless, the degree of integration achieved to date differs among the various market segments. Those which are more integrated are the unsecured deposit market, in which banks exchange short-term liquidity without the guarantee of collateral, and the derivatives markets. Relatively less integrated segments of the market include the repo market, in which participants exchange short-term liquidity against collateral, and the short-term securities markets (Treasury bills, commercial paper and certificates of deposit).

The need to redistribute liquidity among the 11 euro area countries, including the liquidity provided by the Eurosystem in its refinancing operations, has enhanced the development of cross-border transactions in the money market. Such transactions currently represent more than 50% of the overall activity in all segments of the money market. This development has been fostered by the smooth functioning of the TARGET system for the transfer of large-value funds throughout the euro area and the other EU

countries. TARGET has played a key role in facilitating the redistribution of liquidity across the euro area and in arbitrage activity, which helps to level out prices prevailing in the various segments of the money markets throughout the area. Increased cross-border activity is particularly notable in the unsecured and swap segments and helps to explain their clear homogeneity and high level of liquidity. Such homogeneity is evident from the overnight maturity, as shown by the very limited differences between the overnight rates prevailing in the individual euro area countries. This is reflected in the rates contributed by the most active banks of the various countries of the euro area, which form the panel used to calculate the key price reference for the overnight market, the EONIA (euro overnight index average).

Beside the increased cross-border activity, there are a number of other, related, structural changes in the euro area money market. These include the increased concentration, by market participants, of their euro cash management activities compared with the situation which prevailed in the formerly fragmented money markets, the increased competitiveness, the larger number of counterparties actually available to individual banks and the surge in the liquidity of secondary markets.

#### ***The unsecured deposit market exhibits a high degree of integration***

Of the various segments of the euro money market, the unsecured deposit market is the most highly integrated. It is worth noting that in this market segment liquidity is mostly concentrated on shorter maturities, with the bulk on overnight transactions. This concentration has increased significantly since the beginning of 1999, with a jump of 40% in the volume of the overnight maturity between the end of 1998 and the first half of 1999. The immediate and full acceptance by all market participants of EONIA and EURIBOR (euro interbank offered rate, a benchmark rate for the euro money market up to one

year) has played a key role in providing the market with a uniform price reference thereby contributing to its full integration. This is reflected in almost identical risk-adjusted short-term interest rates across participants from various euro area countries.

As regards money market participants, it should be noted that some major players, which previously focused on their domestic market or on the most active European markets, have naturally extended the scope of their activities to the whole euro area. At the same time, the quickening pace of the process of consolidation has fostered the concentration of cash management and money market activities. Large players seem to have reinforced their market share, benefiting from a larger and more liquid market and from internal reorganisation efforts which have improved their competitive positions. A certain pattern of size-related specialisation seems to be developing, according to which large banks are usually active on the area-wide money market in cross-border deals, thereby enhancing market integration and ensuring homogeneous conditions for the funding of smaller banks. This kind of segmentation already existed to some extent prior to the introduction of the euro and does not appear to have given rise to a deterioration in funding conditions for smaller banks.

#### ***The repo market is not yet fully integrated***

Compared with the unsecured market, the repo markets are not yet fully integrated within the euro area, as indicated by the variety of prices prevailing in the “general collateral” market (i.e. that part of the market in which the securities exchanged for cash are broadly accepted throughout the whole market owing to their relatively homogeneous characteristics). The main reasons for this situation include:

- the diverging prices of underlying bonds and their differing degrees of liquidity;

- the lack of harmonisation of the legal documentation used for repo agreements;
- practical difficulties in the cross-border management and settlement of collateral;
- different tax treatment of bonds; and
- an uneven availability of collateral across the euro area.

Repo transactions with longer maturities seem to be more attractive as they offer greater security. The expansion of the repo market seems to be related not only to the introduction of the euro but also to the need to limit credit exposures and to reduce capital needs. The size of standard deals has also increased, with contracts for between €50 million and €100 million becoming normal.

#### ***Some changes are perceived in the markets for short-term securities***

Compared with the second half of 1998, the markets for short-term securities in euro area countries experienced an increase in gross new issuances during the first half of 1999, with the exception of Treasury bills (short-term, fixed income securities issued by national Treasuries), which declined by around 7%. However, Treasury bills remain the most important segment as regards turnover and outstanding amounts. The decrease in the short-term securities issued by the various national Treasuries within the euro area in relation to the gross issuance of certificates of deposit and commercial paper, i.e. short-term fixed income securities issued by banks and corporations respectively, has its origin in the improvement in the fiscal position of the national governments as well as in the consolidation of public debt in favour of longer maturities. Moreover, the strengthening of economic activity and the trend towards financial disintermediation have also fostered the increased issuance of private short-term securities.

Although the available data are imperfect, there is evidence that, unlike the unsecured deposit market and, to a lesser extent, the bond market, the markets for short-term

securities within the euro area remain rather fragmented. However, the starting point of these markets in January 1999 was very different from that prevailing in the unsecured market, which, from the start of Stage Three of Economic and Monetary Union (EMU), was highly liquid and standardised and could rely on the infrastructural support of the TARGET system. By contrast, primary and secondary markets for short-term securities markets were underdeveloped or even non-existent in most euro area countries and cross-border transactions played a very limited role.

The most broadly accepted explanation given for the current limited integration of the short-term securities markets, which is also of relevance to the repo market, is the lack of adequate settlement procedures for cross-border transactions coupled with insufficient harmonisation of the settlement procedures used for domestic transactions and of the relevant legal frameworks (see the box below).

This notwithstanding, some signs of increased activity and some integration in the private paper segment of the market have been observed since the start of Stage Three of EMU. These signs included a trend towards increased cross-border diversification of the investment in the Treasury bills markets and the surge during the first half of 1999 of the gross new issuances of certificates of deposit (by 52%) and commercial paper (by 20%) compared with the second half of 1998. Moreover, discussions on possible solutions for a fast move towards consolidation of the existing securities infrastructure are under way. These facts suggest that a higher degree of integration and increased development of the short-term securities markets can be expected as the aforementioned obstacles are gradually overcome.

#### ***Significant developments in the short-term derivatives market***

Since the start of Stage Three, the integration, standardisation and depth of the short-

**Table 3****Euro-denominated private gross bond issuance by issuer type in 1999<sup>1)</sup>***(annual percentage increases)*

	Private bank	Private corporate	Private finance	Private utility	Total
Q1	49.4	231.7	22.8	116.4	62.9
Q2	49.4	248.2	24.5	2,541.7	76.4
Q3	52.3	476.5	168.2	7.0	99.2
Jan.-Sep.	50.2	294.4	47.1	187.6	77.2

*Source: Capital Data Bondware.**Note: ECB data on sectoral securities issues will become available in early 2000.**1) Issues are calculated using the nominal amount.*

term derivatives market has increased considerably. The euro interest rate swap market (in which fixed interest rate payments are exchanged for floating interest rate payments) showed an important increase in average daily transactions. Its depth and liquidity increased notably as it became fully unified, as did the prices – as attested by the existence of a single yield curve for the whole euro area. The bulk of transactions became cross-border ones. The increased liquidity is reflected in the usual indicators, namely the evolution of bid-ask spreads, which narrowed with regard to those prevailing in the relevant markets before Stage Three of EMU and are now between 1 and 2 basis points, and the standard deal size, which increased to an average of €50 million, with some very large amounts (such as €5 billion) not uncommon.

The most active segment of the swap market is formed by the “overnight index swaps” in which the fixed rate component of the transaction is exchanged for an overnight variable rate component (the EONIA rate).

Concerning other derivatives, activity and liquidity on futures money market contracts has increased. As EURIBOR has become the single reference rate, EURIBOR futures contracts have replaced all former contracts.

**Developments in bond markets**

With regard to the euro-denominated bond market, the most spectacular development in 1999 has undoubtedly been the rapid growth of the private bond market, which has

surpassed the expectations of many private market observers (see Table 3). The market gained momentum with the launch of large debt securities issues that were related to a number of sizeable mergers and acquisitions in the first half of 1999. The rather smooth and fast way in which the euro-denominated private bond market proved able to absorb these issues was widely regarded as an important sign of the increased depth of this market. However, there is still scope for further integration of bond markets within the euro area (see the box below).

Although still relatively small in terms of volume – in particular when compared with either domestic credit in euro in the euro area and/or with the size of the private bond market (comprising both non-financial corporations and financial institutions) in the United States (which is approximately three times larger than the euro-denominated private bond market) – the year-on-year growth rates of euro-denominated private issuance of bonds have been significant, particularly in the case of private non-financial corporations and private utility companies. As seen in Table 3, during the first nine months of 1999 private non-financial corporate bond issues increased by 294% as compared with the same period in 1998, while issuance by private utilities increased by 188% over the same period. The largest private issuers in 1999 were banks, which accounted for more than half of the total issuance volume, followed by non-financial corporations, other financing companies and utility companies. The increased recourse of private enterprises to the bond market was

## Box

### The integration of bond markets in the euro area

The introduction of the euro has brought about significant changes in the European bond markets. The former national markets, especially the government bond markets, have become more integrated and there is increased activity in both the primary and the secondary markets. At the same time, various market segments still remain underdeveloped as far as depth, efficiency and completeness are concerned. Although important steps have been taken, the deep changes that are under way will take time to take effect and full integration of bond markets must be viewed as a medium-term process rather than an instant development.

The disappearance within the euro area of foreign exchange risk, which is one of the key factors that typically constrains cross-border investments, has allowed investors, in the course of 1999, to substantially increase the diversification across the euro area of their bond portfolios which formerly had a significant domestic orientation. However, although many European investors changed their benchmarks (i.e. the indices composed of a variety of assets on which they base their portfolio diversification) to area-wide indices, differences in the pace of diversification can be observed depending on the residence and types of investors concerned. In particular, investors in smaller countries seem to have diversified more quickly than those in larger ones.

With regard to the pricing of bonds, a change in the relative relevance of the factors explaining differentials among the various sovereign issuers has materialised. Before Stage Three of EMU, credit, inflation and related exchange rate risk differentials were the main factors explaining the prevailing yield differentials, whereas in the Monetary Union, apart from credit risk considerations, liquidity has currently become a major factor in defining investors' preferences for the various euro-denominated government bonds. However, in spite of the overall tendency by investors to diversify their portfolios on a cross-border basis throughout the whole euro area, some segments of the bond markets – especially those that are less liquid – have remained largely national and have not undergone many changes. This notwithstanding, the improved national budgetary consolidation observed over the past few years, together with the Stability and Growth Pact and further market integration has contributed to markedly narrower yield spreads between the various sovereign bonds, only rarely exceeding 30 basis points during 1999. Looking forward, the only way to ensure a sustained reduction in credit risk premia differentials will be by means of full convergence towards sound national public finances.

Further to the integration of national markets, the competition among official sector issuers has increased significantly. As a consequence, sovereign (and supranational) issuers have reconsidered their issuance policies as well as organisational aspects affecting the functioning of their secondary markets. Increasing convergence of the issuing techniques towards the most efficient possible practices has been observed. The reforms implemented have generally aimed at improving the liquidity of the bonds issued by means of increasing the size of individual issues and have often provided improved conditions for market access by non-domestic investors.

There are nonetheless still some barriers to further integration of EU bond markets. Sufficiently harmonised regulation of property rights (of particular relevance for the lower-rated bonds segment), harmonisation of accounting rules and corporate governance systems, appropriate regulation of deposit and settlement issues, and appropriate harmonisation of the regulations and of the legal documentation affecting the repo market, are all needed. Furthermore, unlike banking regulation where there is a fairly standardised set of rules, securities regulation is far from providing a common competitive framework. The need for further integration of the euro area capital markets was highlighted in the European Commission's Action Plan on implementing the framework for financial markets which was published last year. This plan promoted the creation of a single wholesale financial market, the opening of cross-border retail financial services and the strengthening of prudential regulation. Within its field of competencies, the Eurosystem is also conducting studies aimed at identifying areas in which action to enhance integration could be taken. Some follow-up work aiming at harmonising domestic settlement procedures and improving the cross-border exchange and settlement of collateral has also been envisaged by the Eurosystem.

also visible in a decline in the share of MFI loans to non-financial enterprises in total MFI loans to the private sector during the first three quarters of 1999 (see Table 2.5 in the “Euro area statistics” section).

### **Importance of corporate restructuring for growth in the corporate bond market**

In addition to the catalysing influence of the introduction of the euro, the strong growth of the euro-denominated private bond market has been driven by a number of factors that have produced a larger and more liquid private bond market which appeals to a larger pool of investors. One of the most important factors has been the ongoing process of corporate restructuring in Europe, which has resulted in strong demand for funds by the private corporate sector. As the introduction of the euro has stimulated the integration of the euro area capital markets, euro area companies involved in merger and acquisition activities and operations such as leveraged buy-outs – in which a take-over of a company is financed through the issuance of high-yield bonds – have financed these deals to a large extent with large euro-denominated debt securities issues. These issues often

served to repay bridge facilities (mainly syndicated loans). This led to some very large issues, unprecedented in the history of European capital markets. In general, merger and acquisition activity by euro area companies grew strongly in 1999, both for the banking and non-banking industry (see Table 4).

According to private data providers, in the case of the non-banking industry merger and acquisition transactions involving companies located in the euro area as parent or target increased in terms of value by 153% in 1999 (as of 23 November) compared with 1998 as a whole. For the banking industry, the corresponding figure was 35%. Following the introduction of the euro, the boom in merger and acquisition business involving euro area banks led to a situation in which the euro area surpassed the United States in the course of 1999 in terms of the nominal value of deals. This was in strong contrast with 1998 where the value of completed deals among banks was less than half that of the United States. Similarly, while in the non-bank sector, the value of deals in the euro area in 1998 was around one-quarter of the US figure, in 1999 this proportion rose to around one-half.

**Table 4**  
**Merger and acquisition activity in the euro area, the United States and Japan <sup>1)</sup>**

(EUR billions, number of deals and percentage growth over the previous year)

		Euro area		United States		Japan <sup>3)</sup>	
		Bank <sup>2)</sup>	Non-bank	Bank <sup>2)</sup>	Non-bank	Bank <sup>2)</sup>	Non-bank
Value of transactions in EUR billions	1997	41.1	174.3	86.0	857.9	1.9	15.2
	1998	110.2	335.3	271.7	1,309.5	1.5	17.1
	1999 <sup>4)</sup>	148.7	847.6	88.1	1,645.7	7.9	40.4
Annual % change in the value of transactions	1998	168.0	92.3	215.9	52.7	-22.0	12.1
	1999 <sup>4)</sup>	34.9	152.8	-67.6	25.7	445.9	136.6
		Bank <sup>2)</sup>	Non-bank	Bank <sup>2)</sup>	Non-bank	Bank <sup>2)</sup>	Non-bank
Number of deals	1997	199	4,323	596	12,325	26	497
	1998	245	5,167	651	13,757	19	564
	1999 <sup>4)</sup>	245	6,138	481	10,778	71	1,171
Annual % change in the number of deals	1998	23.1	19.5	9.2	11.6	-26.9	13.5
	1999 <sup>4)</sup>	0	18.8	-26.1	-21.7	273.7	107.6

Source: Securities Data Company.

1) Classified according to the location of the target company.

2) The ECB's definition of MFIs and the Securities Data Company's definition of banks are not equivalent.

3) The announced deal between Dai-Ichi Kangyo, Fuji and the Industrial Bank of Japan is not included in the 1999 figures for Japan.

4) As at 23 November 1999.

In Japan the slowdown in the pace of economic activity over the past few years seems to have resulted in a surge in corporate restructuring in 1999 (an increase of 446% for banks and 137% for non-banks in 1999 compared with 1998). However, in terms of their value, Japanese mergers and acquisitions are still relatively small compared with those taking place in the United States and in the euro area.

#### ***Other factors also underlie developments in the corporate bond market***

In addition to the surge in merger and acquisition activity in the euro area after the introduction of the euro, investor behaviour contributed to the growth of the euro-denominated private bond market as well. Institutional investors increasingly started to invest in higher yield bonds, as the possibilities to diversify risk across the sovereign euro area bond markets decreased further, while currency diversification-related opportunities to achieve higher rates of return for a given level of portfolio risk ceased to exist. Furthermore, the demand of pension funds for private bonds has been supported by strong growth of the European pension market and mutual funds as well as the high savings rate in Europe. Moreover, demand for investment opportunities in corporate bonds by insurance companies, which traditionally invested a significant part of their funds in corporate loans and unquoted debt securities (partly reflecting the underdevelopment of a pan-European corporate bond market) may have given additional support to the development of this market.

In fact, it has been argued that liquidity considerations have increasingly led retail investors to purchase corporate bonds via investment funds, which has further institutionalised the structure of finance and facilitated the absorption of large issues by capital markets. This is attributable not only to Monetary Union, but also to technological developments which allow for a deeper and

more efficient corporate bond market. In the past, this market has been more difficult to develop from a technical point of view owing to the heterogeneity of issuers and markets.

Finally, as regards the choice between direct and indirect finance, the issuance of private euro-denominated bonds may be related to the financial structure of the euro area itself. In particular, financial markets may have perceived that risks to the soundness of financial intermediaries have increased as a result of greater competition and deregulation in the financial services sector and a growing exposure of banks to emerging markets during the past decade. In this environment, many corporate borrowers in the euro area have recently seen their ratings rise above those of financial intermediaries.

The growth of the euro-denominated private bond market is an indication of the increased importance of direct finance and an orientation of the euro area's financial structure towards more securitisation. The surge in mergers and acquisitions, leveraged buy-outs and management buy-outs in European markets coupled with a more benign economic outlook seems to have resulted in an increase in financing needs in the course of 1999, as is shown by the high year-on-year growth rates of euro-denominated private bond issues.

#### **Developments in equity markets**

The total stock market capitalisation of euro area equity markets stood at €4,346 billion at end-October 1999 or 71% of GDP (see Table 2). This compared with a market capitalisation of €3,624 billion at the end of 1998. Apart from reflecting an increase in stock prices over this period, this also reflected a steady increase in the total number of firms listed on stock exchanges in euro area countries in the course of 1999. This is a further indication of the growing importance of direct finance in the euro area and provides additional evidence that the

financial system in the euro area may be becoming more securitised.

The introduction of the euro appears to have acted as a catalyst for the emergence of stock markets for so-called growth companies and cross-border co-operation between these stock markets. This assists those companies which may have found it difficult to raise bank finance in the past to raise equity finance which may be more appropriate for the risk profiles of their earnings. There was significant growth during 1999 in the EURO.NM market, a pan-European group of regulated exchanges which aims at attracting listings by growth companies. As of November 1999 this alliance, which was established at the end of 1997, included five European equity markets for growth companies – Le Nouveau Marché (Paris), Neuer Markt (Frankfurt), NMAX (Amsterdam), EURO.NM Belgium (Brussels) and Nuovo Mercato (Milan); several other European exchanges have shown interest in joining. Compared with end-December 1998, the total number of companies listed at EURO.NM increased by 76% up to end-September 1999 (from 165 to 291); during the same period, total market capitalisation grew from €31.5 billion to €57.4 billion, an increase of 80% (see Chart 4).

Other initiatives in the equity markets include Nasdaq-Europe, which is scheduled to begin operating in 2000 as a pan-European platform for initial public offerings of European high-growth companies, and EASDAQ, an international exchange based in Brussels which focuses on attracting listings by intermediate high-growth companies with a European or international orientation. This exchange had a total market capitalisation of €30.3 billion as of 26 November 1999. All in all, the emergence of these new initiatives in recent years is a sign that the movement towards and the subsequent start of Stage Three of EMU has provided incentives for private enterprise in Europe and that more companies are positioning themselves to reap the benefits of Economic and Monetary Union.

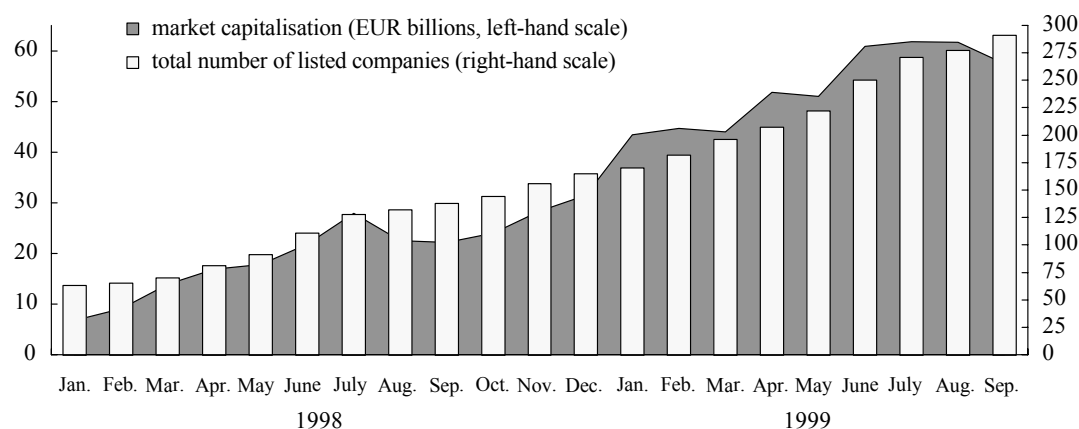
#### Emergence of new financial instruments in euro-denominated capital markets

In parallel with the growth of the euro-denominated private bond market, the structure of corporate finance broadened in 1999 as various segments of the euro area capital markets developed further. In this respect, the growth of a market for high-yield bonds should be mentioned (i.e. bonds

**Chart 4**

#### Market capitalisation and number of listed companies in the EURO.NM market<sup>1)</sup>

(end of period)



Source: EURO.NM

1) EURO.NM is the European Alliance of Stock Markets for growth companies. The members of EURO.NM and their respective growth markets currently include the Paris Bourse (Le Nouveau Marché), the Deutsche Börse (Neuer Markt), the Amsterdam Exchanges (NMAX), the Brussels Exchanges (EURO.NM Belgium) and the Italian Exchange (Nuovo Mercato).



issued by lower rated institutions). The high-yield market has been promoted by the rise in private issuance related to merger and acquisition and leveraged buy-out activities and strong demand by institutional investors for higher-yielding bonds. In this regard, the fact that the preparation for, and subsequent introduction of, the euro has resulted in a significant convergence of government bond yields should be mentioned since it has reduced diversification opportunities.

Overall, an increasing number of relatively small and low-rated companies have taken the step of joining the private euro-denominated bond market and have issued bonds that offer relatively high yields. The growth of the high-yield market has been strong (see Table 5). Private bond issues rated BAA and below by Moody's increased by 171% during the first nine months of 1999. However, the relative importance of issuance by companies with such low ratings is still far below that of the US markets.

The surge of merger and acquisition activity in the euro area in 1999 has revitalised the syndicated loan market, in which loans are made by a group or syndicate of banks if a loan is considered too large to be made by one bank alone. The advantages of syndicated loans are that they can be arranged more swiftly than debt securities issues and that they provide for loan commitments that can be cancelled if a merger or acquisition does not materialise.

Bond derivatives markets, which are used for both hedging and position-taking, have been concentrating on one contract (the Bund

contract traded at Eurex) mainly because of liquidity considerations. In addition, interest rate swaps have been used increasingly for hedging and relative value purposes. Furthermore, equity futures based on pan-European stock indices have been introduced, of which the turnover in the contract based on the Dow Jones EURO STOXX index has been the largest.

New electronic trading systems have been developed as part of the financial innovations related to the euro area capital markets. These new systems might improve market efficiency and transparency. Settlement systems are still fragmented across the euro area, and this is regarded as impeding cross-border repos, as discussed above with regard to the money market.

#### Developments in the structure of the euro foreign exchange markets

The infrastructure for trading the euro in the foreign exchange market developed rapidly in 1999. The introduction of the new currency also coincided with significant changes in the overall structure of the foreign exchange market in respect of liquidity, volumes and participation. Although these developments have been driven mainly by global factors – such as bank mergers, a general reduction in risk appetites, and the increased use of electronic broking systems – the transition to EMU has also been one of the prime catalysts triggering this rationalisation process. The main changes observed so far include the following:

**Table 5**

#### Euro-denominated private gross bond issuance by issuer rating in 1999<sup>1)</sup>

(annual percentage increases)

	AAA	AA	A	BBA and below
Q1	194.5	48.8	79.4	413.7
Q2	156.1	59.5	71.8	247.5
Q3	60.1	44.6	114.0	42.1
Jan.-Sep.	120.5	50.9	85.1	171.2

Source: Capital Data Bondware.

1) Rating according to Moody's.

The recommended quoting convention for the euro – “certain for uncertain” against all other currencies (i.e. €1 = X units of currency “Y”) – has been widely adopted. Quotation of legacy currencies has largely ceased in the interbank market and for large corporate customers. However, banks are still encountering demand for legacy currency quotes from retail and smaller corporate customers, and this is expected to continue until accounting systems have fully adjusted to the euro.

The number of market participants has fallen as a result of bank mergers and the centralisation of euro dealing by banks and treasury activities. The commercial pressures for rationalisation of the banking sector in Europe have been substantially heightened by the creation of the euro, and seem likely to remain a feature for the foreseeable future.

There has also been a decline in the traditional foreign exchange market-making function and the readiness of banks to quote reciprocal prices. In other words, the number of dealers committed to quoting two-way prices to their counterparties at any time (i.e. ready to buy or sell a currency at any time at the request of their counterparty) has decreased. Rather, the major source of spot liquidity in the major currencies, including the euro, is now to be found on the

electronic trading systems, in which dealers can enter deals without having to provide their counterparties with two-way prices.

Foreign exchange turnover has fallen globally for some of the reasons noted above. However, the declines have been more marked in some euro financial centres – in some cases turnover has fallen by rather more than 30%. A significant part of this sizeable contraction can be attributed to the mechanical effect of the introduction of the euro, whereby cross-currency trading between euro area legacy currencies disappeared. It may also reflect the fact that many cross trades were conducted via the US dollar.

For the most part, dealing spreads on trades involving the euro narrowed quickly as the market became used to dealing with and accounting for the new currency. The spreads (i.e. the usual differentials between the bid and ask prices) for standard size deals in euro against the US dollar, the pound sterling and the other non-participating currencies were soon roughly the same in percentage terms as for similar deals against the Deutsche Mark. The main exception has been in trading between the euro and the Japanese yen, where spreads have continued to be wider and more variable than was the case in trading between the Deutsche Mark and the Japanese yen.

### **3 Concluding remarks**

The introduction of the euro at the start of January 1999 brought about a significant change in the economic and financial environment. The most remarkable changes which took place in the course of 1999 occurred in the financial structure of the euro area, with some signs that the euro area is becoming a more market-oriented structure. The integration of the national money markets into one euro area market for short-term liquidity progressed smoothly. Furthermore, a rapid growth of the euro-denominated private bond market and the related advance of financial instruments such

as high-yield bonds has increased the various options available for corporate financing in the euro area. These developments could change the financial structure of the euro area in a more fundamental manner in the years to come. Further integration would enhance the efficiency of euro area financial markets, which would be beneficial to both borrowers and investors. Both the single monetary policy for the 11 euro area countries, and economic policies which remain the responsibility of national authorities, need to take these changes into account.



# Foreign exchange reserves and operations of the Eurosystem

The Treaty establishing the European Community (Treaty) and the Statute of the European System of Central Banks and of the European Central Bank (Statute of the ESCB) stipulate that the Eurosystem, comprising the European Central Bank (ECB) and the national central banks (NCBs) of the Member States which have adopted the euro, is responsible for holding and managing the foreign reserves of the Member States. Both the ECB and the NCBs hold foreign reserves. The foreign reserves of the Eurosystem currently amount to around €350 billion, within this total those of the ECB are around €45 billion. There are many reasons for which the Eurosystem holds foreign reserves; one of the most important operations for which the foreign reserves held by the ECB may, in principle, be needed concerns foreign exchange intervention. Against the background of the potential use of foreign reserve holdings, security and liquidity are the basic requirements for their investment. Under these constraints, the ECB's foreign reserves are managed so as to maximise their value. The operational framework for the management of the foreign reserves of the ECB, which is described in this article, reflects these objectives. The ECB's foreign reserves are currently managed in a decentralised manner by the NCBs on behalf of the ECB in accordance with instructions received from the ECB. Although the NCBs manage their own foreign reserves independently, their operations on the foreign exchange market are, above a certain limit, subject to the approval of the ECB, in order to ensure consistency with the single monetary policy of the Eurosystem. The Treaty provides that further transfers of foreign reserve assets from the NCBs to the ECB may take place, should the need arise.

## I Introduction: the institutional framework

The foreign exchange reserves of the Eurosystem comprise those of the ECB, which were transferred from the NCBs at the start of Stage Three of Economic and Monetary Union (EMU), and those of the NCBs themselves. The institutional framework within which these foreign exchange reserves are managed and foreign exchange operations are carried out is laid down in the Treaty and in the Statute of the ESCB (see Box 1).

According to the Treaty, the foreign exchange operations of the ECB, if and when they are carried out, would have to be seen as a component of the single monetary policy, bound by the same primary objective: the maintenance of price stability. Accordingly, any foreign exchange intervention and any other foreign exchange operations would have to be seen in the context of the Eurosystem's monetary policy strategy. In particular, as part of the broadly based assessment of the outlook for price developments in the context of the monetary policy strategy, the exchange rate is closely analysed and monitored and is treated as an important indicator.<sup>1</sup>

<sup>1</sup> The monetary policy strategy of the Eurosystem was presented in greater detail in an article published in the January 1999 issue of the ECB Monthly Bulletin entitled "The stability-oriented monetary policy strategy of the Eurosystem".

Against this background, the Eurosystem is responsible for the holding and management of the official foreign reserves of the Member States and for all foreign exchange operations, including, in particular, potential intervention.

The Eurosystem may, if and when needed, conduct foreign exchange intervention either on its own (unilateral intervention) or within the framework of co-ordinated intervention involving other central banks (concerted intervention). The foreign currency holdings involved are those pooled at the ECB, but intervention may be carried out either directly by the ECB and/or by NCBs acting on behalf of the ECB, on a disclosed agency basis. Whether the execution of the intervention is centralised or decentralised is irrelevant from the point of view of the ultimate objective of the operation. Finally, it should be noted that the ECB can, if and when needed, also fund intervention through means other than using its foreign reserve assets. The ECB can, for example, use foreign exchange swaps, including swaps with other central banks. Should the need arise, the capacity of the ECB to carry out foreign exchange intervention is not, therefore, restricted to its foreign reserve holdings.

## **Box I**

### **The institutional framework as laid down in the Treaty establishing the European Community (Treaty) and in the Statute of the European System of Central Banks and of the European Central Bank (Statute of the ESCB)**

Article 105 of the Treaty stipulates that one of the basic tasks to be carried out by the Eurosystem is to hold and manage the official foreign reserves of the Member States, without prejudice to the holding and management by the governments of these Member States of foreign exchange working balances. Consequently, there are no official foreign reserves in the euro area apart from those held by the Eurosystem. The Statute of the ESCB governs the holding and management of foreign reserves at the level of both the European Central Bank (ECB) and the national central banks (NCBs).

Both the ECB and the NCBs hold foreign reserves. The Statute of the ESCB provides for an initial transfer of a portion of foreign reserve assets from the NCBs to the ECB and establishes the possibility of additional calls of foreign reserves by the ECB should the need arise (Article 30). The ECB holds and manages the foreign reserves that are transferred to it for the purposes set out in the Statute of the ESCB; the foreign reserves remaining with the NCBs are held and managed by the NCBs in accordance with the provisions of Article 31 of the Statute of the ESCB.

The external operations that may affect the ECB's and NCBs' holdings of reserves are set out in Article 23 of the Statute of the ESCB. First, the ECB and the NCBs may establish relations with central banks and financial institutions in other countries and, where appropriate, with international organisations. Second, they may acquire and sell spot and forward all types of foreign exchange assets and precious metals. Third, they may manage the foreign assets they hold. Finally, they may conduct all types of banking transactions in relations with third countries and international organisations, including borrowing and lending operations.

The foreign reserves of the NCBs are available for the fulfilment of current and prospective obligations, undertaken either by themselves or on behalf of national governments, towards international organisations, such as the BIS and the IMF. NCBs may also conduct other operations when acting as an agent for customers, for example their respective national governments. Finally, portfolio investment transactions may also be conducted by NCBs as part of their general asset management operations and they may change the size of their foreign reserve holdings.

As for the foreign reserves owned by the ECB, the most important type of foreign currency operation that could affect their amount is intervention on foreign exchange markets.

Foreign exchange intervention can, *inter alia*, be conducted in the context of institutional exchange rate relations between the euro and the currencies of countries outside the European Union, e.g. the US dollar and the Japanese yen. With regard to these currencies, Article 111 (ex Article 109) of the Treaty defines two possible alternative institutional procedures. First, the ECOFIN Council can conclude formal agreements on an exchange rate system for the euro. Second, the ECOFIN Council can formulate general orientations for the exchange rate policy. In both cases, the ECB is involved in the institutional procedure by means of either a recommendation to, or a consultation by, the ECOFIN Council. Both these institutional procedures must, however, be without prejudice to the primary objective of maintaining price stability. Neither of the two aforementioned procedures has thus far been initiated. At its meeting in Luxembourg on 13 December 1997, the European Council stressed that the exchange rate of the euro should be seen as the outcome of both economic developments and relevant economic policies, rather than as an objective to be set independently. Following this line of reasoning, the European Council stated that general orientations for the exchange rate policy of the euro area would be formulated only under exceptional circumstances and without prejudice to the independence of the Eurosystem.

Intervention may also take place within the framework of the new exchange rate mechanism, ERM II, which entered into force at the start of Stage Three of EMU. ERM II is based mainly on two legal documents: the European Council Resolution of 16 June 1997 and the Agreement of 1 September 1998 between the ECB and the central banks of the EU Member States outside the euro area. The NCBs of Denmark and Greece currently participate in ERM II. Any intervention in EU currencies would be performed without prejudice to the primary objective of the ECB of maintaining price stability and would be carried out by the Eurosystem in close co-ordination with the relevant non-euro area central bank, in particular with regard to the financing of the intervention. This obviates the need to hold foreign exchange reserves denominated in EU currencies.

## 2 The ECB's foreign reserves

### Size of the foreign reserves

The Governing Council of the ECB decided that the transfer of foreign reserves should take place at the very beginning of 1999 for the maximum amount of €50 billion allowed in accordance with the Treaty, adjusted downwards by deducting the shares in the ECB capital of the NCBs of the countries not participating in the euro area from the outset. The transfer thus amounted to approximately 78.92% of €50 billion, i.e. around €39.46 billion. 15% of this amount was transferred in the form of gold, and the remaining 85% in the two major currencies (the US dollar and the Japanese yen). The foreign exchange reserves represent a very large share of the assets side of the ECB balance sheet. This underlines the importance of a framework which ensures prudent and efficient management of the foreign reserves.

### The management of the foreign reserves owned by the ECB

As explained above, the aim of the ECB's foreign reserve management is to ensure that, at any point in time, the ECB has an amount of liquid resources sufficient for any foreign exchange intervention. This implies that liquidity and security are the basic requirements for the investment of the foreign reserves. Under these constraints, the ECB's foreign reserves should be managed in such a way as to maximise their value. The operational framework for the management

of the foreign reserve assets of the ECB reflects these aims.

The ECB's foreign reserves are managed in a decentralised manner. Nevertheless, the strategic and tactical investment framework is determined centrally by the decision-making bodies of the ECB. This framework includes the currency distribution, the trade-off between interest rate risk and return, and the credit risk and liquidity requirements. The investment decisions are then conveyed to the NCBs, in the form of investment benchmarks and limits, to be implemented. When implementing the ECB's investment decisions, NCBs act on behalf of the ECB, on a disclosed agency basis, so that the ECB's counterparties in the international financial markets can distinguish the operations carried out by the NCBs on behalf of the ECB from those carried out by NCBs in the course of managing their own reserves.

The Governing Council has defined the currency distribution of the foreign reserves of the ECB on the basis of prospective operational needs and may change them if this is deemed appropriate. There is, however, no active management of the currency composition of reserves for investment purposes, in order to avoid any interference with the single monetary policy of the Eurosystem.

The ECB defines four key parameters for the investment of its foreign reserves. First, a two-level investment benchmark (i.e. a

strategic and a tactical benchmark) for each currency; second, permitted deviations from these benchmarks in terms of interest rate risk; third, a list of eligible instruments and operations; and, fourth, limits for credit risk exposure. Details of these parameters are not published so as to avoid any unwarranted impact on financial markets.

With regard to the investment benchmarks, the Governing Council first establishes a strategic benchmark for each currency, which constitutes the main guideline for the ECB's investment policy. This benchmark reflects the long-term policy requirements and risk and return preferences of the ECB. Second, the ECB determines a tactical benchmark. This tactical benchmark, which must be kept within pre-set bands around the strategic benchmark, reflects the short to medium-term risk and return preferences of the ECB, in the context of the prevailing market conditions. The information regarding all four characteristics listed above is then communicated to the NCBs, which implement the investment framework of the ECB. Concerning the daily management of foreign reserves, the NCBs have a margin of discretion within the deviation bands and limits defined by the ECB. This aims at maximising the efficiency of the management of the ECB's foreign reserves. Through a portfolio management system which uses a special IT network built for the ESCB, the ECB receives online information on the deals carried out by all NCBs on its behalf.

Since its launch at the beginning of 1999, this framework has proven to function well. However, there is constant consultation between the ECB and all the NCBs to refine and improve it. This is particularly true with regard to the selection of counterparties in operations involving foreign reserve assets, the selection of eligible assets and the introduction of new instruments.

The counterparties and intermediaries used in operations involving foreign reserve assets are selected by the ECB in the light of the experience of NCBs. In making its selection,

the ECB follows a uniform approach, based essentially on two sets of criteria. The first set of criteria includes, notably, an assessment of the creditworthiness of the counterparties. The second set of criteria relates to efficiency considerations and includes, *inter alia*, the research service provided, the competitiveness of prices and the ability of counterparties to handle large volumes in all market conditions. The transactions conducted with the ECB's counterparties are documented under standard market agreements. The ECB has also developed a proprietary master netting agreement which has been accepted by its counterparties. The ECB modifies, from time to time, the list of instruments eligible for use in its foreign reserve management. The choice of such eligible instruments depends upon the general requirements in respect of the management of the ECB's foreign reserves and aims at achieving an increasing degree of sophistication, while meeting the requirements for high levels of security and liquidity.

It should also be noted that the management of the ECB's foreign reserves allows the ECB continuously to update its knowledge of investors' behaviour and market techniques. In particular, beyond the analysis of economic and financial data, this makes it constantly possible to add to a thorough and forward-looking understanding of financial market participants' focus.

### **The ECB's gold reserves**

As a result of the initial transfer of foreign reserves, the ECB holds approximately 750 tonnes of gold. This transfer of gold from the NCBs to the ECB had no implications for the consolidated gold holdings of the entire Eurosystem. The ECB is party to the 1999 Central Bank Gold Agreement, which was signed on 26 September 1999 by 15 central banks, including those belonging to the Eurosystem (see Box 2).

## Box 2

### 1999 Central Bank Gold Agreement

In the interest of clarifying their intention with respect to their gold holdings, the undersigned institutions make the following statement:

1. Gold will remain an important element of global monetary reserves.
2. The undersigned institutions will not enter the market as sellers, with the exception of already decided sales.
3. The gold sales already decided will be achieved through a concerted programme of sales over the next five years. Annual sales will not exceed approximately 400 tons and total sales over the period will not exceed 2,000 tons.
4. The signatories to this agreement have agreed not to expand their gold leasings and their use of gold futures and options over this period.
5. This agreement will be reviewed after five years.

European Central Bank  
Oesterreichische Nationalbank  
Nationale Bank van België/Banque Nationale de Belgique  
Suomen Pankki  
Banque de France  
Deutsche Bundesbank  
Central Bank of Ireland  
Banca d'Italia  
Banque centrale du Luxembourg  
De Nederlandsche Bank  
Banco de Portugal  
Banco de España  
Sveriges Riksbank  
Schweizerische Nationalbank  
Bank of England

### 3 The NCBs' foreign reserves

According to the Treaty, as seen above, the foreign reserves which were not transferred to the ECB at the start of Stage Three of EMU are held and managed by the NCBs. NCBs conduct many operations with their foreign reserves and numerous foreign exchange transactions, but most do not substantially affect their total holdings of reserves. In practice, NCBs' transactions are mostly related to the portfolio management of their own foreign reserves and to

customer transactions (e.g. operations for national treasuries or international institutions). The latter might include the management of public debt denominated in foreign currencies (e.g. purchases of foreign exchange by a central bank for the servicing of government foreign debt). In addition, some of the NCBs' operations are aimed at adjusting the size of their foreign reserve holdings.



At the end of November 1999 the foreign reserves held by NCBs amounted to €307.5 billion. Table I illustrates the development of the ECB's and the NCBs' holdings since the beginning of this year. The total amount of the NCBs' foreign reserves expressed in euro has increased thus far in 1999, mainly as a result of revaluations and the accrual of income from their own foreign reserve management, but it was also affected by operations carried out by some NCBs to reduce the proportion of foreign reserves on their balance sheets. The ECB's foreign reserves have increased in euro terms primarily as a result of revaluations, but they also reflect the accrual of income from reserve management operations. If foreign exchange intervention had been carried out by the Eurosystem, this would have affected the ECB's foreign reserves; however, no foreign exchange intervention has been carried out thus far.

In line with Article 31 of the Statute of the ESCB, operations carried out on the foreign exchange market with the NCBs' foreign reserves, which may affect foreign exchange rates or domestic liquidity conditions, are, above certain limits established within the framework of guidelines issued by the Governing Council, subject to the approval of the ECB, in order to ensure consistency with the single monetary policy of the Eurosystem. Since they do not affect the single monetary policy of the Eurosystem, NCBs' investment operations in foreign financial markets are not subject to the

approval of the ECB. Transactions undertaken by NCBs in fulfilment of their obligations towards international organisations are also exempt from this requirement. An analogous framework applies to Member States' transactions with their foreign currency working balances. Internal ECB guidelines, specifying the aforementioned limits, have been in place since the launch of the euro.

While the Treaty provides for a specific amount of foreign reserves to be transferred from the NCBs to the ECB, as seen above, it also makes explicit reference to additional transfers of foreign reserve assets to the ECB. Indeed, Article 30 of the Statute of the ESCB provides that further calls of foreign reserve assets, beyond the amount of the initial transfer, may take place. In the event of such further calls, the contribution of each NCB would be fixed in proportion to its share in the subscribed capital of the ECB, as was the case for the initial transfer. The Treaty establishes that EC secondary legislation shall be adopted to make such further calls possible. To this end, the ECB has made a Recommendation to the ECOFIN Council, which envisages that further calls may be effected up to the same amount as the initial transfer of foreign reserves from the NCBs to the ECB (i.e. €50 billion). This Recommendation is currently being examined. Additional transfers of foreign reserve assets to the ECB may also, if deemed necessary, take place on the basis of further EC secondary legislation.

**Table I**  
**Foreign reserve assets of the Eurosystem (including gold)**  
*(end-of-period in EUR billions; revaluations are carried out at the end of each quarter)*

1999	ECB	All NCBs	Eurosystem
January	39.2	289.1	328.3
February	39.4	285.4	324.8
March	42.3	302.1	344.4
April	42.4	300.4	342.8
May	42.5	297.1	339.6
June	43.6	299.2	342.8
July	43.5	298.7	342.2
August	43.7	299.8	343.5
September	44.1	307.4	351.5
October	44.1	307.3	351.4
November	44.3	307.5	351.8

#### **4 The presentation of foreign reserves in the consolidated weekly financial statement of the Eurosystem**

A consolidated weekly financial statement of the Eurosystem, reflecting the financial position at the close of business each Friday, is published on the ECB's Web site the following Tuesday (or, at the quarter-end, the following Wednesday). The consolidated weekly financial statements are accompanied by a press release indicating the major changes in the various items. In this press release a distinction is made between items related to monetary policy and those not related to monetary policy. In the section on items not related to monetary policy, weekly changes in the net position of the Eurosystem in foreign reserves are

commented upon, in particular. Since these financial statements of the ECB and the 11 euro area NCBs are consolidated, changes in the ECB's foreign reserves cannot be derived from the weekly financial statements. In other words, changes in the Eurosystem's foreign reserves on a weekly basis cannot be attributed to any one of the 12 central banks forming the Eurosystem.

The ECB's foreign reserves will be reported in the ECB Monthly Bulletin on a monthly basis, separately from the position of the entire Eurosystem, as from the beginning of this year.





## **Euro area statistics**



# Contents

## Statistics

1	Monetary policy statistics	
1.1	Consolidated financial statement of the Eurosystem	4*
1.2	ECB interest rates on standing facilities	6*
1.3	Eurosystem monetary policy operations allotted through tenders	6*
1.4	Minimum reserve statistics	7*
1.5	Banking system's liquidity position	8*
2	Monetary developments in the euro area	
2.1	Aggregated balance sheet of the Eurosystem	10*
2.2	Aggregated balance sheet of the euro area MFIs, excluding the Eurosystem	11*
2.3	Consolidated balance sheet of the euro area MFIs, including the Eurosystem	12*
2.4	Monetary aggregates	14*
2.5	Outstanding MFI loans by counterpart, type and original maturity	17*
2.6	Currency analysis of certain liabilities and assets of the euro area MFIs	18*
3	Financial markets and interest rates in the euro area	
3.1	Money market interest rates	20*
3.2	Government bond yields	21*
3.3	Stock market indices	22*
3.4	Retail bank interest rates	23*
3.5	Securities issues other than shares by original maturity, residency of the issuer and currency denomination	24*
4	HICP and other prices in the euro area	
4.1	Harmonised Index of Consumer Prices	26*
4.2	Selected other price indicators	27*
5	Real economy indicators in the euro area	
5.1	National accounts	28*
5.2	Selected other real economy indicators	29*
5.3	Business and consumer surveys	30*
5.4	Labour market indicators	31*
6	Saving, investment and financing in the euro area	32*
7	General government fiscal position in the euro area and in the euro area countries	33*
8	Balance of payments and international investment position of the euro area (including reserves)	
8.1	Summary balance of payments	34*
8.2	Balance of payments: current and capital accounts	35*
8.3	Balance of payments: income account	36*
8.4	Balance of payments: direct and portfolio investment accounts	37*
8.5	Balance of payments: other investment account and reserve assets	38*
8.6	International investment position	40*
9	External trade in goods of the euro area	41*
10	Exchange rates	44*
11	Economic and financial developments in the other EU Member States	45*
12	Economic and financial developments outside the EU	
12.1	Economic and financial developments	46*
12.2	Saving, investment and financing	47*
	<b>Technical notes</b>	<b>48*</b>
	<b>General notes</b>	<b>49*</b>

# 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 in euro	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
	1	2	3	4	5	6	7	8
1999 6 Aug.	101,754	245,853	13,027	4,162	194,731	149,018	45,001	0
13	101,754	245,650	12,724	4,107	189,871	143,990	45,001	0
20	101,754	246,057	12,640	4,261	186,895	141,042	45,001	0
27	101,754	245,415	12,580	4,116	205,150	159,071	44,996	0
3 Sep.	101,754	245,588	11,915	4,281	197,748	152,043	44,996	0
10	101,754	245,034	12,887	4,686	193,931	147,991	44,996	0
17	101,754	245,923	12,472	5,028	188,657	142,932	44,994	0
24	101,754	246,058	13,054	4,919	198,458	152,955	44,994	0
1 Oct.	114,988	240,223	13,357	5,066	192,534	146,988	44,994	0
8	114,988	240,037	13,649	5,026	191,099	145,071	44,994	0
15	114,988	239,967	13,748	5,084	185,829	140,104	44,994	0
22	114,988	240,735	13,741	5,084	171,707	125,054	44,994	0
29	114,988	240,177	13,684	5,670	205,293	149,004	54,995	0
5 Nov.	114,988	240,305	13,702	5,832	195,860	140,104	54,995	0
12	114,988	238,617	13,749	5,336	196,193	140,111	54,995	0
19	114,988	240,349	13,229	5,313	198,821	143,029	54,995	0
26	114,987	239,561	12,846	5,340	208,995	143,046	64,999	0
3 Dec.	114,986	239,060	13,111	5,254	212,237	146,067	64,999	0
10	114,955	240,344	13,728	4,394	230,117	164,018	64,999	0
17	114,836	241,732	13,422	5,412	214,957	148,970	64,999	0
24	114,745	242,368	13,795	4,998	225,423	148,972	74,996	0
31	116,483	254,880	14,383	4,822	250,079	161,988	74,996	0

### 2. Liabilities

	Banknotes in circulation	Liabilities to financial sector counterparties in the euro area in euro	Current accounts (covering the minimum reserves system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	Debt certificates issued
	1	2	3	4	5	6	7	8
1999 6 Aug.	348,034	106,144	105,807	292	0	0	45	10,158
13	346,223	103,115	103,001	96	0	0	18	10,158
20	342,257	100,588	95,691	4,883	0	0	14	10,158
27	340,626	110,453	110,439	13	0	0	1	10,158
3 Sep.	344,193	106,110	106,037	49	0	0	24	10,158
10	344,254	100,011	99,984	20	0	0	7	10,158
17	342,188	98,993	98,237	750	0	0	6	10,158
24	340,327	103,953	103,863	76	0	0	14	10,158
1 Oct.	343,179	109,898	109,679	154	0	0	65	8,606
8	345,322	102,086	101,938	85	0	0	63	8,606
15	343,752	109,329	109,011	184	0	0	134	8,606
22	340,852	98,656	92,529	6,027	0	0	100	8,606
29	343,584	109,886	109,399	395	0	0	92	8,606
5 Nov.	345,416	100,927	100,826	13	0	0	88	7,876
12	344,556	98,280	98,208	21	0	0	51	7,876
19	342,495	106,871	106,052	748	0	0	71	7,876
26	343,342	106,344	106,129	57	0	0	158	7,876
3 Dec.	353,009	114,526	114,227	143	0	0	156	7,876
10	357,245	103,295	101,332	1,815	0	0	148	7,876
17	361,633	105,625	103,606	1,870	0	0	149	7,876
24	370,789	105,127	105,000	111	0	0	16	7,876
31	374,953	117,121	114,493	2,618	0	0	10	7,876

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims	Securities of euro area residents in euro	General government debt in euro	Other assets	Total		
							9	10	11
0	240	47	425	25,939	60,156	77,342	722,964	1999	6 Aug.
0	149	70	661	26,033	60,156	75,965	716,260		13
0	186	99	567	26,087	60,156	75,529	713,379		20
0	304	115	664	25,966	60,156	78,829	733,966		27
0	3	52	654	25,838	60,156	79,848	727,128		3 Sep.
0	236	43	665	25,551	60,156	77,271	721,270		10
0	46	125	560	25,163	60,156	78,761	717,914		17
0	36	102	371	25,414	60,156	78,787	728,600		24
0	151	90	311	24,700	60,156	79,592	730,616		1 Oct.
0	334	94	606	24,631	60,156	79,827	729,413		8
0	195	76	460	24,309	60,156	80,277	724,358		15
0	1,111	46	502	24,102	60,156	79,433	709,946		22
0	650	69	575	23,428	60,156	79,228	742,624		29
0	73	116	572	23,490	60,121	82,843	737,141		5 Nov.
0	302	95	690	23,856	60,121	80,988	733,848		12
0	72	43	682	24,123	60,121	77,851	734,795		19
0	44	206	700	23,896	60,121	77,306	743,052		26
0	523	58	590	23,931	60,121	78,337	747,037		3 Dec.
0	78	224	798	24,055	60,153	76,701	764,447		10
0	39	152	797	23,868	59,649	79,341	753,217		17
0	96	401	958	23,991	59,649	75,700	760,669		24
0	11,429	404	1,262	23,521	59,180	79,844	803,192		31

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	Revaluation accounts	Capital and reserves	Other liabilities	Total		
								9	10	11
45,219	6,988	1,037	10,032	6,192	82,510	53,218	53,432	722,964	1999	6 Aug.
44,255	8,186	924	9,604	6,192	82,510	53,219	51,874	716,260		13
47,592	7,618	952	9,701	6,192	82,510	53,220	52,591	713,379		20
57,773	7,545	1,000	9,264	6,192	82,510	53,220	55,225	733,966		27
53,401	7,509	905	8,372	6,192	82,510	53,221	54,557	727,128		3 Sep.
54,393	7,398	904	8,958	6,192	82,510	53,221	53,271	721,270		10
52,897	7,180	855	9,696	6,192	82,510	53,221	54,024	717,914		17
58,991	7,260	872	10,460	6,192	82,510	53,222	54,655	728,600		24
45,950	7,433	1,078	9,840	6,229	89,826	53,220	55,357	730,616		1 Oct.
51,323	7,214	1,040	9,687	6,229	89,826	53,221	54,859	729,413		8
41,971	7,127	1,039	9,909	6,229	89,827	53,223	53,346	724,358		15
40,259	7,648	1,071	10,610	6,229	89,835	53,225	52,955	709,946		22
59,464	7,132	1,282	9,842	6,229	89,835	53,225	53,539	742,624		29
59,276	7,119	1,205	9,470	6,229	89,835	53,228	56,560	737,141		5 Nov.
61,257	7,143	986	8,363	6,229	89,835	53,231	56,092	733,848		12
56,974	7,339	874	9,504	6,229	89,835	53,232	53,566	734,795		19
65,713	7,269	965	8,653	6,229	89,835	53,236	53,590	743,052		26
54,635	6,874	914	8,279	6,229	89,835	53,237	51,623	747,037		3 Dec.
76,886	6,054	1,261	9,794	6,229	89,835	53,241	52,731	764,447		10
56,129	7,322	977	11,116	6,229	89,835	53,242	53,233	753,217		17
52,373	7,343	1,027	12,008	6,229	89,835	53,243	54,819	760,669		24
60,614	7,834	926	11,901	6,531	107,348	53,374	54,714	803,192		31



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

	Deposit facility		Marginal lending facility	
	Level 1	Change 2	Level 3	Change 4
1999 1 Jan.	2.00	-	4.50	-
4 <sup>1)</sup>	2.75	0.75	3.25	-1.25
22	2.00	-0.75	4.50	1.25
9 Apr.	1.50	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	4.00	0.50

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 allotted through tenders<sup>1)</sup>***(EUR millions; interest rates in percentages per annum)*

Date of settlement	Main refinancing operations					
	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		Running for (...) days
			Fixed rate	Marginal rate	Weighted average rate	
1	2	3	4	5	6	
1999 6 Oct.	1,655,341	90,000	2.50	-	-	14
13	1,289,972	50,000	2.50	-	-	15
20	1,107,860	75,000	2.50	-	-	14
28	1,937,221	74,000	2.50	-	-	13
3 Nov.	2,344,082	66,000	2.50	-	-	14
10	404,857	74,000	3.00	-	-	14
17	484,348	69,000	3.00	-	-	14
24	687,973	74,000	3.00	-	-	14
1 Dec.	1,018,950	72,000	3.00	-	-	14
8	1,141,163	92,000	3.00	-	-	14
15	286,824	57,000	3.00	-	-	15
22	1,505,405	92,000	3.00	-	-	21
30	485,825	70,000	3.00	-	-	20

Date of settlement	Longer-term refinancing operations					
	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		Running for (...) days
			Fixed rate	Marginal rate	Weighted average rate	
1	2	3	4	5	6	
1999 14 Jan.	79,846	15,000	-	3.13	-	42
14	39,343	15,000	-	3.10	-	70
14	46,152	15,000	-	3.08	-	105
25 Feb.	77,300	15,000	-	3.04	-	91
25 Mar.	53,659	15,000	-	2.96	2.97	98
29 Apr.	66,911	15,000	-	2.53	2.54	91
27 May	72,294	15,000	-	2.53	2.54	91
1 July	76,284	15,000	-	2.63	2.64	91
29	64,973	15,000	-	2.65	2.66	91
26 Aug.	52,416	15,000	-	2.65	2.66	91
30 Sep.	41,443	15,000	-	2.66	2.67	84
28 Oct.	74,430	25,000	-	3.19	3.42	91
25 Nov.	74,988	25,000	-	3.18	3.27	98
23 Dec.	91,088	25,000	-	3.26	3.29	98

Date of settlement	Other tender operations						
	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		Running for (...) days
				Fixed rate	Marginal rate	Weighted average rate	
1	2	3	4	5	6	7	
2000 5 Jan.	Liquidity absorbing <sup>2)</sup>	14,420	14,420	-	3.00	3.00	7

Source: ECB.

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

2) Collection of fixed-term deposits. The intended volume was EUR 33 billion.

**Table 1.4****Minimum reserve statistics****1. Reserve base of credit institutions subject to reserve requirements <sup>1) 2)</sup>***(EUR billions; end of period)*

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period) <sup>2</sup>	Debt securities up to 2 years' agreed maturity <sup>3</sup>	Money market paper <sup>4</sup>	Deposits (over 2 years' agreed maturity and notice period) <sup>5</sup>	Repos <sup>6</sup>	Debt securities over 2 years' agreed maturity <sup>7</sup>
1999 Jan.	8,607.7	4,838.6	83.1	146.0	1,105.5	510.6	1,923.9
Feb.	8,638.8	4,801.1	86.9	148.9	1,111.6	543.9	1,946.5
Mar.	8,684.9	4,803.1	88.8	151.2	1,125.6	549.8	1,966.4
Apr.	8,741.1	4,827.6	93.3	160.3	1,129.3	542.0	1,988.6
May	8,797.6	4,867.1	101.1	158.7	1,130.8	541.0	1,999.0
June	8,857.3	4,916.6	106.3	152.0	1,145.5	517.6	2,019.3
July	8,848.9	4,895.7	109.2	155.5	1,153.5	513.8	2,021.2
Aug.	8,856.3	4,893.0	113.2	165.4	1,164.9	484.8	2,035.0
Sep.	8,969.1	4,912.7	120.6	170.0	1,166.5	537.2	2,062.1
Oct.	9,083.6	4,967.3	129.0	178.5	1,180.3	554.2	2,074.5
Nov. <sup>(p)</sup>	9,251.1	5,072.9	135.6	203.0	1,195.1	558.1	2,086.6

Source: ECB.

- 1) *Liabilities vis-a-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks, are excluded from the reserve base. If a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to 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) *Maintenance periods start on the 24th of the month and run to the 23rd of the following month; the required reserve is calculated from the reserve base as at the end of the preceding month.*

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

Maintenance period ending in:	Required reserves <sup>2)</sup>	Actual reserves <sup>3)</sup>	Excess reserves <sup>4)</sup>	Deficiencies <sup>5)</sup>	Interest rate on minimum reserves <sup>6)</sup>
	1	2	3	4	5
1999 Feb.	98.3	99.3	1.1	0.1	3.00
Mar.	100.6	101.5	0.9	0.1	3.00
Apr.	100.1	100.7	0.6	0.0	2.84
May	100.2	101.0	0.8	0.0	2.50
June	100.9	101.5	0.6	0.0	2.50
July	102.0	102.7	0.8	0.0	2.50
Aug.	102.8	103.5	0.6	0.0	2.50
Sep.	102.6	103.0	0.5	0.0	2.50
Oct.	102.8	103.3	0.6	0.0	2.50
Nov.	103.4	104.0	0.5	0.0	2.73
Dec.	104.9	105.4	0.5	0.0	3.00
2000 Jan. <sup>(p)</sup>	107.7	-	-	-	-

Source: ECB.

- 1) *This table contains full data for completed maintenance periods and required reserves for the current maintenance period.*
- 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 are then aggregated at the euro area level.*
- 3) *Aggregate average daily holdings of credit institutions required to hold a positive amount of reserves 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).*

**Table 1.5****Banking system's liquidity position <sup>1)</sup>***(EUR billions; period averages of daily positions)*

Maintenance period ending in:	Liquidity-providing factors						Liquidity-absorbing factors			Credit institutions' current accounts <sup>4)</sup>	Base money <sup>5)</sup>
	Monetary policy operations of the Eurosystem						Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) <sup>3)</sup>		
	Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Other operations <sup>2)</sup>	Marginal lending facility	Deposit facility					
1	2	3	4	5	6	7	8	9	10	11	
1999 Feb.	328.2	104.6	34.2	30.6	3.8	1.3	329.3	41.1	29.5	100.2	430.8
Mar.	323.6	136.4	45.0	0.0	0.4	1.4	326.9	49.8	25.0	102.2	430.5
Apr.	338.4	130.1	45.0	0.0	0.7	0.3	331.0	42.9	39.0	101.1	432.3
May	342.5	121.6	45.0	0.0	0.8	0.4	333.9	36.3	38.0	101.2	435.5
June	339.8	132.0	45.0	0.0	0.4	0.6	337.0	40.4	37.2	101.9	439.6
July	342.4	143.1	45.0	0.0	0.4	0.5	342.1	45.7	39.5	102.9	445.6
Aug.	343.2	150.1	45.0	0.0	0.5	1.0	344.8	47.3	42.1	103.6	449.4
Sep.	343.5	150.4	45.0	0.0	0.2	0.7	342.1	51.4	41.6	103.2	446.0
Oct.	349.7	143.0	45.0	0.0	0.3	0.6	342.5	45.4	45.9	103.5	446.7
Nov.	351.8	140.5	53.7	0.0	0.3	0.4	343.1	51.5	47.3	104.1	447.5
Dec.	351.7	150.4	65.0	0.0	0.3	1.0	354.3	59.0	47.5	105.6	460.6

Source: ECB.

1) The banking system's liquidity position is defined as the current account holdings in euro of credit institutions in the euro area with the Eurosystem. Amounts are derived from the consolidated financial statement of the Eurosystem.

2) Includes monetary policy operations initiated by national central banks in Stage Two and outstanding at the start of Stage Three (excluding outright operations and the issuance of debt certificates).

3) Remaining items in the consolidated financial statement of the Eurosystem.

4) Equal to the difference between the sum of liquidity-providing factors (items 1 to 5) and the sum of liquidity-absorbing factors (items 6 to 9).

5) Calculated as the sum of the deposit facility (item 6), banknotes in circulation (item 7) and credit institutions' current account holdings (item 10) or, alternatively, as the difference between the sum of liquidity-providing factors (items 1 to 5) and the sum of government deposits (item 8) and other factors (net) (item 9).



## 2 Monetary developments in the euro area

**Table 2.1**

**Aggregated balance sheet of the Eurosystem<sup>1)</sup>**

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

### 1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Holdings of shares/other equity issued by euro area residents			External assets <sup>2)</sup>	Fixed assets	Remaining assets	Total
	1	2	3	4	5	6	7	8	9	10	11				
1998 Apr.	224.9	203.3	21.2	0.4	102.5	1.4	100.2	0.9	3.0	0.4	2.6	327.8	7.6	43.7	709.5
May	227.0	205.6	21.2	0.3	101.9	1.6	99.4	0.9	3.0	0.4	2.6	331.0	7.7	46.9	717.4
June	293.4	272.1	21.1	0.2	105.4	4.8	99.7	0.8	3.2	0.6	2.6	337.2	7.8	47.9	794.9
July	314.2	292.9	21.1	0.2	87.8	1.1	85.9	0.8	4.8	2.1	2.8	333.2	8.0	49.8	798.0
Aug.	313.9	292.6	21.1	0.2	88.1	0.9	86.3	0.9	4.8	2.0	2.8	333.1	8.0	54.8	802.7
Sep.	302.8	281.5	21.1	0.2	82.7	1.0	81.0	0.7	4.8	2.0	2.8	329.4	8.0	50.0	777.6
Oct.	305.1	283.8	21.1	0.2	73.3	0.9	71.7	0.7	4.8	1.9	2.9	334.7	8.1	49.7	775.7
Nov.	300.6	279.1	21.1	0.4	78.0	1.0	76.3	0.6	4.8	1.9	2.9	341.9	8.1	51.5	785.0
Dec.	225.2	204.6	20.4	0.1	87.8	1.1	86.2	0.5	5.5	1.8	3.7	322.3	7.9	49.3	698.0
1999 Jan.	524.2	503.6	20.4	0.2	89.2	1.3	87.3	0.6	8.2	4.1	4.1	416.8	9.3	57.1	1,104.7
Feb.	647.3	626.7	20.4	0.2	90.7	1.5	88.6	0.5	8.3	4.2	4.1	365.2	9.3	56.8	1,177.7
Mar.	608.6	587.9	20.4	0.2	94.0	1.5	91.9	0.6	8.1	4.0	4.1	426.0	9.3	52.2	1,198.3
Apr.	540.8	520.2	20.4	0.2	93.2	1.2	91.3	0.7	8.1	4.0	4.1	435.7	9.6	52.8	1,140.2
May	481.2	460.6	20.4	0.2	93.1	1.6	90.8	0.7	8.2	4.0	4.2	387.6	9.6	51.1	1,030.9
June	788.9	768.3	20.4	0.2	92.4	1.5	90.0	0.9	8.7	4.4	4.3	499.4	9.7	47.1	1,446.1
July	755.2	734.7	20.4	0.2	92.3	1.5	89.9	0.9	8.7	4.4	4.3	452.0	9.8	51.6	1,369.8
Aug.	531.0	510.4	20.4	0.2	91.9	1.1	90.0	0.7	8.8	4.4	4.4	423.0	9.9	52.8	1,117.3
Sep.	457.1	436.5	20.4	0.2	92.4	1.4	89.9	1.1	8.7	4.3	4.4	427.8	9.8	47.9	1,043.8
Oct.	567.1	546.6	20.4	0.2	92.4	1.9	89.4	1.2	8.6	4.3	4.3	432.4	9.9	53.9	1,164.2
Nov. <sup>①)</sup>	508.4	487.8	20.4	0.2	92.6	2.1	89.4	1.1	8.8	4.2	4.6	410.3	9.9	56.0	1,086.0

### 2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs			Money market paper	Debt securities issued	Capital and reserves	External liabilities <sup>2)</sup>	Remaining liabilities	Total
			3	4	5						
1998 Apr.	343.8	131.3	84.8	44.3	2.2	14.6	14.4	106.5	32.6	66.3	709.5
May	346.1	141.8	90.9	47.0	4.0	14.7	13.7	106.2	32.1	62.8	717.4
June	345.5	217.8	159.1	54.2	4.5	14.4	13.3	114.3	27.2	62.5	794.9
July	350.4	215.8	148.8	64.0	3.0	15.1	13.0	112.9	24.0	66.7	798.0
Aug.	344.7	222.8	149.5	69.7	3.5	13.4	12.5	112.7	23.6	73.0	802.7
Sep.	341.5	211.8	140.2	67.1	4.5	11.9	12.0	109.6	23.2	67.6	777.6
Oct.	342.4	213.3	144.3	64.7	4.3	11.8	11.7	108.6	22.6	65.3	775.7
Nov.	344.1	225.7	162.5	56.8	6.4	13.0	11.0	105.3	20.0	65.8	785.0
Dec.	359.1	152.0	94.2	55.0	2.9	8.5	5.3	97.1	18.6	57.4	698.0
1999 Jan.	343.8	467.5	410.9	50.3	6.2	6.3	5.3	125.7	99.3	56.8	1,104.7
Feb.	342.4	594.2	532.5	55.0	6.7	6.3	5.3	122.9	50.5	56.0	1,177.7
Mar.	348.3	549.5	486.6	55.1	7.9	4.9	5.3	137.9	97.9	54.5	1,198.3
Apr.	349.6	486.1	440.9	38.8	6.3	4.9	5.3	138.9	105.0	50.5	1,140.2
May	353.0	419.7	369.5	42.7	7.4	4.9	5.3	137.4	61.5	49.2	1,030.9
June	355.8	724.3	672.3	44.1	7.8	4.9	5.3	140.7	171.4	43.8	1,446.1
July	363.6	682.7	620.6	56.4	5.7	4.9	5.3	139.9	124.3	49.2	1,369.8
Aug.	358.6	463.8	403.4	54.5	5.9	4.9	5.3	139.8	93.9	51.0	1,117.3
Sep.	359.4	390.6	333.0	50.7	6.9	3.3	5.3	146.3	88.8	50.1	1,043.8
Oct.	361.2	500.6	440.8	50.9	8.8	3.3	5.3	150.6	93.8	49.4	1,164.2
Nov. <sup>①)</sup>	362.9	443.0	368.3	65.0	9.7	3.3	4.6	150.3	69.5	52.4	1,086.0

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

2) From January 1999 including temporary gross positions of the Eurosystem with the national central banks of Member States not participating in the euro area related to the operation of the TARGET system. These positions amounted to approximately EUR 75 billion at end-January, EUR 27 billion at end-February, EUR 77 billion at end-March, EUR 84 billion at end-April, EUR 40 billion at end-May, EUR 149 billion at end-June, EUR 101 billion at end-July, EUR 72 billion at end-August, EUR 66 billion at end-September, EUR 71 billion at end-October and EUR 47 billion at end-November.



**Table 2.3****Consolidated balance sheet of the euro area MFIs, including the Eurosystem<sup>1)</sup>***(EUR billions (not seasonally adjusted; end of period))***1. Assets: levels outstanding**

		Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/other equity issued by other euro area residents		External assets <sup>3)</sup>	Fixed assets	Remaining assets	Total
		1	2	3	4	5	6	7	8	9	10	11	
1998	Apr.	5,639.0	832.1	4,806.9	1,414.9	1,215.0	199.9	284.7	1,961.8	245.8	845.1	10,391.2	
	May	5,645.6	820.9	4,824.7	1,429.4	1,225.9	203.5	290.3	1,963.9	254.7	863.2	10,447.1	
	June	5,703.4	826.9	4,876.6	1,433.7	1,237.3	196.3	285.4	2,012.1	248.0	753.8	10,436.4	
	July	5,739.7	822.5	4,917.2	1,424.9	1,223.1	201.8	277.9	1,965.9	243.3	799.4	10,451.2	
	Aug.	5,741.6	825.0	4,916.6	1,424.8	1,222.4	202.4	271.1	1,974.1	244.3	793.6	10,449.5	
	Sep.	5,785.6	828.9	4,956.7	1,421.9	1,217.3	204.6	274.2	1,983.7	244.9	803.2	10,513.5	
	Oct.	5,825.9	834.8	4,991.1	1,431.0	1,222.9	208.1	275.2	1,971.0	247.1	800.5	10,550.6	
	Nov.	5,877.2	838.8	5,038.4	1,426.5	1,223.5	203.0	288.7	2,023.2	249.3	818.3	10,683.2	
	Dec.	5,932.3	840.8	5,091.4	1,375.5	1,181.6	193.9	305.0	1,913.7	251.8	791.7	10,569.9	
	1999	Jan.	5,942.1	840.8	5,101.2	1,397.9	1,190.4	207.6	321.7	2,051.3	254.0	959.8	10,926.8
		Feb.	5,951.5	841.3	5,110.2	1,407.6	1,204.1	203.5	328.1	1,955.2	252.7	979.1	10,874.2
		Mar.	5,992.8	839.1	5,153.7	1,419.5	1,221.5	198.0	346.6	2,070.1	254.0	903.2	10,986.2
Apr.		6,009.6	831.8	5,177.8	1,422.4	1,219.8	202.6	359.2	2,068.1	255.9	867.5	10,982.7	
May		6,046.0	830.8	5,215.2	1,446.8	1,237.9	209.0	373.2	2,008.4	257.1	847.2	10,978.7	
June		6,142.6	837.3	5,305.3	1,423.7	1,210.2	213.4	364.5	2,139.3	259.6	879.6	11,209.2	
July		6,163.9	828.9	5,335.0	1,415.1	1,198.2	216.8	361.6	2,080.0	264.4	864.6	11,149.5	
Aug.		6,156.1	825.0	5,331.2	1,430.0	1,204.9	225.2	360.3	2,052.6	265.2	850.5	11,114.7	
Sep.		6,204.4	830.5	5,373.9	1,437.3	1,216.8	220.5	358.7	2,088.3	267.3	826.6	11,182.6	
Oct.		6,255.6	839.6	5,416.0	1,448.3	1,230.1	218.3	359.8	2,123.0	269.5	862.6	11,318.8	
Nov. <sup>(p)</sup>		6,337.1	852.5	5,484.6	1,460.3	1,232.8	227.4	374.8	2,172.9	273.7	900.2	11,519.0	

**2. Liabilities: levels outstanding**

		Currency in circulation	Deposits of central government	Deposits of other general government/other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/units and money market paper	Debt securities issued	Capital and reserves	External liabilities <sup>3)</sup>	Re-maining liabilities	Excess of inter-MFI liabilities	Total	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1998	Apr.	314.8	141.6	4,692.5	1,227.5	1,912.4	1,346.0	206.6	321.0	1,352.6	694.7	1,515.9	1,387.6	-29.4	10,391.2	
	May	317.2	135.1	4,713.0	1,246.3	1,910.6	1,347.9	208.2	319.4	1,356.2	701.7	1,508.4	1,403.0	-7.0	10,447.1	
	June	315.5	148.2	4,735.0	1,294.3	1,890.8	1,346.5	203.4	315.1	1,370.3	714.3	1,523.3	1,323.3	-8.7	10,436.4	
	July	320.7	156.4	4,709.1	1,253.8	1,893.9	1,345.9	215.5	322.3	1,378.7	713.8	1,496.9	1,347.9	5.4	10,451.2	
	Aug.	314.9	165.2	4,706.4	1,245.3	1,905.4	1,347.6	208.2	326.3	1,383.4	712.7	1,499.4	1,336.4	4.8	10,449.5	
	Sep.	311.7	157.1	4,718.5	1,268.8	1,890.8	1,347.6	211.3	320.6	1,397.5	720.4	1,513.6	1,354.6	19.5	10,513.5	
	Oct.	313.3	155.5	4,737.2	1,275.0	1,889.2	1,350.8	222.3	325.3	1,391.8	717.6	1,553.3	1,352.1	4.7	10,550.6	
	Nov.	314.2	148.8	4,761.0	1,316.2	1,888.9	1,353.5	202.4	328.7	1,400.9	714.9	1,618.3	1,360.7	35.8	10,683.2	
	Dec.	323.6	150.7	4,858.4	1,385.6	1,909.7	1,385.9	177.2	303.4	1,390.1	713.3	1,523.9	1,277.0	29.6	10,569.9	
	1999	Jan.	313.2	132.1	4,871.5	1,413.9	1,975.8	1,310.6	171.2	339.9	1,415.6	757.3	1,689.7	1,431.0	-23.6	10,926.8
		Feb.	312.7	140.4	4,858.4	1,388.8	1,973.0	1,312.6	183.9	355.3	1,432.6	754.4	1,640.0	1,382.4	-2.0	10,874.2
		Mar.	317.5	134.2	4,869.4	1,391.7	1,988.0	1,310.8	178.9	366.0	1,438.0	767.8	1,716.0	1,356.9	20.3	10,986.2
Apr.		319.5	116.6	4,881.2	1,409.8	1,984.9	1,314.2	172.3	387.5	1,454.5	778.4	1,737.7	1,302.9	4.4	10,982.7	
May		321.3	121.5	4,903.9	1,442.1	1,975.2	1,314.1	172.5	388.9	1,465.4	783.1	1,718.5	1,257.4	18.6	10,978.7	
June		323.7	126.3	4,932.5	1,486.0	1,961.5	1,318.6	166.5	391.2	1,474.1	793.8	1,833.0	1,325.4	9.3	11,209.2	
July		331.8	135.4	4,936.6	1,473.4	1,978.6	1,320.9	163.7	382.8	1,478.5	797.6	1,765.0	1,316.8	5.0	11,149.5	
Aug.		326.2	137.8	4,916.0	1,445.4	1,987.9	1,320.1	162.6	396.1	1,486.8	796.7	1,769.0	1,288.0	-2.0	11,114.7	
Sep.		327.0	133.1	4,929.7	1,475.8	1,977.5	1,318.0	158.4	398.2	1,510.9	805.4	1,774.1	1,296.0	8.1	11,182.6	
Oct.		329.3	136.4	4,945.8	1,478.0	1,997.6	1,314.4	155.8	404.3	1,524.5	814.0	1,842.0	1,305.1	17.4	11,318.8	
Nov. <sup>(p)</sup>		329.8	147.0	4,988.6	1,512.3	2,008.7	1,309.6	157.9	422.6	1,532.1	819.7	1,903.9	1,360.7	14.5	11,519.0	

*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. Data have been revised in the light of new information.
- 2) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.
- 3) See Table 2.1, footnote 2.

(EUR billions (not seasonally adjusted))

### 3. Assets: flows <sup>2)</sup>

	Total										Total
	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 <sup>3)</sup>	Fixed assets	Remaining assets	
	1	2	3	4	5	6	7	8	9	10	11
1998 Apr.	39.9	5.1	34.8	7.9	7.5	0.4	8.6	-4.4	0.3	23.1	75.3
May	8.3	-11.1	19.4	14.8	11.1	3.8	5.6	16.1	9.0	17.9	71.7
June	66.7	5.9	60.8	2.9	10.7	-7.8	-6.0	32.0	-6.7	-104.5	-15.7
July	39.9	-4.2	44.2	-11.7	-17.3	5.7	-6.8	-23.6	-4.7	45.9	39.1
Aug.	1.5	2.4	-0.9	-0.4	-0.9	0.5	-6.7	-1.8	1.0	-6.0	-12.5
Sep.	50.8	4.2	46.5	-2.4	-5.0	2.6	3.1	79.7	0.6	-4.4	127.4
Oct.	40.2	5.8	34.4	7.7	4.5	3.2	1.0	-22.0	2.3	-2.6	26.5
Nov.	53.4	3.9	49.5	-4.7	0.5	-5.2	13.5	25.3	2.4	17.5	107.4
Dec.	64.9	2.1	62.8	-50.1	-40.9	-9.2	16.2	-102.5	2.6	-26.2	-95.0
1999 Jan.	70.8	0.9	69.9	17.7	17.1	0.7	10.6	107.0	-0.1	155.0	360.9
Feb.	7.0	0.3	6.6	9.2	13.5	-4.3	6.5	-132.4	-1.3	19.2	-91.8
Mar.	36.0	-2.9	39.0	28.0	25.6	2.4	18.2	65.2	1.3	-86.5	62.2
Apr.	15.3	-8.9	24.2	3.7	-0.7	4.4	12.5	-17.1	2.0	-35.7	-19.2
May	35.4	-1.1	36.5	24.2	18.0	6.2	14.0	-71.8	1.2	-20.3	-17.3
June	97.8	6.5	91.3	-24.3	-28.7	4.3	-9.3	116.3	2.3	32.0	214.7
July	24.3	-8.3	32.6	-8.3	-11.9	3.6	-2.9	-22.6	4.7	-15.0	-19.7
Aug.	-8.7	-4.0	-4.6	14.2	6.2	8.0	-1.5	-48.6	0.9	-14.1	-57.7
Sep.	50.0	5.6	44.4	6.6	11.3	-4.7	-1.6	36.2	2.1	-17.1	76.1
Oct.	48.1	9.0	39.1	10.3	12.8	-2.5	1.1	9.6	1.9	36.0	107.0
Nov. <sup>(p)</sup>	77.0	12.6	64.4	10.8	2.1	8.7	15.0	2.1	4.2	37.7	146.9

### 4. Liabilities: flows <sup>2)</sup>

	Total													Total
	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/units and money market paper	Debt securities issued	Capital and reserves	External liabilities <sup>3)</sup>	Re-maining liabilities	Excess of inter-MFI liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1998 Apr.	3.0	2.0	26.2	15.0	17.2	-0.3	-5.6	10.1	8.2	-11.1	-0.1	52.3	-15.4	75.3
May	2.4	-6.5	21.9	19.4	-1.0	1.9	1.6	-1.4	6.2	7.4	2.8	16.6	22.3	71.7
June	-1.7	13.1	20.7	47.4	-20.5	-1.4	-4.8	-4.4	14.5	15.4	3.1	-77.2	0.6	-15.7
July	5.2	8.2	-23.6	-39.7	4.4	-0.6	12.1	7.4	11.6	-1.1	-8.9	24.8	15.6	39.1
Aug.	-5.7	8.8	-3.8	-8.9	10.8	1.6	-7.3	3.8	3.1	-0.2	-6.4	-11.6	-0.5	-12.5
Sep.	-3.2	-8.1	18.6	25.6	-10.5	0.2	3.2	-5.0	6.9	8.7	72.7	22.3	14.4	127.4
Oct.	1.5	-1.6	18.0	5.8	-2.0	3.2	11.0	4.8	-9.0	-2.5	35.9	-5.5	-15.1	26.5
Nov.	0.9	-6.7	21.3	40.3	-1.7	2.6	-19.9	3.1	7.6	-1.8	40.4	11.5	31.2	107.4
Dec.	9.4	1.9	99.9	70.0	22.7	32.5	-25.2	-24.8	-11.1	-2.0	-84.0	-78.8	-5.6	-95.0
1999 Jan.	-9.4	-6.6	39.0	28.1	-2.0	14.8	-1.9	13.6	26.9	13.4	157.8	163.7	-37.4	360.9
Feb.	-0.6	8.3	-23.3	-26.3	-11.7	2.0	12.7	15.1	13.1	-2.1	-83.7	-47.0	28.4	-91.8
Mar.	4.8	-6.0	7.8	1.6	13.2	-1.9	-5.1	6.5	7.4	12.5	48.9	-35.6	16.0	62.2
Apr.	2.0	-17.5	10.6	17.7	-3.9	3.4	-6.6	20.9	15.3	11.0	8.7	-54.6	-15.6	-19.2
May	1.8	4.9	21.5	31.9	-10.4	-0.2	0.2	1.3	9.4	5.5	-31.2	-44.7	14.2	-17.3
June	2.4	4.8	27.1	43.3	-14.7	4.4	-6.0	1.1	7.1	12.5	99.6	70.4	-10.2	214.7
July	8.1	9.1	7.2	-11.4	19.0	2.4	-2.8	-7.9	7.3	4.6	-33.3	-10.0	-4.8	-19.7
Aug.	-5.6	2.5	-22.6	-28.8	8.2	-0.9	-1.1	13.1	5.5	-0.2	-14.0	-30.1	-6.4	-57.7
Sep.	0.8	-4.7	14.4	30.9	-10.2	-2.1	-4.2	1.7	24.1	4.3	11.5	13.8	10.1	76.1
Oct.	2.3	3.3	13.7	1.3	18.6	-3.6	-2.7	5.5	10.7	6.1	43.0	14.4	8.0	107.0
Nov. <sup>(p)</sup>	0.5	10.6	38.3	32.6	8.5	-4.9	2.1	17.7	3.8	1.7	15.8	61.2	-2.9	146.9



Table 2.4

Monetary aggregates <sup>1)</sup>

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

## 1. Levels outstanding at the end of the period

	M2										Debt securities up to 2 years
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index Dec 98=100 <sup>2)</sup>	Repurchase agreements	Money market fund shares/units and money market paper	
	Currency in circulation	Overnight deposits	Total	Index Dec 98=100 <sup>2)</sup>							
					1	2	3	4	5	6	
1998 Apr.	314.8	1,295.9	1,610.7	90.56	892.5	1,185.1	3,688.4	94.57	206.6	321.0	86.4
May	317.2	1,313.0	1,630.3	91.69	888.8	1,189.2	3,708.3	95.11	208.2	319.4	88.7
June	315.5	1,361.7	1,677.2	94.30	871.2	1,189.0	3,737.5	95.83	203.4	315.1	87.8
July	320.7	1,321.7	1,642.3	92.38	872.5	1,189.7	3,704.6	95.04	215.5	322.3	93.5
Aug.	314.9	1,312.6	1,627.5	91.53	879.3	1,192.9	3,699.7	94.89	208.2	326.3	88.8
Sep.	311.7	1,334.7	1,646.5	92.71	864.8	1,193.8	3,705.1	95.17	211.3	320.6	80.5
Oct.	313.3	1,339.7	1,653.0	93.06	867.2	1,197.3	3,717.5	95.48	222.3	325.3	81.5
Nov.	314.2	1,380.7	1,694.9	95.37	871.1	1,199.9	3,765.8	96.66	202.4	328.7	80.0
Dec.	323.6	1,453.0	1,776.6	100.00	885.8	1,231.6	3,894.0	100.00	177.2	303.4	67.8
1999 Jan.	313.2	1,481.7	1,795.0	101.08	881.7	1,247.8	3,924.5	100.71	171.2	339.9	55.0
Feb.	312.7	1,452.9	1,765.6	99.36	868.0	1,251.6	3,885.2	99.63	183.9	355.3	56.8
Mar.	317.5	1,465.2	1,782.7	100.24	878.3	1,250.4	3,911.3	100.23	178.9	366.0	48.6
Apr.	319.5	1,480.1	1,799.6	101.17	871.9	1,255.3	3,926.8	100.60	172.3	387.5	53.4
May	321.3	1,509.9	1,831.2	102.92	862.5	1,259.3	3,953.0	101.24	172.5	388.9	59.2
June	323.7	1,548.7	1,872.3	105.21	841.4	1,265.1	3,978.9	101.87	166.5	391.2	58.9
July	331.8	1,542.3	1,874.0	105.36	853.3	1,269.9	3,997.2	102.41	163.7	382.8	62.7
Aug.	326.2	1,513.3	1,839.5	103.38	856.6	1,270.2	3,966.2	101.57	162.6	396.1	64.9
Sep.	327.0	1,538.0	1,865.0	104.84	844.0	1,268.2	3,977.2	101.87	158.4	398.2	81.8
Oct.	329.3	1,542.4	1,871.7	105.17	859.1	1,265.9	3,996.7	102.28	155.8	404.3	79.7
Nov. <sup>6)</sup>	329.8	1,577.6	1,907.4	107.08	859.2	1,261.3	4,027.9	102.98	157.9	422.6	80.6

2. Flows <sup>3)</sup>

	M2										Debt securities up to 2 years
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual percentage change <sup>3)</sup>	Repurchase agreements	Money market fund shares/units and money market paper	
	Currency in circulation	Overnight deposits	Total	Annual percentage change <sup>3)</sup>							
					1	2	3	4	5	6	
1998 May	2.4	17.7	20.0	10.1	-3.0	4.1	21.1	5.3	1.6	-1.4	2.6
June	-1.7	48.1	46.4	9.6	-18.2	-0.2	28.0	5.3	-4.8	-4.4	-1.0
July	5.2	-39.2	-34.1	8.2	2.4	0.7	-31.0	4.4	12.1	7.4	6.0
Aug.	-5.7	-9.4	-15.2	8.3	6.3	3.2	-5.7	4.3	-7.3	3.8	-4.8
Sep.	-3.2	24.3	21.1	8.0	-11.3	1.1	10.9	4.7	3.2	-5.0	-7.4
Oct.	1.5	4.6	6.2	8.1	2.2	3.5	11.8	4.6	11.0	4.8	0.7
Nov.	0.9	40.1	41.0	8.4	2.7	2.5	46.2	5.0	-19.9	3.1	-1.8
Dec.	9.4	72.8	82.3	9.6	16.3	31.4	130.0	6.0	-25.2	-24.8	-12.3
1999 Jan.	-9.4	28.6	19.2	14.9	-7.4	15.8	27.6	7.6	-1.9	13.6	-1.1
Feb.	-0.6	-30.0	-30.5	12.9	-15.3	3.7	-42.1	6.4	12.7	15.1	1.3
Mar.	4.8	10.9	15.7	11.8	9.0	-1.4	23.3	6.9	-5.1	6.5	-1.6
Apr.	2.0	14.4	16.5	11.7	-7.0	5.0	14.5	6.4	-6.6	20.9	1.9
May	1.8	29.4	31.2	12.3	-9.9	3.9	25.2	6.4	0.2	1.3	5.6
June	2.4	38.2	40.6	11.6	-21.7	5.8	24.7	6.3	-6.0	1.1	-0.5
July	8.1	-5.3	2.8	14.1	13.2	4.9	20.8	7.8	-2.8	-7.9	4.2
Aug.	-5.6	-29.8	-35.3	12.9	2.4	0.2	-32.7	7.0	-1.1	13.1	1.9
Sep.	0.8	25.2	26.1	13.1	-12.4	-1.9	11.7	7.0	-4.2	1.7	5.3
Oct.	2.3	3.5	5.8	13.0	12.4	-2.4	15.8	7.1	-2.7	5.5	-2.5
Nov. <sup>6)</sup>	0.5	33.5	34.0	12.3	-1.7	-4.7	27.6	6.5	2.1	17.7	0.1

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. Data have been revised in the light of new information.
- 2) Taking the December 1998 outstanding level (not seasonally adjusted) as 100, the index shows the cumulative product of changes from that date calculated from flows as described in footnote 3. The percentage change in the index between any two dates corresponds to the change in the aggregate excluding such reclassifications, etc.
- 3) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions. For the calculation of growth rates, see the technical notes on page 48\*.

M3			Memo : Non-monetary liabilities of MFIs							Total	
Total	Index, Dec 98=100 <sup>2)</sup>		Deposits		Debt securities over 2 years	Capital and reserves					
			With agreed maturity over 2 years	Redeemable at notice over 3 months							
12	13	14	15	16	17	18	19	20			
4,302.4	96.68		1,235.2	1,020.5	214.7	1,266.2	694.7	3,196.2	1998 Apr.		
4,324.6	97.22		1,235.3	1,022.3	213.0	1,267.5	701.7	3,204.6	May		
4,343.9	97.62		1,232.2	1,020.2	212.0	1,282.5	714.3	3,228.9	June		
4,335.9	97.50		1,232.6	1,021.8	210.8	1,285.2	713.8	3,231.7	July		
4,323.0	97.18		1,236.5	1,026.5	209.9	1,294.6	712.7	3,243.8	Aug.		
4,317.5	97.22		1,235.8	1,026.5	209.3	1,317.0	720.4	3,273.2	Sep.		
4,346.7	97.86		1,231.5	1,022.4	209.1	1,310.2	717.6	3,259.3	Oct.		
4,376.9	98.48		1,227.8	1,018.3	209.5	1,320.9	714.9	3,263.6	Nov.		
4,442.4	100.00		1,239.1	1,024.4	214.6	1,322.3	713.3	3,274.7	Dec.		
4,490.6	100.86		1,218.0	1,094.9	123.1	1,360.6	757.3	3,335.9	1999 Jan.		
4,481.3	100.57		1,227.6	1,105.8	121.8	1,375.8	754.4	3,357.8	Feb.		
4,504.9	101.09		1,231.4	1,110.5	120.9	1,389.4	767.8	3,388.7	Mar.		
4,540.0	101.77		1,232.7	1,114.0	118.7	1,401.1	778.4	3,412.2	Apr.		
4,573.6	102.50		1,228.8	1,113.7	115.2	1,406.3	783.1	3,418.1	May		
4,595.4	102.93		1,235.2	1,121.0	114.2	1,415.3	793.8	3,444.3	June		
4,606.4	103.25		1,238.0	1,126.0	112.0	1,415.8	797.6	3,451.4	July		
4,589.8	102.83		1,243.0	1,132.0	111.0	1,421.9	796.7	3,461.7	Aug.		
4,615.7	103.16		1,245.4	1,134.2	111.2	1,429.1	805.4	3,480.0	Sep.		
4,636.4	103.52		1,249.6	1,139.0	110.6	1,444.8	814.0	3,508.4	Oct.		
4,689.0	104.58		1,260.6	1,150.0	110.7	1,451.5	819.7	3,531.9	Nov. <sup>(p)</sup>		

M3			Memo : Non-monetary liabilities of MFIs							Total	
Total	Annual percentage change <sup>3)</sup>	3-month moving average (centred)	Deposits		Debt securities over 2 years	Capital and reserves					
			With agreed maturity over 2 years	Redeemable at notice over 3 months							
12	13	14	15	16	17	18	19	20			
23.9	5.0	5.1	0.2	1.9	-1.7	3.6	7.4	11.2	1998 May		
17.9	4.9	4.9	-3.3	-2.3	-1.0	15.5	15.4	27.7	June		
-5.4	4.8	4.8	0.7	1.9	-1.2	5.6	-1.1	5.2	July		
-14.1	4.5	4.6	3.6	4.5	-0.9	7.9	-0.2	11.4	Aug.		
1.7	4.6	4.7	0.3	0.8	-0.6	14.4	8.7	23.3	Sep.		
28.3	4.9	4.7	-4.4	-4.1	-0.2	-9.8	-2.5	-16.6	Oct.		
27.5	4.7	4.7	-4.0	-4.4	0.4	9.4	-1.8	3.5	Nov.		
67.7	4.6	5.0	11.9	6.4	5.5	1.3	-2.0	11.1	Dec.		
38.2	5.7	5.1	4.6	5.6	-1.0	28.0	13.4	46.0	1999 Jan.		
-12.9	5.2	5.4	2.3	3.6	-1.3	11.7	-2.1	12.0	Feb.		
23.1	5.5	5.3	3.5	4.3	-0.8	9.0	12.5	24.9	Mar.		
30.7	5.3	5.4	1.1	3.3	-2.2	13.3	11.0	25.4	Apr.		
32.3	5.4	5.4	-4.1	-0.6	-3.5	3.8	5.5	5.2	May		
19.3	5.4	5.6	6.1	7.1	-1.0	7.6	12.5	26.1	June		
14.4	5.9	5.7	3.3	5.5	-2.2	3.1	4.6	11.0	July		
-18.8	5.8	5.9	4.7	5.7	-1.0	3.7	-0.2	8.2	Aug.		
14.6	6.1	5.9	2.5	2.3	0.2	18.8	4.3	25.6	Sep.		
16.2	5.8	6.0	5.3	6.0	-0.6	13.1	6.1	24.6	Oct.		
47.5	6.2	-	10.3	10.2	0.1	3.7	1.7	15.7	Nov. <sup>(p)</sup>		

**Table 2.4 (cont.)**
**Monetary aggregates <sup>1)</sup>**
*(EUR billions and percentage changes, unless otherwise indicated)*
**3. Seasonally adjusted levels**

	M3									
	M2				Marketable instruments <sup>4)</sup>				Total	Index <sup>2)</sup>
	M1		Other short-term deposits <sup>3)</sup>		Total					
	Total	Index <sup>2)</sup>	Total		Total					
1	2	3	4	5	6	7	8	9	10	
1998 Apr.	1,626.3	91.44	2,063.8		3,690.1	94.66	604.2		4,294.3	96.60
May	1,634.7	91.94	2,071.4		3,706.2	95.10	602.2		4,308.3	96.95
June	1,650.0	92.77	2,074.0		3,724.0	95.53	604.0		4,328.0	97.36
July	1,643.3	92.44	2,068.9		3,712.3	95.28	630.3		4,342.6	97.75
Aug.	1,651.6	92.89	2,074.0		3,725.7	95.60	613.8		4,339.5	97.65
Sep.	1,661.3	93.55	2,077.5		3,738.8	96.08	613.2		4,352.0	98.09
Oct.	1,675.5	94.33	2,078.4		3,753.9	96.45	633.2		4,387.1	98.86
Nov.	1,682.0	94.65	2,094.6		3,776.7	96.98	614.3		4,391.0	98.89
Dec.	1,697.2	95.53	2,107.4		3,804.6	97.74	577.1		4,381.7	98.73
1999 Jan.	1,791.9	100.91	2,101.0		3,892.8	99.94	572.9		4,465.7	100.40
Feb.	1,787.7	100.61	2,096.8		3,884.5	99.65	592.3		4,476.8	100.57
Mar.	1,800.6	101.25	2,129.6		3,930.2	100.75	590.1		4,520.3	101.53
Apr.	1,816.3	102.11	2,113.1		3,929.4	100.70	602.6		4,531.9	101.69
May	1,835.2	103.15	2,118.9		3,954.1	101.31	606.1		4,560.2	102.30
June	1,846.9	103.78	2,119.2		3,966.0	101.59	613.8		4,579.9	102.68
July	1,869.3	105.10	2,131.3		4,000.6	102.54	609.1		4,609.7	103.43
Aug.	1,869.4	105.06	2,128.5		3,997.9	102.42	615.2		4,613.1	103.45
Sep.	1,881.3	105.76	2,132.7		4,014.0	102.85	637.8		4,651.8	104.07
Oct.	1,890.6	106.23	2,140.3		4,030.9	103.19	643.5		4,674.4	104.47
Nov. <sup>6)</sup>	1,896.8	106.48	2,142.5		4,039.3	103.32	664.3		4,703.7	105.01

**4. Seasonally adjusted flows <sup>5)</sup>**

	M3									
	M2				Marketable instruments <sup>4)</sup>				Total	Change on previous month (%)
	M1		Other short-term deposits <sup>3)</sup>		Total		Change on previous month (%)			
	Total	Change on previous month (%)	Total	Change on previous month (%)	Total	Change on previous month (%)	Total	Change on previous month (%)		
1	2	3	4	5	6	7	8	9	10	
1998 Apr.	20.7	1.3	1.4	0.1	22.2	0.6	-0.2	0.0	21.9	0.5
May	8.9	0.5	8.3	0.4	17.3	0.5	-1.6	-0.3	15.7	0.4
June	14.7	0.9	2.0	0.1	16.7	0.5	1.6	0.3	18.3	0.4
July	-5.9	-0.4	-4.0	-0.2	-9.8	-0.3	26.9	4.5	17.1	0.4
Aug.	8.0	0.5	4.6	0.2	12.5	0.3	-16.8	-2.7	-4.3	-0.1
Sep.	11.8	0.7	6.9	0.3	18.7	0.5	1.0	0.2	19.7	0.5
Oct.	13.8	0.8	0.6	0.0	14.5	0.4	19.8	3.2	34.3	0.8
Nov.	5.7	0.3	15.0	0.7	20.7	0.6	-19.5	-3.1	1.2	0.0
Dec.	15.6	0.9	14.1	0.7	29.8	0.8	-36.8	-6.0	-7.0	-0.2
1999 Jan.	95.5	5.6	-10.1	-0.5	85.4	2.2	-11.5	-2.0	73.9	1.7
Feb.	-5.3	-0.3	-5.7	-0.3	-11.1	-0.3	18.5	3.2	7.5	0.2
Mar.	11.5	0.6	31.3	1.5	42.8	1.1	0.1	0.0	43.0	1.0
Apr.	15.2	0.8	-17.1	-0.8	-1.9	0.0	9.1	1.5	7.2	0.2
May	18.5	1.0	5.3	0.3	23.8	0.6	3.2	0.5	27.0	0.6
June	11.1	0.6	-0.5	0.0	10.7	0.3	6.4	1.1	17.1	0.4
July	23.5	1.3	13.6	0.6	37.1	0.9	-3.8	-0.6	33.3	0.7
Aug.	-0.7	0.0	-3.7	-0.2	-4.4	-0.1	5.6	0.9	1.2	0.0
Sep.	12.4	0.7	4.4	0.2	16.8	0.4	10.6	1.7	27.4	0.6
Oct.	8.4	0.4	4.9	0.2	13.3	0.3	4.8	0.8	18.1	0.4
Nov. <sup>6)</sup>	4.5	0.2	0.3	0.0	4.8	0.1	19.4	3.0	24.2	0.5

Source: ECB.

1) See page 14\*, footnote 1.

2) See page 14\*, footnote 2. For the calculation of growth rates, see the technical notes on page 48\*.

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

4) Marketable instruments comprise repurchase agreements, money market fund shares/units and money market paper together with debt securities issued with an original maturity of up to two years.

5) See page 14\*, footnote 3.

**Table 2.5**
**Outstanding MFI loans by counterpart, type and original maturity <sup>1)</sup>**
*(EUR billions (not seasonally adjusted; end of period))*
**1. Loans to non-financial sectors other than government**

	Non-financial corporations <sup>2)</sup>				Households <sup>2)</sup>	Consumer credit <sup>3)</sup>			Lending for house purchase <sup>3)</sup>			Other lending			Non-profit institutions serving households <sup>2)</sup>
	Up to 1 year	Over 1 and up to 5 years	Over 5 years			Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1998 Q1	2,163.1	770.9	319.8	1,072.5	2,318.2	75.0	119.0	185.9	28.0	49.0	1,320.7	108.2	76.6	355.8	37.7
Q2	2,200.2	785.4	317.8	1,096.9	2,374.5	77.9	122.1	190.2	28.4	49.2	1,346.0	113.4	77.4	369.8	37.6
Q3	2,222.2	774.3	324.0	1,123.8	2,419.2	80.2	125.9	195.1	28.9	48.6	1,378.8	111.6	86.5	363.6	36.7
Q4	2,284.9	810.7	320.1	1,154.0	2,478.7	84.7	128.2	199.8	28.2	45.9	1,415.9	114.2	84.8	376.9	37.0
1999 Q1	2,279.1	816.3	347.0	1,115.7	2,526.2	86.1	147.5	187.3	15.4	70.5	1,460.4	131.5	100.3	327.2	35.8
Q2	2,339.0	842.7	355.2	1,141.1	2,592.1	84.9	152.3	193.0	18.7	67.8	1,508.8	138.1	98.2	330.1	35.8
Q3 <sup>(p)</sup>	2,337.9	829.0	363.9	1,145.1	2,642.7	85.4	154.3	195.5	18.8	67.3	1,550.3	136.3	100.6	334.2	36.2

**2. Loans to non-monetary financial corporations**

	Other financial intermediaries <sup>2)</sup>				Insurance corporations and pension funds <sup>2)</sup>			
	Up to 1 year	Over 1 and up to 5 years	Over 5 years		Up to 1 year	Over 1 and up to 5 years	Over 5 years	
	16	17	18	19	20	21	22	23
1998 Q1	240.4	146.1	50.0	44.3	23.5	17.5	2.0	4.0
Q2	244.6	146.4	51.0	47.2	23.4	16.4	2.2	4.8
Q3	246.4	142.6	54.0	49.8	35.1	27.1	2.4	5.6
Q4	262.2	157.3	52.8	52.1	27.9	19.2	2.5	6.3
1999 Q1	275.9	174.6	52.8	48.5	36.6	27.5	3.1	6.0
Q2	297.9	193.8	49.6	54.5	40.4	29.0	2.7	8.8
Q3 <sup>(p)</sup>	310.0	190.1	54.2	65.6	43.2	31.6	2.7	8.9

**3. Loans to government**

	General government <sup>2)</sup>										
	Central government <sup>4)</sup>	Other general government									Social security funds
		State government			Local government						
		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years				
24	25	26	27	28	29	30	31	32	33	34	
1998 Q1	828.0	221.2	269.2	9.9	14.6	244.6	327.0	19.9	52.4	254.7	10.6
Q2	827.5	217.2	271.3	8.5	14.5	248.3	333.3	19.8	54.0	259.6	5.7
Q3	829.5	216.4	272.9	7.8	14.0	251.1	325.0	17.7	50.7	256.6	15.2
Q4	841.0	202.6	290.5	11.3	13.7	265.6	333.8	19.1	51.2	263.6	14.0
1999 Q1	839.1	221.7	277.8	11.0	21.1	245.6	326.0	19.0	12.6	294.4	13.6
Q2	837.3	212.3	279.3	11.5	20.6	247.1	328.4	20.0	10.9	297.5	17.3
Q3 <sup>(p)</sup>	830.3	205.9	278.9	10.7	21.2	247.0	327.5	19.1	10.7	297.6	18.0

Source: ECB.

1) Data have been revised in the light of new information. Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated.

2) Corresponding ESA 95 sector codes: non-financial corporations, S11; households, S14; non-profit institutions serving households, S15; other financial intermediaries, S123 (including financial auxiliaries, S124); insurance corporations and pension funds, S125; general government, S13.

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

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

**Table 2.6**
**Currency analysis of certain liabilities and assets of the euro area MFIs <sup>1)</sup>**
*(EUR billions (not seasonally adjusted; end of period))*
**Liabilities outstanding**
**1. Deposits placed by euro area residents**

	MFIs								Non-MFIs							
	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies	USD	JPY	CHF	Other
1998 Q1	3,180.6	2,809.4	43.5	327.7	234.5	27.0	44.9	21.3	4,816.8	4,658.3	21.1	137.3	103.3	15.1	10.3	8.6
Q2	3,280.6	2,929.7	41.8	309.1	223.0	21.8	43.6	20.6	4,887.4	4,734.8	18.6	134.0	99.0	15.6	10.1	9.3
Q3	3,316.5	2,927.2	42.4	346.8	241.3	27.9	45.2	32.4	4,877.0	4,726.3	19.5	131.2	94.0	12.6	13.6	11.0
Q4	3,405.9	3,010.1	43.3	352.6	247.0	27.5	51.3	26.8	5,009.1	4,864.9	19.4	124.8	89.6	13.0	13.2	9.0
1999 Q1	3,892.6	3,466.7	48.9	377.0	265.9	27.7	54.7	28.6	5,003.5	4,851.8	23.6	128.1	89.0	13.9	14.5	10.7
Q2	4,112.7	3,711.3	43.7	357.6	255.1	27.1	51.5	23.9	5,058.3	4,897.8	25.7	134.8	96.8	15.0	12.5	10.5
Q3 <sup>3)</sup>	3,823.1	3,415.6	46.6	360.9	253.6	30.1	56.2	21.0	5,058.7	4,896.7	27.0	135.0	96.8	15.9	12.0	10.3

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

	Banks <sup>3)</sup>								Non-banks							
	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies	USD	JPY	CHF	Other
1998 Q1	1,161.9	470.3	121.0	570.6	448.6	44.0	52.5	25.6	388.7	150.1	39.0	199.6	145.7	22.4	13.9	17.7
Q2	1,150.4	470.0	122.6	557.7	435.9	42.7	51.3	27.7	370.7	145.0	34.6	191.1	142.8	18.4	11.5	18.3
Q3	1,174.7	468.4	129.1	577.2	443.7	47.5	54.1	32.0	332.6	143.1	30.6	158.9	122.3	13.8	11.2	11.6
Q4	1,158.3	458.9	124.0	575.4	441.4	55.8	52.5	25.8	364.7	153.5	33.4	177.8	130.7	22.4	12.1	12.6
1999 Q1	1,291.9	557.0	128.9	605.9	467.3	53.5	53.2	31.9	417.4	179.5	38.9	198.9	148.0	24.4	12.5	14.0
Q2	1,374.6	611.9	136.0	626.7	498.9	39.4	52.2	36.2	452.0	192.0	40.8	219.2	168.2	24.6	11.7	14.8
Q3 <sup>3)</sup>	1,301.2	547.7	128.4	625.1	494.1	42.9	53.4	34.8	457.5	197.4	43.6	216.5	163.1	27.2	11.4	14.9

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

	Debt securities								Money market paper							
	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies	USD	JPY	CHF	Other
1998 Q1	2,001.2	1,784.0	20.7	196.6	110.7	38.9	31.2	15.8	163.5	151.0	0.3	12.2	10.6	0.9	0.4	0.4
Q2	2,055.0	1,835.8	22.5	196.7	112.5	37.4	30.5	16.3	160.2	144.2	0.7	15.3	10.9	1.8	1.2	1.3
Q3	2,105.1	1,892.6	26.0	186.5	104.7	33.3	32.7	15.8	166.1	147.9	0.6	17.6	15.5	1.0	0.7	0.3
Q4	2,117.8	1,902.1	26.4	189.4	106.3	35.2	33.0	14.9	169.4	155.4	0.6	13.4	11.3	0.9	1.1	0.1
1999 Q1	2,198.9	1,966.9	25.3	206.7	111.6	32.8	31.6	30.7	185.4	169.8	0.8	14.9	12.6	0.8	1.3	0.2
Q2	2,274.2	2,026.9	30.1	217.2	114.3	31.8	32.1	38.9	187.8	169.9	1.4	16.5	13.8	1.1	1.5	0.2
Q3 <sup>3)</sup>	2,336.6	2,078.9	31.9	225.8	118.1	34.7	32.7	40.2	204.0	184.2	1.2	18.6	13.5	2.7	2.2	0.2

*Source: ECB.*
*1) Data have been revised in the light of new information. Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated.*
*2) Including items expressed in the national denominations of the euro.*
*3) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.*

## Assets outstanding

### 4. Loans to euro area residents

	MFIs								Non-MFIs							
	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies					All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1998 Q1	3,188.6	-	-	-	-	-	-	-	5,604.6	5,437.2	26.6	140.8	86.0	15.3	36.9	2.6
Q2	3,342.6	-	-	-	-	-	-	-	5,704.2	5,541.9	25.5	136.8	81.6	13.9	38.2	3.0
Q3	3,354.7	-	-	-	-	-	-	-	5,786.7	5,624.1	26.4	136.3	77.8	12.7	42.8	3.0
Q4	3,376.5	-	-	-	-	-	-	-	5,931.9	5,758.7	26.3	146.9	79.2	15.1	48.9	3.7
1999 Q1	3,872.4	-	-	-	-	-	-	-	5,992.8	5,797.4	19.7	175.7	99.0	18.5	53.7	4.5
Q2	4,103.5	-	-	-	-	-	-	-	6,142.6	5,931.2	21.4	190.0	109.4	19.5	57.9	3.2
Q3 <sup>(p)</sup>	3,814.2	-	-	-	-	-	-	-	6,203.9	5,984.7	22.8	196.5	106.5	23.9	61.6	4.5

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

	MFIs								Non-MFIs							
	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies					All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1998 Q1	654.7	625.7	6.7	22.2	14.6	2.7	1.2	3.8	1,407.7	1,366.7	8.2	32.8	16.8	6.9	2.6	6.5
Q2	686.3	657.0	6.2	23.2	14.7	2.6	1.2	4.7	1,433.7	1,390.2	8.8	34.7	17.2	7.2	2.7	7.5
Q3	708.8	680.3	7.4	21.1	13.7	3.0	1.4	3.0	1,421.9	1,384.3	10.2	27.2	15.0	7.6	2.4	2.2
Q4	729.0	686.0	18.0	25.0	16.9	3.7	1.8	2.6	1,375.5	1,338.2	10.6	26.4	14.4	8.6	2.3	1.1
1999 Q1	760.9	725.4	7.7	27.7	18.3	5.5	1.3	2.6	1,419.5	1,387.0	3.9	28.6	15.2	10.5	2.0	0.9
Q2	800.1	766.2	6.5	27.4	18.1	5.2	1.1	3.1	1,423.7	1,393.8	3.2	26.7	13.5	10.2	2.1	1.0
Q3 <sup>(p)</sup>	823.9	790.4	6.9	26.6	17.5	4.5	1.7	2.9	1,437.3	1,407.5	3.1	26.6	13.5	10.0	2.3	0.9

### 6. Loans to non-residents of the euro area

	Banks <sup>3)</sup>								Non-banks							
	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies					All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1998 Q1	1,081.2	441.5	83.8	555.9	426.6	63.7	29.8	35.8	420.7	190.9	25.5	204.3	171.7	5.7	11.0	15.9
Q2	1,053.1	429.6	88.5	535.0	404.9	66.8	29.6	33.8	384.9	179.5	23.0	182.4	162.8	4.5	11.2	3.9
Q3	1,026.9	423.6	100.6	502.6	365.2	67.5	26.7	43.2	380.2	174.6	26.0	179.6	156.5	5.3	11.9	5.9
Q4	972.0	380.2	76.7	515.1	375.5	73.9	27.1	38.7	378.7	152.3	27.0	199.4	173.2	8.3	13.3	4.5
1999 Q1	1,008.1	467.1	81.4	459.6	328.2	62.7	26.8	41.9	385.5	137.1	28.9	219.5	191.7	7.7	14.5	5.5
Q2	1,018.8	471.8	79.5	467.5	347.3	53.2	26.2	40.9	416.6	139.2	35.0	242.4	211.9	8.0	16.3	6.3
Q3 <sup>(p)</sup>	948.0	427.7	77.0	443.3	320.8	53.8	28.3	40.5	413.5	143.3	35.5	234.7	200.7	10.4	17.9	5.7

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

	Banks <sup>3)</sup>								Non-banks							
	All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies					All currencies	Euro <sup>2)</sup>	Other EU currencies	Other currencies				
					USD	JPY	CHF	Other					USD	JPY	CHF	Other
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1998 Q1	71.5	15.9	4.5	51.1	38.2	3.7	0.6	8.6	262.9	38.8	29.6	194.6	148.1	23.9	3.9	18.8
Q2	88.2	17.1	4.7	66.4	38.1	4.4	0.7	23.2	274.4	49.5	25.6	199.4	138.7	20.2	3.8	36.6
Q3	77.0	19.5	3.9	53.7	39.7	5.2	1.0	7.8	286.0	41.4	31.1	213.5	158.5	29.9	4.3	20.8
Q4	65.3	18.8	5.1	41.5	27.9	5.0	0.8	7.7	316.2	47.3	30.6	238.3	179.7	34.6	4.2	19.6
1999 Q1	75.6	19.7	5.7	50.2	35.0	5.4	0.9	9.0	410.1	52.5	30.8	326.8	255.4	37.6	4.4	29.4
Q2	82.7	21.7	6.3	54.8	39.2	5.6	1.2	8.8	413.0	66.8	33.7	312.4	247.6	37.1	4.9	22.8
Q3 <sup>(p)</sup>	82.6	23.1	6.7	52.8	38.1	5.8	1.0	7.9	412.0	70.3	34.9	306.8	242.0	38.5	4.8	21.6

## 3 Financial markets and interest rates in the euro area

**Table 3.1**

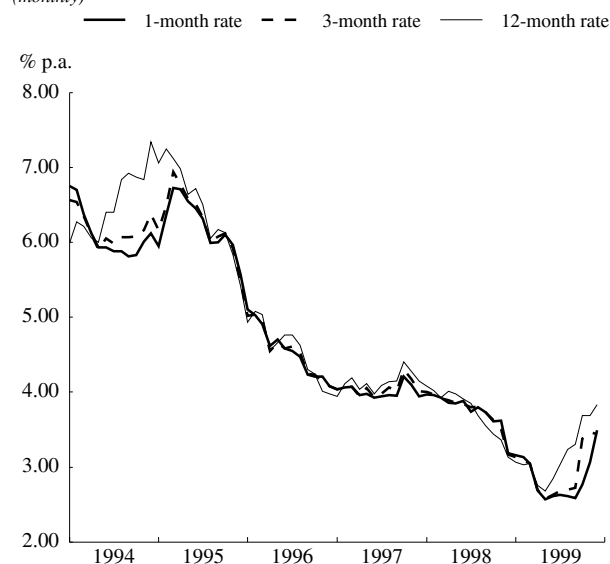
**Money market interest rates <sup>1)</sup>**

(percentages per annum) <sup>2)</sup>

	Euro area <sup>3)4)</sup>					United States <sup>5)</sup>	Japan <sup>5)</sup>
	Overnight deposits <sup>1</sup>	1-month deposits <sup>2</sup>	3-month deposits <sup>3</sup>	6-month deposits <sup>4</sup>	12-month deposits <sup>5</sup>	3-month deposits <sup>6</sup>	3-month deposits <sup>7</sup>
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
1999	2.74	2.86	2.96	3.05	3.18	5.41	0.22
1998 Dec.	3.09	3.18	3.17	3.14	3.13	5.00	0.18
1999 Jan.	3.14	3.16	3.13	3.10	3.06	4.99	0.35
Feb.	3.12	3.13	3.09	3.04	3.03	5.00	0.38
Mar.	2.93	3.05	3.05	3.02	3.05	4.99	0.20
Apr.	2.71	2.69	2.70	2.70	2.76	4.97	0.18
May	2.55	2.57	2.58	2.60	2.68	4.98	0.12
June	2.56	2.61	2.63	2.68	2.84	5.17	0.10
July	2.52	2.63	2.68	2.90	3.03	5.30	0.12
Aug.	2.44	2.61	2.70	3.05	3.24	5.46	0.13
Sep.	2.43	2.58	2.73	3.11	3.30	5.56	0.14
Oct.	2.50	2.76	3.38	3.46	3.68	6.20	0.24
Nov.	2.94	3.06	3.47	3.48	3.69	6.09	0.31
Dec.	3.04	3.49	3.44	3.51	3.83	6.15	0.39
1999 3 Dec.	3.04	3.52	3.45	3.48	3.78	6.15	0.38
10	3.00	3.55	3.46	3.49	3.77	6.12	0.25
17	3.04	3.56	3.46	3.54	3.89	6.19	0.49
24	3.07	3.54	3.45	3.55	3.88	6.10	0.90
31	3.75	3.17	3.34	3.52	3.88	5.98	0.16

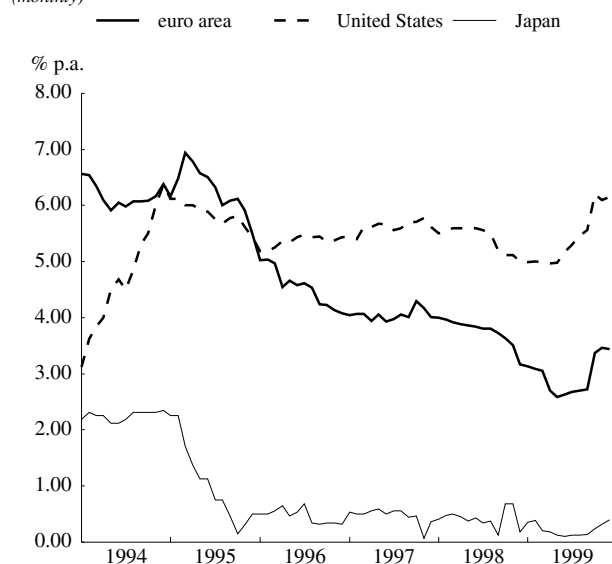
**Euro area money market rates**

(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) Before 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 index average (EONIA); other euro area money market rates from January 1999 are euro interbank offered rates (EURIBOR). The last EONIA rate for December 1999 relates to 30 December.

5) From February 1999, London interbank offered rate (LIBOR).

**Table 3.2**

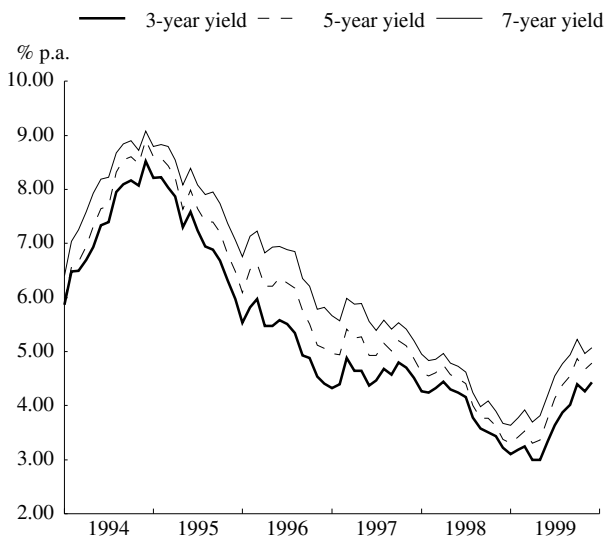
**Government bond yields <sup>1)</sup>**

(percentages per annum)

	Euro area <sup>2)</sup>					United States	Japan
	2 years 1	3 years 2	5 years 3	7 years 4	10 years 5	10 years 6	10 years 7
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
1999	3.39	3.63	4.01	4.38	4.66	5.64	1.75
1998 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
Feb.	3.05	3.19	3.43	3.78	3.98	4.99	2.09
Mar.	3.08	3.25	3.53	3.92	4.18	5.23	1.72
Apr.	2.83	3.00	3.31	3.70	4.04	5.18	1.55
May	2.82	3.00	3.37	3.81	4.21	5.54	1.36
June	3.09	3.34	3.77	4.20	4.53	5.90	1.60
July	3.30	3.64	4.13	4.55	4.86	5.80	1.69
Aug.	3.56	3.87	4.39	4.78	5.06	5.94	1.89
Sep.	3.68	4.02	4.55	4.94	5.24	5.91	1.75
Oct.	4.07	4.40	4.87	5.23	5.47	6.10	1.78
Nov.	3.99	4.27	4.67	4.97	5.18	6.03	1.81
Dec.	4.18	4.43	4.79	5.07	5.30	6.26	1.73
1999 3 Dec.	4.12	4.37	4.76	5.04	5.27	6.17	1.78
10	4.04	4.27	4.60	4.87	5.10	6.08	1.76
17	4.28	4.53	4.87	5.15	5.39	6.31	1.75
24	4.25	4.51	4.83	5.13	5.37	6.42	1.73
31	4.29	4.58	4.97	5.25	5.49	6.37	1.63

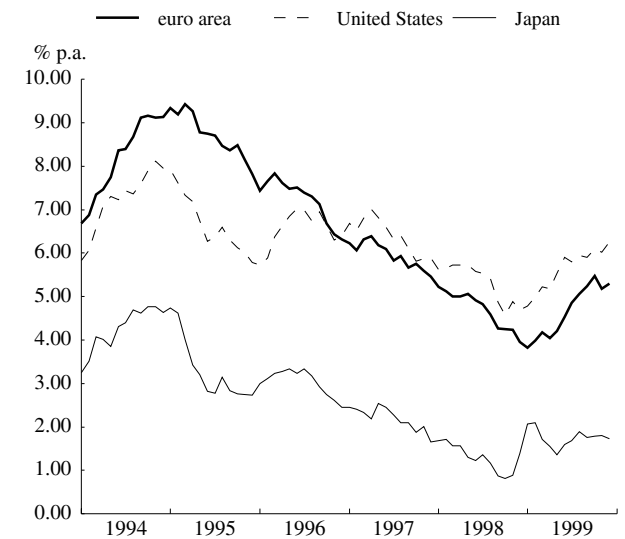
**Euro area government bond yields**

(monthly)



**10-year government bond yields**

(monthly)



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

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

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



**Table 3.3**

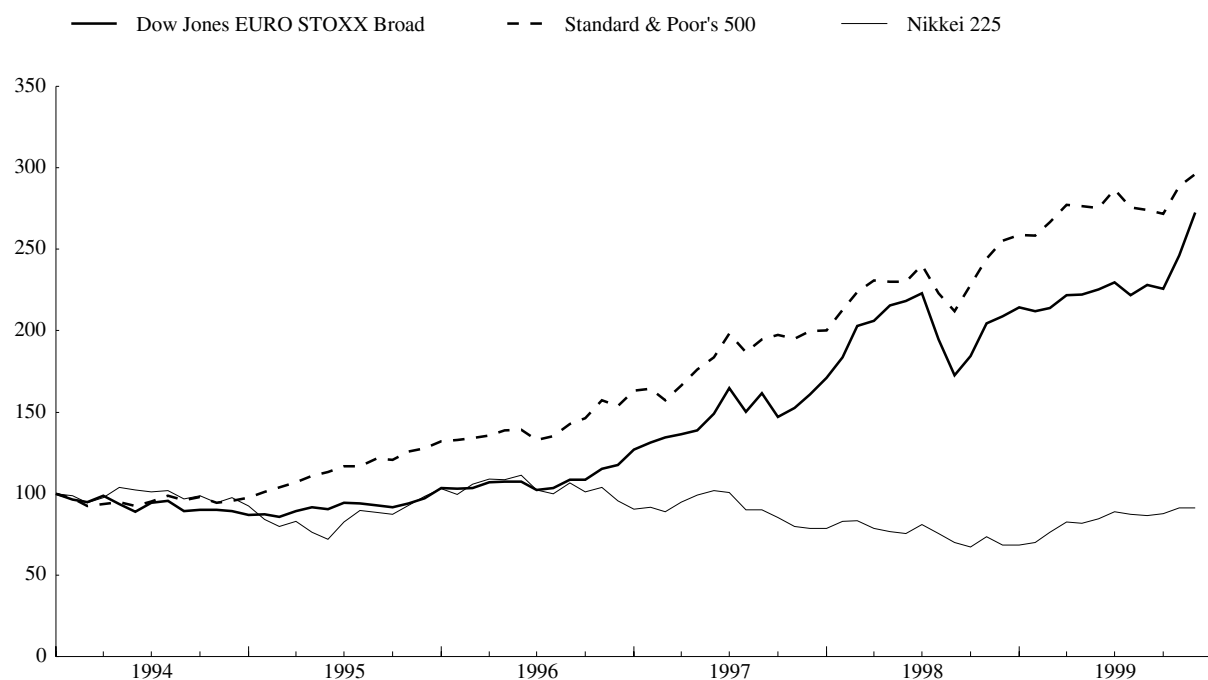
**Stock market indices**

(index levels, in points)<sup>1)</sup>

	Dow Jones EURO STOXX indices											United States	Japan
	Benchmark		Main economic sector indices										
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Conglomerates	Industrial	Technology	Utilities	Standard & Poor's 500	Nikkei 225
1	2	3	4	5	6	7	8	9	10	11	12	13	
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
1999	325.23	3,779.57	183.87	162.80	493.34	285.35	249.69	259.77	366.91	468.28	306.21	1,327.39	16,802.27
1998 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
Feb.	302.69	3,450.87	149.74	152.16	496.17	225.01	246.99	229.33	312.25	366.43	330.00	1,244.93	14,168.83
Mar.	305.52	3,524.19	153.81	155.94	480.73	254.11	249.73	229.77	311.75	374.45	318.57	1,284.56	15,459.81
Apr.	316.39	3,671.80	172.06	162.67	493.62	276.64	257.18	238.42	334.72	403.94	306.87	1,335.79	16,689.65
May	317.05	3,669.07	176.93	167.47	482.10	291.29	253.77	257.12	344.94	413.34	300.15	1,330.72	16,533.26
June	321.66	3,749.45	177.95	168.33	487.77	299.00	251.77	268.06	365.11	440.22	300.26	1,325.93	17,135.96
July	328.07	3,846.24	190.82	168.19	487.34	316.01	246.24	277.97	379.94	481.62	302.28	1,380.99	18,008.62
Aug.	316.78	3,691.33	204.66	162.31	468.57	314.74	235.93	278.08	365.94	455.23	289.80	1,327.49	17,670.31
Sep.	325.88	3,772.79	199.93	161.67	500.44	312.33	242.61	273.47	380.45	480.77	296.06	1,318.21	17,532.78
Oct.	322.44	3,742.62	193.96	159.46	482.52	295.41	238.87	262.05	381.39	488.96	281.85	1,312.60	17,697.85
Nov.	351.17	4,159.97	200.99	164.75	508.19	305.69	259.69	275.80	418.69	589.93	297.38	1,391.61	18,440.35
Dec.	389.11	4,590.11	239.03	177.78	534.58	307.61	259.32	297.94	506.52	757.03	312.07	1,428.96	18,430.57
1999 3 Dec.	374.92	4,449.47	229.84	171.79	526.56	305.32	259.35	280.73	482.69	704.06	304.58	1,433.30	18,368.14
10	377.09	4,458.04	224.33	168.22	526.41	298.05	256.36	279.62	491.31	744.82	317.08	1,417.04	18,271.85
17	385.59	4,538.23	252.37	177.02	520.10	318.15	256.80	295.46	507.21	761.16	306.17	1,421.03	18,095.12
24	406.42	4,781.16	246.03	186.57	548.39	311.54	266.17	330.87	523.17	791.68	323.96	1,458.34	18,584.95
31	416.23	4,904.46	251.60	192.65	574.19	314.24	267.35	331.74	543.53	830.66	320.71	1,469.25	18,934.34

**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 3.4**

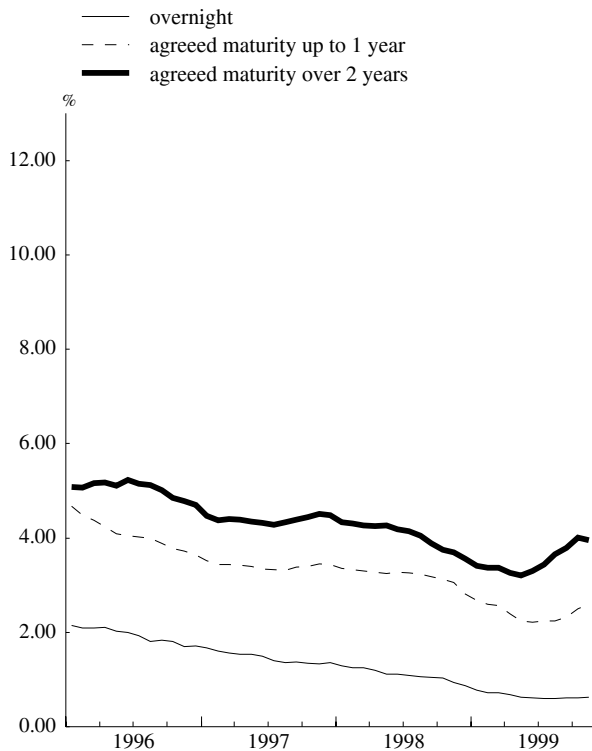
**Retail bank interest rates**

(percentages per annum; period averages)

	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	4.08	4.68	5.04	3.05	3.16	8.84	-	11.56	7.46
1997	1.46	3.41	3.63	4.40	2.80	3.09	7.58	6.64	10.61	6.63
1998	1.10	3.20	3.22	4.06	2.61	3.25	6.74	5.80	10.05	5.87
1998 Nov.	0.94	3.06	3.05	3.70	2.48	3.12	6.38	5.43	9.68	5.43
Dec.	0.87	2.81	2.81	3.56	2.44	3.03	6.22	5.11	9.61	5.29
1999 Jan.	0.77	2.67	2.67	3.41	2.37	2.86	6.07	5.04	9.61	5.10
Feb.	0.72	2.60	2.59	3.37	2.34	2.78	5.98	5.00	9.54	5.02
Mar.	0.71	2.57	2.56	3.37	2.31	2.79	5.85	4.99	9.50	5.05
Apr.	0.68	2.39	2.39	3.26	2.27	2.61	5.68	4.82	9.37	4.91
May	0.63	2.25	2.25	3.21	2.16	2.48	5.57	4.73	9.31	4.84
June	0.61	2.22	2.22	3.30	2.15	2.45	5.49	4.78	9.29	4.96
July	0.60	2.24	2.24	3.44	2.15	2.63	5.41	4.96	9.21	5.18
Aug.	0.60	2.24	2.25	3.66	2.01	2.73	5.42	5.16	9.31	5.47
Sep.	0.60	2.32	2.32	3.79	1.99	2.80	5.37	5.19	9.29	5.53
Oct.	0.61	2.50	2.51	4.01	2.01	2.93	5.57	5.55	9.36	5.79
Nov.	0.63	2.59	2.60	3.95	2.03	3.01	5.74	5.53	9.36	5.77

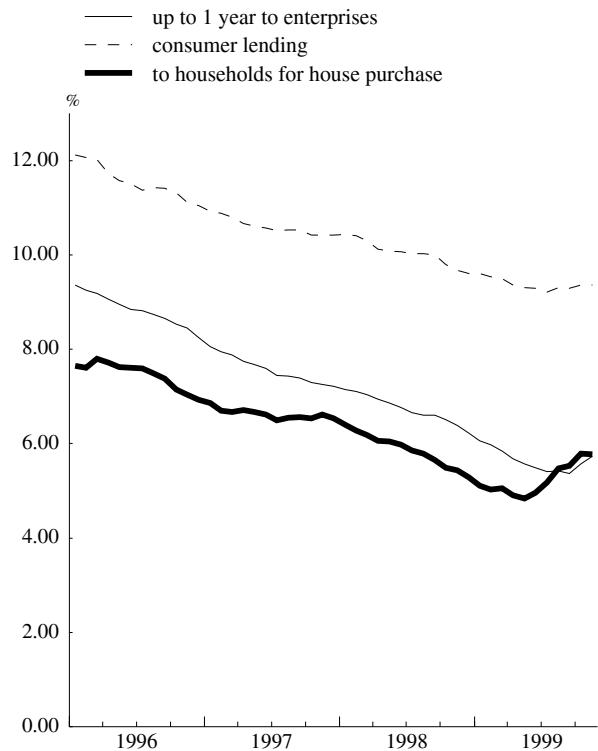
**Deposit interest rates**

(monthly)



**Lending interest rates**

(monthly)



Source: ECB.

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

**Table 3.5****Securities issues other than shares by original maturity, residency of the issuer and currency denomination <sup>1)2)</sup>***(EUR billions; transactions during the period and end-of-period stocks; nominal values)***1. Short-term <sup>3)</sup>**

	By euro area residents									
					In euro <sup>4)</sup>				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
1998 Dec.	.	.	.	526.1	.	.	.	517.1	.	.
1999 Jan.	205.3	191.2	14.1	539.2	198.6	185.7	12.9	529.0	6.7	5.5
Feb.	174.8	174.9	-0.1	539.2	170.3	172.0	-1.8	527.2	4.5	2.8
Mar.	184.1	179.8	4.3	543.6	179.5	176.3	3.2	530.4	4.7	3.5
Apr.	217.6	199.5	18.0	561.7	212.7	195.4	17.3	547.7	4.9	4.2
May	171.8	172.3	-0.5	561.1	165.4	167.5	-2.1	545.5	6.4	4.8
June	173.5	185.6	-12.1	548.9	167.8	181.0	-13.2	532.0	5.7	4.6
July	206.0	208.1	-2.2	545.2	199.6	202.0	-2.5	528.1	6.4	6.1
Aug.	180.9	162.0	18.8	563.6	174.1	156.7	17.4	545.1	6.7	5.3
Sep.	186.1	181.6	4.5	566.2	179.0	176.8	2.2	545.4	7.1	4.8

**2. Long-term <sup>3)</sup>**

	By euro area residents									
					In euro <sup>4)</sup>				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
1998 Dec.	.	.	.	5,284.2	.	.	.	4,988.4	.	.
1999 Jan.	149.9	107.0	43.0	5,340.7	144.0	98.5	45.5	5,043.4	5.9	8.5
Feb.	123.7	86.6	37.1	5,392.9	114.6	84.8	29.9	5,084.2	9.0	1.8
Mar.	117.5	83.9	33.6	5,433.6	111.2	77.9	33.3	5,119.3	6.3	5.9
Apr.	118.6	79.1	39.6	5,462.7	113.0	77.3	35.7	5,141.9	5.6	1.7
May	107.4	69.6	37.8	5,509.6	98.0	64.9	33.1	5,185.0	9.4	4.7
June	101.5	70.8	30.7	5,551.1	97.3	68.4	28.8	5,221.8	4.2	2.4
July	122.3	98.4	23.9	5,586.8	117.3	91.5	25.8	5,262.1	5.0	6.9
Aug.	67.5	52.2	15.3	5,608.9	60.3	47.5	12.7	5,280.1	7.3	4.7
Sep.	129.2	80.4	48.8	5,664.9	114.9	74.4	40.5	5,329.3	14.3	6.0

**3. Total**

	By euro area residents									
					In euro <sup>4)</sup>				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
1	2	3	4	5	6	7	8	9	10	
1998 Dec.	.	.	.	5,810.3	.	.	.	5,505.5	.	.
1999 Jan.	355.2	298.1	57.1	5,879.9	342.6	284.2	58.4	5,572.4	12.6	13.9
Feb.	298.4	261.4	37.0	5,932.1	284.9	256.8	28.1	5,611.5	13.5	4.7
Mar.	301.6	263.7	38.0	5,977.2	290.7	254.2	36.4	5,649.7	10.9	9.4
Apr.	336.2	278.6	57.6	6,024.4	325.7	272.7	53.0	5,689.6	10.5	5.9
May	279.3	242.0	37.3	6,070.7	263.4	232.4	31.0	5,730.4	15.9	9.6
June	275.0	256.5	18.5	6,100.0	265.0	249.4	15.6	5,753.9	10.0	7.0
July	328.3	306.5	21.7	6,132.0	316.8	293.5	23.3	5,790.2	11.4	13.0
Aug.	248.4	214.3	34.1	6,172.5	234.4	204.2	30.2	5,825.2	14.0	10.0
Sep.	315.4	262.0	53.3	6,231.1	293.9	251.3	42.6	5,874.7	21.5	10.8

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

1) Data coverage for euro area residents is estimated at around 95% of total issues. This is expected to increase over the coming months, although full coverage will not be feasible in the short term.

2) Net issues differ from the change in amounts outstanding because of valuation changes, reclassifications and other adjustments.

3) "Short-term" means securities with an original maturity of one year or less (in accordance with the ESA 95, in exceptional cases two years or less).

Securities with longer original maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term.

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

currencies		By non-residents of the euro area in euro <sup>4)</sup>				Total in euro <sup>4)</sup>				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
.	8.9	.	.	.	12.4	.	.	.	529.5	1998 Dec.
1.2	10.2	.	.	.	.	.	.	.	.	1999 Jan.
1.7	12.0	.	.	.	.	.	.	.	.	Feb.
1.2	13.2	23.3	11.1	12.2	25.4	571.7	545.2	26.5	555.8	Mar.
0.7	14.0	.	.	.	.	.	.	.	.	Apr.
1.6	15.6	.	.	.	.	.	.	.	.	May
1.1	16.8	19.2	22.7	-3.5	22.8	565.0	566.5	-1.5	554.9	June
0.3	17.1	.	.	.	.	.	.	.	.	July
1.4	18.5	.	.	.	.	.	.	.	.	Aug.
2.3	20.8	27.8	18.4	9.4	31.7	580.5	554.0	26.6	577.1	Sep.

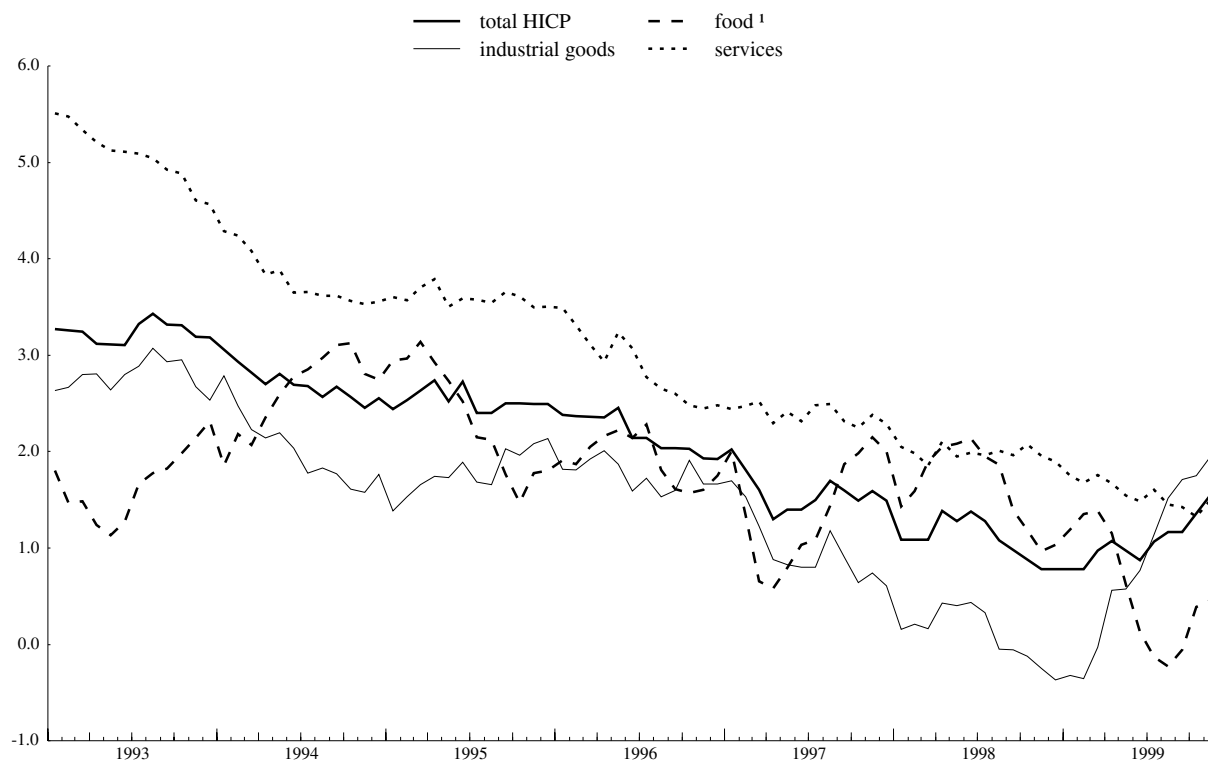
currencies		By non-residents of the euro area in euro <sup>4)</sup>				Total in euro <sup>4)</sup>				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
.	295.9	.	.	.	426.7	.	.	.	5,415.1	1998 Dec.
-2.5	297.2	.	.	.	.	.	.	.	.	1999 Jan.
7.2	308.7	.	.	.	.	.	.	.	.	Feb.
0.4	314.3	53.4	16.8	36.5	462.6	423.2	278.0	145.2	5,581.9	Mar.
3.9	320.7	.	.	.	.	.	.	.	.	Apr.
4.7	324.6	.	.	.	.	.	.	.	.	May
1.8	329.3	56.1	11.4	44.7	506.9	364.4	222.0	142.3	5,728.7	June
-1.9	324.7	.	.	.	.	.	.	.	.	July
2.6	328.8	.	.	.	.	.	.	.	.	Aug.
8.4	335.6	62.5	8.2	54.3	561.4	354.9	221.7	133.2	5,890.7	Sep.

currencies		By non-residents of the euro area in euro <sup>4)</sup>				Total in euro <sup>4)</sup>				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
.	304.8	.	.	.	439.1	.	.	.	5,944.6	1998 Dec.
-1.3	307.5	.	.	.	.	.	.	.	.	1999 Jan.
8.9	320.7	.	.	.	.	.	.	.	.	Feb.
1.5	327.5	76.7	27.9	48.7	488.0	994.8	823.2	171.6	6,137.7	Mar.
4.6	334.8	.	.	.	.	.	.	.	.	Apr.
6.3	340.3	.	.	.	.	.	.	.	.	May
2.9	346.2	75.2	34.0	41.2	529.7	929.3	788.5	140.8	6,283.6	June
-1.6	341.8	.	.	.	.	.	.	.	.	July
3.9	347.3	.	.	.	.	.	.	.	.	Aug.
10.7	356.4	90.3	26.6	63.7	593.1	935.5	775.6	159.8	6,467.8	Sep.

## 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								Services
		Goods	Food <sup>1)</sup>			Industrial goods	Non-energy industrial goods		Energy	
			Processed food <sup>1)</sup>	Unprocessed food	Non-energy industrial goods		Energy			
Weight in the total (%) <sup>2)</sup>	100.0	63.6	22.4	13.4	9.0	41.2	32.5	8.7	36.4	
	1	2	3	4	5	6	7	8	9	10
1995	97.9	2.5	2.1	2.4	2.4	2.2	1.8	1.9	1.4	3.6
1996	100.0	2.2	1.8	1.9	2.0	1.7	1.8	1.5	3.0	2.9
1997	101.6	1.6	1.1	1.4	1.4	1.4	1.0	0.5	2.8	2.4
1998	102.7	1.1	0.6	1.6	1.4	2.0	0.1	0.9	-2.6	2.0
1998 Q3	102.9	1.1	0.7	1.7	1.4	2.1	0.1	1.0	-3.2	2.0
Q4	102.8	0.8	0.2	1.1	1.2	0.8	-0.2	0.9	-4.4	2.0
1999 Q1	103.1	0.8	0.3	1.3	1.2	1.5	-0.2	0.8	-3.8	1.7
Q2	103.8	1.0	0.6	0.6	0.9	0.3	0.6	0.6	0.8	1.6
Q3	104.1	1.1	0.9	-0.1	0.7	-1.4	1.5	0.5	4.9	1.5
1998 Nov.	102.8	0.8	0.2	1.0	1.2	0.6	-0.2	0.9	-4.4	2.0
Dec.	102.9	0.8	0.1	1.0	1.1	0.9	-0.4	0.9	-4.8	1.9
1999 Jan.	102.8	0.8	0.2	1.2	1.3	1.1	-0.3	0.8	-4.4	1.8
Feb.	103.1	0.8	0.2	1.3	1.3	1.5	-0.4	0.7	-4.3	1.7
Mar.	103.4	1.0	0.5	1.4	1.1	1.8	0.0	0.7	-2.8	1.8
Apr.	103.7	1.1	0.8	1.2	1.2	1.2	0.6	0.6	0.3	1.7
May	103.8	1.0	0.6	0.6	0.8	0.4	0.6	0.6	0.5	1.5
June	103.8	0.9	0.5	0.1	0.7	-0.7	0.8	0.6	1.4	1.5
July	104.0	1.1	0.7	-0.1	0.7	-1.4	1.1	0.6	3.2	1.6
Aug.	104.1	1.2	0.9	-0.2	0.7	-1.6	1.5	0.6	5.0	1.5
Sep.	104.1	1.2	1.1	-0.1	0.7	-1.2	1.7	0.4	6.4	1.4
Oct.	104.2	1.4	1.3	0.4	0.9	-0.4	1.8	0.5	6.4	1.3
Nov.	104.4	1.6	1.4	0.5	0.9	-0.2	2.0	0.5	7.2	1.5



Source: Eurostat. Data before 1995 are estimates based on national definitions and are not fully comparable with HICPs starting in 1995.

1) Including alcoholic beverages and tobacco.

2) Referring to index period 1999.

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

	Industrial producer prices								World market prices of raw materials <sup>2)</sup>		Oil prices <sup>3)</sup> (EUR per barrel)	
	Total excluding construction		Manufacturing						Con- struction <sup>1)</sup>	Total	Total excluding energy	
	Index, 1995 = 100			Inter- mediate goods	Capital goods	Consumer goods						
						Durable consumer goods	Non- durable consumer goods <sup>8)</sup>					
1	2	3	4	5	6	7	8	9	10	11	12	
1995	100.0	3.6	3.9	5.0	1.8	-	-	2.4	-	0.2	2.1	13.0
1996	100.4	0.4	1.0	-1.1	1.2	1.7	1.7	1.7	1.3	6.5	-6.9	15.9
1997	101.4	1.1	0.6	1.2	0.3	0.8	0.1	1.2	1.3	10.0	12.9	17.1
1998	100.6	-0.8	-0.7	-2.2	0.5	0.4	0.1	0.6	0.2	-21.2	-12.5	12.0
1999	.	.	.	.	.	.	.	.	.	17.8	-3.1	17.1
1998 Q4	99.4	-2.3	-2.2	-4.5	0.4	-0.2	0.1	-0.3	0.1	-30.0	-20.5	10.1
1999 Q1	98.8	-2.6	-2.1	-4.8	0.2	-0.1	0.2	-0.2	0.8	-17.6	-16.0	10.3
Q2	99.7	-1.3	-1.0	-2.8	0.0	-0.2	0.1	-0.3	.	5.9	-8.2	15.0
Q3	101.0	0.6	0.8	0.6	-0.1	0.1	0.1	0.1	.	31.0	1.1	19.7
Q4	.	.	.	.	.	.	.	.	.	61.5	14.0	23.0
1998 Dec.	99.1	-2.6	-2.3	-4.9	0.4	-0.1	0.2	-0.3	-	-30.8	-19.5	8.8
1999 Jan.	98.8	-2.7	-2.4	-5.1	0.2	-0.1	0.3	-0.3	-	-23.4	-17.3	9.6
Feb.	98.7	-2.7	-2.3	-5.1	0.3	0.0	0.2	-0.2	-	-20.6	-16.0	9.4
Mar.	99.0	-2.3	-1.8	-4.3	0.2	-0.1	0.2	-0.2	-	-8.4	-14.6	11.8
Apr.	99.6	-1.6	-1.2	-3.3	0.2	-0.1	0.2	-0.3	-	0.3	-12.5	14.4
May	99.7	-1.4	-1.0	-2.8	-0.1	-0.2	0.1	-0.3	-	5.1	-7.8	14.9
June	99.8	-1.0	-0.7	-2.1	0.0	-0.1	0.0	-0.2	-	12.8	-4.2	15.6
July	100.5	-0.1	0.1	-0.6	-0.1	0.0	0.0	-0.1	-	22.7	-2.3	18.1
Aug.	101.0	0.6	0.9	0.6	-0.1	0.0	0.0	0.0	-	29.2	-0.5	19.2
Sep.	101.5	1.3	1.5	1.7	-0.1	0.3	0.3	0.3	-	41.4	6.6	21.8
Oct.	101.9	2.1	2.1	3.2	0.0	0.4	0.4	0.4	-	44.3	10.7	20.8
Nov.	.	.	.	.	.	.	.	.	-	60.4	11.9	23.5
Dec.	.	.	.	.	.	.	.	.	-	81.3	19.3	24.8

**2. Deflators of gross domestic product**

	Deflators of GDP <sup>4)</sup> (s.a.)								
	GDP		Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports	Imports	
	Index, 1995 = 100								
	13	14	15	16	17	18	19	20	
1995	100.0	2.6	2.5	2.6	2.9	1.5	2.6	2.3	
1996	102.1	2.1	2.1	2.5	2.2	0.8	0.9	0.8	
1997	103.6	1.5	1.7	1.9	1.8	1.0	2.2	2.7	
1998	105.3	1.6	1.1	1.3	1.5	0.5	-0.1	-1.5	
1997 Q2	103.5	1.6	1.6	1.8	2.0	0.9	1.9	2.2	
Q3	103.9	1.6	1.9	2.1	1.7	1.1	2.7	3.8	
Q4	104.2	1.5	1.7	1.9	1.8	1.2	2.4	2.9	
1998 Q1	104.8	1.6	1.4	1.6	1.2	0.7	1.3	0.9	
Q2	105.2	1.6	1.4	1.6	1.4	0.7	0.5	-0.3	
Q3	105.5	1.6	0.9	1.2	1.8	0.4	-0.6	-2.4	
Q4	105.8	1.5	0.7	0.9	1.6	0.1	-1.7	-4.2	
1999 Q1	106.2	1.4	0.9	1.0	1.9	0.1	-2.1	-4.0	
Q2	106.3	1.0	0.9	1.2	1.9	0.2	-1.0	-1.3	

Sources: Eurostat, except columns 10 and 11 (HWWA, Institut für Wirtschaftsforschung, Hamburg), column 12 (International Petroleum Exchange), and columns 13 to 20 (ECB calculations based on Eurostat data).

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

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

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

4) Based mainly on the ESA 95; data to end-1998 are based on national deflators in domestic currency.

## 5 Real economy indicators in the euro area

**Table 5.1**

### National accounts <sup>1)</sup>

#### 1. Current prices

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

	GDP	Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Exports <sup>3)</sup>	Imports <sup>3)</sup>
	1	2	3	4	5	6	7	8
1995	5,307.4	5,219.5	2,995.9	1,097.0	1,093.9	32.7	1,548.8	1,461.0
1996	5,528.7	5,412.6	3,138.6	1,147.4	1,119.6	7.0	1,636.6	1,520.5
1997	5,641.4	5,502.8	3,190.1	1,152.8	1,134.7	25.2	1,804.0	1,665.3
1998	5,863.9	5,729.5	3,313.7	1,180.4	1,188.5	46.8	1,909.7	1,775.3
1998 Q2	1,458.0	1,422.4	823.5	294.2	292.2	12.5	480.5	444.9
Q3	1,474.0	1,438.2	833.6	296.0	299.9	8.7	481.2	445.4
Q4	1,487.9	1,457.7	843.5	298.1	302.6	13.5	472.3	442.0
1999 Q1	1,501.6	1,472.6	850.8	303.9	309.2	8.6	471.1	442.1
Q2	1,510.3	1,484.7	857.6	306.3	312.5	8.4	482.1	456.5
Q3	.	.	.	.	.	.	.	.

#### 2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP	Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories <sup>2)</sup>	Exports <sup>3)</sup>	Imports <sup>3)</sup>
	9	10	11	12	13	14	15	16
1995	5,307.4	5,219.5	2,995.9	1,097.0	1,093.9	32.7	1,548.8	1,461.0
1996	5,378.4	5,265.8	3,039.1	1,117.0	1,103.8	5.9	1,618.6	1,506.1
1997	5,496.5	5,353.7	3,081.2	1,122.6	1,126.9	23.0	1,779.9	1,637.2
1998	5,646.2	5,530.2	3,170.9	1,137.2	1,175.1	47.0	1,892.3	1,776.3
1998 Q2	1,409.3	1,376.0	790.1	284.5	290.0	11.4	476.4	443.0
Q3	1,416.2	1,387.7	795.8	284.4	296.3	11.2	475.5	446.9
Q4	1,418.8	1,396.7	801.0	284.2	296.9	14.6	470.2	448.1
1999 Q1	1,426.1	1,406.5	806.0	288.1	302.8	9.6	471.3	451.6
Q2	1,434.6	1,412.7	808.1	287.7	304.5	12.5	480.2	458.3
Q3	1,448.9	1,420.6	814.6	289.0	307.5	9.6	494.2	466.0

(annual percentage changes)

1995	2.2	2.2	1.8	0.8	2.5	—	6.5	6.8
1996	1.3	0.9	1.4	1.8	0.9	—	4.5	3.1
1997	2.2	1.7	1.4	0.5	2.1	—	10.0	8.7
1998	2.7	3.3	2.9	1.3	4.3	—	6.3	8.5
1998 Q2	2.8	3.0	2.7	1.5	3.2	—	8.7	9.8
Q3	2.6	3.5	3.3	1.1	4.6	—	4.5	7.7
Q4	1.9	3.0	3.1	1.1	3.5	—	1.6	5.0
1999 Q1	1.7	2.7	2.8	1.4	3.7	—	0.2	3.1
Q2	1.8	2.7	2.3	1.1	5.0	—	0.8	3.5
Q3	2.3	2.4	2.4	1.6	3.8	—	3.9	4.3

Source: Eurostat.

1) Based mainly on the ESA 95. See the first section of the general notes for a brief explanation of features of current price data expressed in ECU up to end-1998.

2) Including acquisitions less disposals of valuables.

3) Exports and imports cover goods and services and include cross-border trade within the euro area.

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

	Total including construction		Total excluding construction		Manufacturing						Construction
	Index (s.a.) 1995 = 100		Index (s.a.) 1995 = 100		Intermediate goods	Capital goods	Consumer goods		Durable consumer goods	Non-durable consumer goods	
	1	2	3	4			5	6			
1995	100.1	2.8	100.1	3.4	3.5	2.6	7.3	0.8	-1.1	1.8	-0.4
1996	100.0	-0.1	100.4	0.3	0.0	-0.2	1.4	-0.2	-0.2	-0.4	-2.5
1997	103.8	3.8	104.8	4.4	5.0	5.4	5.0	2.7	2.8	2.6	-0.5
1998	107.4	3.5	109.1	4.1	4.6	3.7	6.7	3.1	6.3	1.5	-0.9
1998 Q3	107.7	3.2	109.4	3.9	4.3	2.8	6.6	3.4	6.6	1.9	-1.1
Q4	107.2	0.8	109.1	1.5	1.4	0.3	4.2	1.3	4.6	-0.3	-3.7
1999 Q1	107.7	0.3	109.3	0.5	0.2	-0.1	1.1	1.1	1.9	0.8	-1.1
Q2	108.2	0.8	109.8	0.4	0.3	0.2	-0.3	1.2	2.7	0.2	0.8
Q3	.	.	110.8	1.4	1.3	1.6	0.4	2.0	3.3	1.8	.
1998 Nov.	107.4	1.5	109.5	2.3	2.0	1.3	4.7	1.8	4.4	0.3	-3.6
Dec.	106.6	-0.8	108.2	-0.2	-0.7	-1.9	2.4	-0.7	0.6	-1.3	-4.7
1999 Jan.	108.1	1.4	109.3	1.4	1.4	0.2	3.5	2.4	4.7	1.3	1.1
Feb.	107.1	-0.8	108.9	-0.3	-0.9	-0.8	0.4	-0.1	0.9	-0.5	-4.5
Mar.	107.9	0.3	109.8	0.3	0.1	0.2	-0.3	1.1	0.6	1.7	0.0
Apr.	107.9	0.1	109.1	-0.3	-0.3	-0.5	-0.1	0.1	1.1	-0.2	0.9
May	108.1	0.3	109.8	0.0	-0.1	-0.2	-1.2	1.4	3.2	-0.2	0.0
June	108.6	1.9	110.5	1.5	1.3	1.3	0.3	2.1	3.9	0.8	1.5
July	108.6	0.8	110.4	0.4	0.3	0.8	-1.2	1.3	1.5	1.4	1.1
Aug.	108.3	0.3	110.9	2.6	2.6	2.3	1.1	4.6	11.1	3.1	1.6
Sep.	.	.	111.0	1.4	1.4	1.9	1.5	0.8	0.7	1.1	.
Oct.	.	.	.	.	.	.	.	.	.	.	.
Nov.	.	.	.	.	.	.	.	.	.	.	.

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

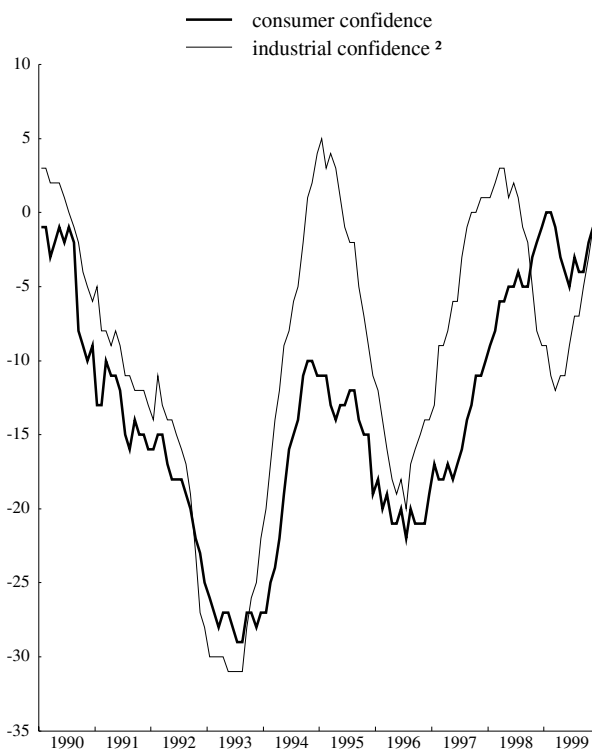
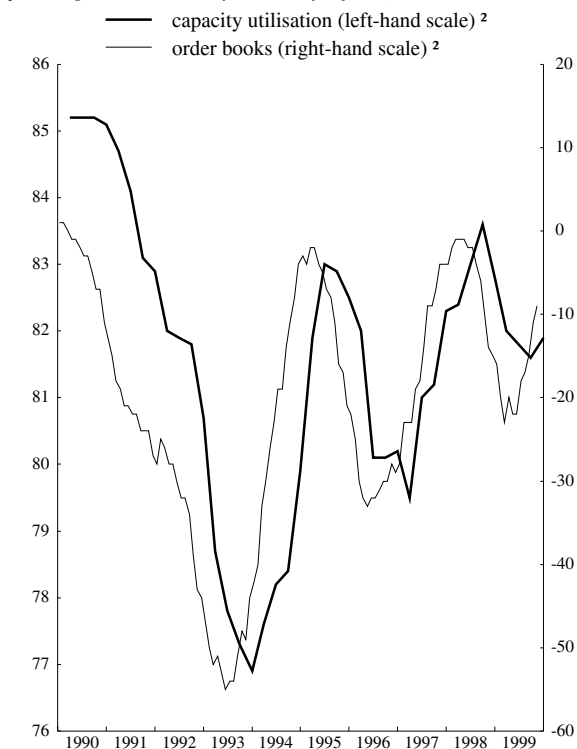
	Retail sales								New passenger car registrations	
	Current prices				Constant prices				Thousands <sup>2)</sup> (s.a.)	
	Total		Total		Food, beverages, tobacco	Non-food	Textiles, clothing, footwear	Household equipment		
	Index (s.a.) 1995 = 100		Index (s.a.) 1995 = 100						15	16
12	13	14	15	16	17	18	19	20	21	
1995	100.0	.	100.0	.	.	.	.	.	777	0.8
1996	102.0	2.1	100.4	0.4	0.7	.	-1.0	0.0	826	6.2
1997	104.3	2.2	101.6	1.2	1.2	0.9	0.6	1.1	861	4.2
1998	108.0	3.6	104.5	2.8	1.9	2.7	1.7	3.8	923	7.1
1998 Q3	108.7	4.3	105.1	3.6	2.1	3.8	4.6	3.8	937	6.7
Q4	109.3	3.3	105.4	2.8	3.1	2.6	0.3	2.9	946	6.3
1999 Q1	109.9	3.0	105.8	2.3	2.5	2.0	1.9	1.1	977	7.1
Q2	110.5	2.7	106.2	2.1	2.8	1.6	1.9	2.5	980	8.3
Q3	111.5	2.6	107.0	1.8	3.8	0.6	-1.2	3.2	992	6.3
1998 Nov.	110.3	5.4	106.4	5.3	5.9	4.1	4.5	4.5	972	10.0
Dec.	108.9	2.3	104.9	1.7	2.1	1.7	-1.7	1.9	916	3.9
1999 Jan.	109.2	2.3	105.5	2.1	1.6	0.9	1.7	2.7	983	8.9
Feb.	109.4	2.3	105.4	1.6	2.4	0.9	-2.2	0.3	964	5.5
Mar.	111.0	4.3	106.4	3.0	3.4	4.0	5.6	0.6	982	6.7
Apr.	109.7	2.3	105.6	1.6	1.3	1.4	2.5	3.5	991	11.2
May	110.5	1.6	106.1	1.0	1.0	0.6	-0.3	1.0	971	5.9
June	111.4	4.2	106.9	3.6	6.1	2.7	3.6	3.0	980	7.8
July	111.5	2.7	107.0	2.0	2.6	1.4	0.0	3.1	1,047	10.4
Aug.	111.8	2.7	107.2	1.8	6.0	1.9	1.1	3.7	963	5.3
Sep.	111.3	2.5	106.8	1.7	2.7	-1.3	-4.2	2.7	966	1.9
Oct.	.	.	.	.	.	.	.	.	974	2.9
Nov.	.	.	.	.	.	.	.	.	962	-1.3

*Sources: Eurostat, except columns 20 and 21 (ECB calculation based on data from the ACEA/A.A.A., European Automobile Manufacturers' Association).*
*1) Adjusted for variations in the number of working days.*
*2) Monthly averages.*



**Table 5.3**
**Business and consumer surveys**
*(percentage balances, seasonally adjusted, unless otherwise indicated)*

	Manufacturing industry				Construction confidence indicator	Retail trade confidence indicator	Consumer confidence indicator
	Confidence indicator	Production expectations	Assessment of order books	Capacity utilisation <sup>1)</sup> (percentages)			
	1	2	3	4	5	6	7
1995	-2	10	-8	82.6	-27	-12	-14
1996	-16	-1	-30	80.6	-36	-11	-20
1997	-4	11	-15	81.0	-33	-9	-15
1998	-1	11	-5	83.0	-19	-3	-5
1999	.	.	.	81.8	.	.	.
1998 Q4	-7	3	-13	82.8	-15	-3	-2
1999 Q1	-11	1	-20	82.0	-9	-3	0
Q2	-10	3	-21	81.8	-7	-4	-4
Q3	-6	8	-17	81.6	-7	-7	-4
Q4	.	.	.	81.9	.	.	.
1998 Nov.	-8	2	-14	-	-14	-4	-2
Dec.	-9	2	-15	-	-14	-4	-1
1999 Jan.	-9	2	-16	-	-9	0	0
Feb.	-11	1	-20	-	-9	-4	0
Mar.	-12	0	-23	-	-9	-6	-1
Apr.	-11	2	-20	-	-7	-1	-3
May	-11	3	-22	-	-8	-3	-4
June	-9	5	-22	-	-6	-9	-5
July	-7	7	-18	-	-5	-6	-3
Aug.	-7	7	-17	-	-9	-7	-4
Sep.	-5	10	-15	-	-8	-7	-4
Oct.	-3	13	-11	-	-6	-9	-2
Nov.	-1	15	-9	-	0	-9	-1

**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)*


Source: European Commission Business and Consumer Surveys.

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

2) Manufacturing.

**Table 5.4**
**Labour market indicators**
**1. Employment and unemployment <sup>1)</sup>**
*(annual percentage changes, unless otherwise indicated)*

	Employment						Unemployment (s.a.)			
	Whole economy				Industry (excluding construction)	Services	Total		Adult <sup>2)</sup>	Youth <sup>2)</sup>
	Index, 1995 = 100		Employees	Self- employed			Millions	% of labour force	% of labour force	% of labour force
1	2	3	4	5	6	7	8	9	10	
1995	100.0	-	-	-	-	-	14.286	11.3	9.5	23.2
1996	100.3	0.3	0.3	0.4	-1.2	1.3	14.702	11.6	9.8	23.9
1997	100.8	0.5	0.7	0.0	-0.4	1.1	14.788	11.6	9.9	23.2
1998	102.1	1.3	1.4	0.6	0.9	1.7	14.004	10.9	9.4	21.3
1998 Q3	.	.	1.3	.	.	.	13.901	10.8	9.3	21.1
Q4	.	.	1.6	.	.	.	13.613	10.6	9.2	20.7
1999 Q1	.	.	1.6	.	.	.	13.263	10.3	9.0	20.0
Q2	.	.	1.7	.	.	.	13.025	10.1	8.9	19.3
Q3	.	.	.	.	.	.	12.864	10.0	8.7	19.0
1998 Nov.	-	-	-	-	-	-	13.631	10.6	9.2	20.8
Dec.	-	-	-	-	-	-	13.496	10.5	9.1	20.5
1999 Jan.	-	-	-	-	-	-	13.361	10.4	9.0	20.3
Feb.	-	-	-	-	-	-	13.298	10.3	9.0	20.1
Mar.	-	-	-	-	-	-	13.131	10.2	8.9	19.7
Apr.	-	-	-	-	-	-	13.086	10.2	8.9	19.4
May	-	-	-	-	-	-	13.002	10.1	8.8	19.2
June	-	-	-	-	-	-	12.989	10.1	8.8	19.2
July	-	-	-	-	-	-	12.924	10.0	8.8	19.2
Aug.	-	-	-	-	-	-	12.917	10.0	8.8	19.1
Sep.	-	-	-	-	-	-	12.752	9.9	8.7	18.8
Oct.	-	-	-	-	-	-	12.652	9.8	8.6	18.5
Nov.	-	-	-	-	-	-	12.587	9.8	8.6	18.4

**2. Labour costs and productivity**
*(annual percentage changes)*

	Unit labour cost in the whole economy, and components (s.a.)			Labour cost indices <sup>3)</sup> and components					Earnings per employee in manufacturing
	Unit labour cost	Compensation per employee	Labour productivity	Total					
				Wages and salaries	Other	Industry	Services		
						Total	Total		
11	12	13	14	15	16	17	18	19	
1995	1.5	3.4	1.9	-	-	-	-	-	3.7
1996	2.0	3.2	1.2	3.4	3.1	4.5	3.3	4.1	3.7
1997	0.7	2.4	1.7	2.6	2.5	3.3	2.5	2.6	2.8
1998	0.0	1.6	1.5	1.7	2.2	1.1	1.8	1.3	2.4
1997 Q2	0.6	2.6	2.1	3.0	2.7	3.9	2.5	3.6	3.2
Q3	0.4	2.1	1.9	2.4	2.4	2.9	2.5	2.2	2.6
Q4	0.0	2.1	2.2	2.5	2.4	3.1	2.5	2.0	2.7
1998 Q1	-1.4	1.3	2.8	1.8	2.4	1.1	1.5	1.6	2.0
Q2	-0.1	1.4	1.4	1.7	2.3	0.8	1.9	1.2	2.5
Q3	0.3	1.5	1.2	1.6	2.0	1.1	1.9	1.1	2.3
Q4	0.7	1.4	0.6	1.8	2.2	1.1	2.1	1.3	2.7
1999 Q1	1.6	1.8	0.2	2.0	2.0	2.1	2.1	1.4	2.4
Q2	1.7	2.1	0.4	1.9	2.0	1.6	1.8	1.8	2.2

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

1) Data for employment are based on the ESA 95. Data for unemployment follow ILO recommendations.

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

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

## 6 Saving, investment and financing in the euro area

**Table 6**

### Saving, investment and financing

(as a percentage of GDP, unless otherwise indicated)

	Euro area saving and investment <sup>1)</sup>			Investment of private non-financial sectors <sup>1) 2)</sup>							
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other than shares	Long-term securities	Shares	Insurance technical reserves
1991	21.9	23.0	-1.3	19.1	14.3	16.7	3.9	3.0	2.5	1.7	2.5
1992	20.9	22.2	-1.0	18.4	13.7	14.2	4.4	1.7	0.5	1.4	2.6
1993	20.0	20.2	0.5	16.6	12.3	13.0	5.3	0.6	1.0	0.8	2.9
1994	20.4	19.8	0.3	16.5	12.3	13.7	3.3	2.2	2.4	1.8	2.9
1995	21.3	20.1	0.8	16.9	12.6	13.3	4.5	2.2	1.9	1.6	3.4
1996	20.9	19.8	1.2	16.6	12.3	11.8	3.9	0.2	1.2	1.2	3.6
1997	21.6	19.2	1.9	16.2	12.0	12.7	2.3	-0.8	-0.1	1.6	3.9
1998	21.9	19.3	1.3	16.2	12.1	13.8	2.2	-2.1	-1.2	2.2	3.1

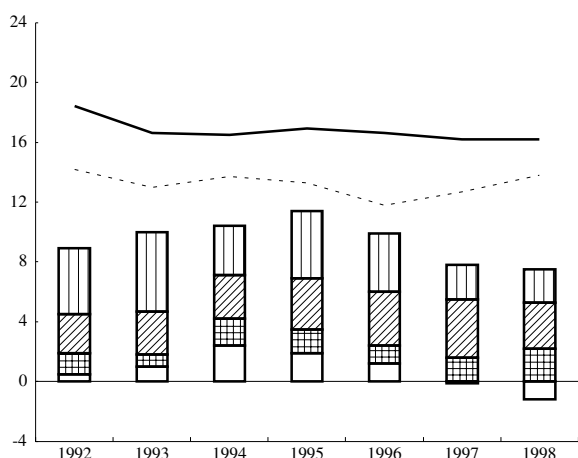
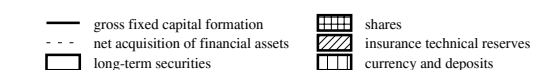
  

	Financing of private non-financial sectors <sup>1) 2)</sup>									Net financial investment (col. 6-14)	Financial investment as a % of gross investment (col. 6:(4+6))	Net incurrence of liabilities as a % of financing (col. 14:(12+14))
	Gross saving	Households	Net incurrence of liabilities	Securities other than shares	Long-term securities	Shares	Loans	Long-term loans				
									12			
1991	21.0	12.1	13.3	0.4	0.4	1.6	9.1	5.0	3.4	46.6	38.8	
1992	20.7	12.1	10.6	0.7	0.6	1.4	6.8	4.7	3.6	43.6	33.9	
1993	20.4	11.5	7.4	1.3	1.4	1.6	3.6	4.4	5.6	43.9	26.6	
1994	20.3	10.6	9.6	1.0	1.1	1.8	3.6	3.5	4.1	45.4	32.1	
1995	21.1	10.9	7.0	-1.8	-1.8	1.4	5.4	3.6	6.3	44.0	24.9	
1996	20.3	10.7	8.0	0.2	0.0	1.7	5.3	4.3	3.8	41.5	28.3	
1997	19.8	9.4	9.3	0.1	0.0	1.5	6.5	4.8	3.4	43.9	32.0	
1998	18.7	8.7	11.9	0.5	0.3	2.6	7.5	5.6	1.9	46.0	38.9	

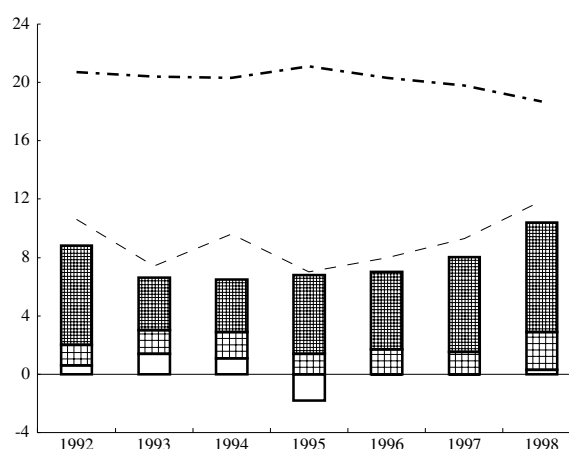
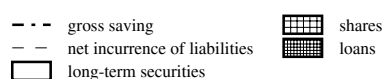
### Investment and financing of private non-financial sectors <sup>1) 2)</sup>

(as a percentage of GDP)

#### Investment



#### Financing



Source: ECB.

1) Selected items of investment and financing.

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

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

**Table 7**

## General government fiscal position

(as a percentage of GDP)

### 1. Euro area <sup>1) 2)</sup> – receipts and expenditure

	Receipts							Expenditure							
	Total	Current receipts	Direct taxes	Indirect taxes	Social contributions	Sales	Capital receipts	Total	Current expenditure	Compensation of employees	Intermediate consumption	Interest	Transfers to households	Capital expenditure	Investment
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1991	46.4	46.1	11.9	12.9	16.8	2.2	0.4	50.9	46.1	11.2	5.4	5.0	20.5	4.8	3.1
1992	47.6	46.8	12.0	12.9	17.1	2.3	0.7	52.2	47.5	11.4	5.5	5.5	21.4	4.7	3.1
1993	48.3	47.8	12.1	13.2	17.6	2.4	0.5	53.9	49.2	11.6	5.7	5.8	22.3	4.7	2.9
1994	47.7	47.2	11.6	13.4	17.5	2.3	0.4	52.7	48.3	11.3	5.5	5.4	22.3	4.4	2.8
1995	47.4	46.8	11.7	13.3	17.4	2.4	0.5	52.4	48.0	11.2	5.3	5.7	22.3	4.5	2.6
1996	48.2	47.7	12.1	13.4	17.7	2.5	0.5	52.4	48.5	11.2	5.4	5.6	22.8	3.9	2.5
1997	48.5	47.8	12.3	13.5	17.6	2.4	0.7	51.0	47.3	11.0	5.3	5.1	22.6	3.7	2.3
1998	48.1	47.5	12.5	14.2	16.6	2.4	0.5	50.0	46.2	10.7	5.2	4.6	22.1	3.8	2.3

### 2. Euro area <sup>1) 2)</sup> – saving, deficit and debt

	Gross saving	Deficit (-) / surplus (+)				Primary deficit/surplus	Deficit/debt adjustment <sup>3)</sup>	Change in debt <sup>4)</sup>				Gross nominal consolidated debt			
		Total	Central government	State and local government	Social security			Total	Currency, deposits and loans	Short-term securities	Medium/long-term securities	Total	Currency, deposits and loans	Short-term securities	Medium/long-term securities
1991	0.0	-4.4	-4.3	-0.4	0.3	0.5	0.7	5.1	1.3	0.0	3.9	58.1	18.5	8.5	31.2
1992	-0.7	-4.6	-4.1	-0.5	-0.1	0.8	2.1	6.7	1.7	0.8	4.2	61.7	19.2	8.9	33.6
1993	-1.4	-5.6	-4.9	-0.6	0.0	0.2	2.5	8.1	1.5	-0.3	6.9	68.2	20.2	8.3	39.7
1994	-1.1	-5.1	-4.4	-0.7	0.0	0.4	0.9	5.9	0.2	0.6	5.1	70.7	19.4	8.5	42.8
1995	-1.1	-5.1	-4.3	-0.5	-0.3	0.6	2.1	7.2	2.0	-0.2	5.4	74.7	20.5	7.9	46.3
1996	-0.8	-4.2	-3.6	-0.4	-0.2	1.4	-0.3	3.9	0.3	0.2	3.4	76.0	20.2	7.8	48.0
1997	0.5	-2.5	-2.3	-0.3	0.1	2.6	-0.3	2.2	-0.1	-1.0	3.2	75.3	19.3	6.5	49.4
1998	1.4	-2.0	-2.1	0.1	0.1	2.7	-0.4	1.6	-0.3	-0.7	2.6	73.5	18.1	5.6	49.8

### 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
1991	-6.3	-3.1	-4.4	-2.0	-2.3	-10.1	1.9	-2.9	-3.0	-6.0	-1.0
1992	-7.0	-2.6	-4.0	-3.8	-2.5	-9.6	0.7	-3.9	-2.0	-3.0	-5.9
1993	-7.3	-3.2	-6.8	-5.7	-2.2	-9.5	1.6	-3.2	-4.2	-6.1	-7.1
1994	-4.9	-2.4	-6.2	-5.8	-1.7	-9.2	2.7	-3.8	-5.0	-6.0	-6.4
1995	-3.8	-3.3	-7.1	-4.9	-2.1	-7.7	1.8	-4.1	-5.1	-5.7	-4.6
1996	-3.1	-3.4	-4.5	-4.1	-0.2	-6.6	2.8	-1.8	-3.7	-3.3	-3.1
1997	-1.6	-2.7	-2.5	-3.0	1.0	-2.7	3.8	-1.0	-1.8	-2.5	-1.2
1998	-0.9	-2.0	-1.7	-2.9	2.4	-2.7	2.5	-0.7	-2.2	-2.2	0.9

### 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
1991	128.5	41.4	44.6	35.7	94.3	101.5	4.0	79.0	57.9	62.9	23.1
1992	130.1	44.0	47.1	39.6	91.1	108.7	4.9	80.0	57.9	56.3	41.3
1993	136.8	48.0	59.0	45.7	92.6	119.1	5.9	81.2	62.7	61.0	57.6
1994	135.1	50.2	61.3	48.5	86.1	124.9	5.5	77.9	65.4	63.8	59.3
1995	132.0	58.3	64.2	52.8	78.4	125.3	5.8	77.9	69.4	65.9	58.1
1996	128.8	60.8	68.5	55.7	68.6	124.6	6.3	76.1	69.8	64.9	57.6
1997	123.4	61.5	67.1	58.1	59.9	122.4	6.4	70.8	64.1	61.7	55.0
1998	118.2	61.1	65.1	58.8	49.5	118.7	6.9	67.5	63.0	57.8	49.7

Sources: ECB for euro area aggregated data; for data relating to countries' deficit/surplus and debt, 1995-98: European Commission (Economic and Financial Affairs DG and Eurostat), 1991-94: ECB.

1) Receipts, expenditure and deficit aggregates based mainly on the ESA 95.

2) Euro area excluding Luxembourg; transactions among the euro area countries are not consolidated.

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:  $[debt(t)-debt(t-1)] \div GDP(t)$ .

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

Table 8.1

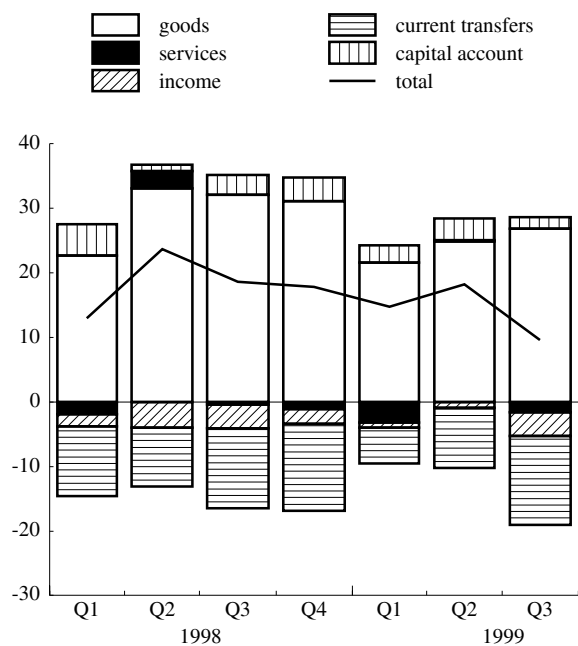
### Summary balance of payments

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

	Current account					Capital account	Financial account <sup>1)</sup>						Errors and omissions <sup>2)</sup>
	Total	Goods	Services	Income	Current transfers		Total <sup>2)</sup>	Direct investment	Portfolio investment <sup>2)</sup>	Financial derivatives <sup>2)</sup>	Other investment <sup>2) 3) 4)</sup>	Reserve assets <sup>2)</sup>	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1998	60.3	118.8	-0.9	-11.9	-45.8	12.7	-69.1	-102.6	-85.3	-8.2	118.5	8.5	-3.8
1998 Q3	15.5	32.0	-0.4	-3.7	-12.5	3.1	-15.6	-20.0	8.8	1.1	-8.2	2.6	-3.0
Q4	14.2	31.0	-1.2	-2.3	-13.4	3.7	-36.2	-56.5	-39.7	-5.3	58.7	6.7	18.3
1999 Q1	11.9	21.5	-3.2	-0.8	-5.5	2.8	-33.1	-15.6	-54.7	-1.4	33.0	5.5	18.4
Q2	14.8	24.8	0.2	-0.9	-9.3	3.4	-28.3	-52.6	-7.0	-0.6	25.3	6.6	10.1
Q3	7.8	26.8	-1.6	-3.6	-13.8	1.7	-3.4	-18.6	25.0	2.6	-13.9	1.5	-6.1
1998 Aug.	4.3	9.0	0.1	0.2	-4.9	1.5	4.3	-7.6	8.0	2.2	3.7	-2.0	-10.1
Sep.	0.7	7.9	-0.8	-1.6	-4.9	0.5	-37.2	-6.5	-12.6	0.3	-22.9	4.5	36.0
Oct.	3.7	10.6	-1.0	-1.0	-4.9	0.8	-9.7	-18.0	-30.7	-2.9	44.8	-2.9	5.3
Nov.	4.4	10.2	-0.3	-1.0	-4.6	0.9	7.4	-35.3	3.1	-2.3	47.8	-5.8	-12.6
Dec.	6.1	10.3	0.1	-0.3	-3.9	2.0	-33.8	-3.2	-12.0	-0.1	-33.9	15.4	25.7
1999 Jan.	-0.5	4.8	-2.9	-0.4	-2.0	2.7	0.4	-4.7	8.8	-1.9	0.3	-2.1	-2.6
Feb.	4.1	6.9	0.0	-0.6	-2.2	-0.1	6.8	-6.2	-26.4	-0.4	34.8	5.0	-10.8
Mar.	8.3	9.8	-0.4	0.2	-1.4	0.2	-40.3	-4.6	-37.1	0.9	-2.1	2.7	31.8
Apr.	6.8	8.0	-0.4	2.1	-2.9	0.5	-5.1	-14.6	13.6	3.5	-9.3	1.8	-2.3
May	0.5	5.9	0.7	-2.9	-3.2	1.4	-11.0	-19.1	-28.5	-3.9	37.0	3.5	9.1
June	7.4	11.0	-0.1	-0.2	-3.2	1.4	-12.2	-18.9	7.9	-0.1	-2.3	1.3	3.3
July	8.2	13.3	0.8	-1.5	-4.4	0.7	-3.4	-5.7	3.0	1.8	-1.8	-0.7	-5.5
Aug.	1.5	7.0	-1.1	0.4	-4.8	0.6	32.9	-5.9	1.8	1.5	34.9	0.5	-35.0
Sep.	-1.9	6.5	-1.3	-2.5	-4.6	0.4	-32.8	-7.0	20.2	-0.7	-47.0	1.7	34.3
Oct.	3.6	10.2	-0.6	-1.9	-4.0	1.6	30.5	-11.6	-14.4	-1.4	57.9	0.1	-35.7

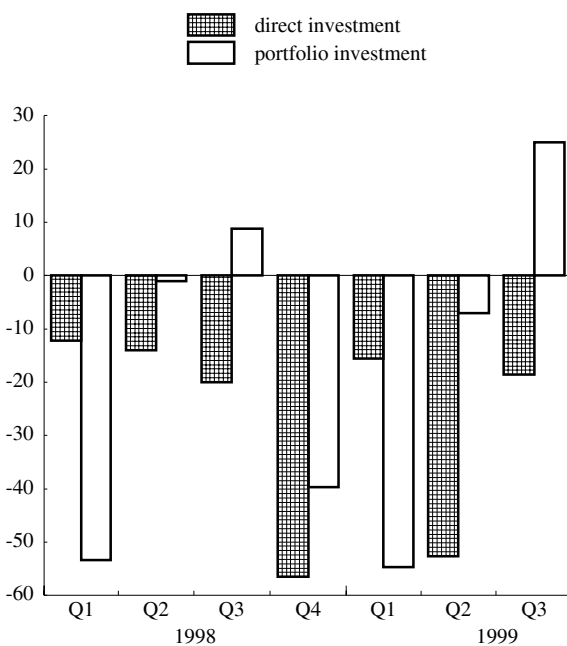
### Current and capital accounts

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



### Direct and portfolio investment

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



Source: ECB.

- 1) Inflows (+); outflows (-). Reserve assets: increase (-); decrease (+).
- 2) Data before end-1998 are not closely comparable with later observations.
- 3) Flows before January 1999 include estimates.
- 4) This item is under review.

**Table 8.2****Balance of payments: current and capital accounts***(EUR billions (ECU billions to end-1998); gross flows)*

	Current account										Capital account	
	Total		Goods		Services		Income		Current transfers		Credit 11	Debit 12
	Credit 1	Debit 2	Credit 3	Debit 4	Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10		
1998	1,264.0	1,203.7	772.4	653.6	232.0	232.8	198.5	210.4	61.1	106.9	17.8	5.1
1998 Q3	310.8	295.2	189.4	157.4	61.6	62.0	47.5	51.2	12.2	24.6	4.3	1.2
Q4	316.6	302.4	195.7	164.7	58.1	59.3	50.3	52.6	12.4	25.9	5.2	1.6
1999 Q1	299.7	287.7	179.7	158.2	50.7	53.9	45.5	46.3	23.8	29.3	4.4	1.7
Q2	324.0	309.2	193.1	168.2	59.3	59.1	56.8	57.8	14.8	24.2	4.6	1.2
Q3	314.7	306.9	193.3	166.5	62.4	64.0	46.3	50.0	12.6	26.4	3.1	1.4
1998 Aug.	93.8	89.4	55.7	46.7	20.3	20.2	14.0	13.9	3.7	8.7	1.8	0.3
Sep.	103.6	102.9	63.6	55.7	19.6	20.4	16.6	18.2	3.7	8.6	0.9	0.4
Oct.	105.7	101.9	67.1	56.5	19.4	20.4	15.7	16.7	3.4	8.4	1.2	0.4
Nov.	101.5	97.1	64.4	54.2	17.9	18.1	15.3	16.3	4.0	8.5	1.3	0.5
Dec.	109.4	103.3	64.3	54.0	20.8	20.8	19.3	19.6	5.0	9.0	2.7	0.6
1999 Jan.	95.0	95.5	53.5	48.7	14.9	17.8	14.4	14.8	12.3	14.3	3.1	0.4
Feb.	94.7	90.5	57.4	50.5	17.2	17.2	13.8	14.5	6.2	8.4	0.7	0.8
Mar.	110.0	101.7	68.8	59.0	18.7	19.0	17.3	17.1	5.3	6.6	0.6	0.5
Apr.	105.4	98.5	63.3	55.3	18.5	18.9	18.7	16.6	4.9	7.8	1.0	0.4
May	102.2	101.7	60.7	54.9	19.2	18.5	16.9	19.7	5.4	8.6	1.8	0.3
June	116.4	109.0	69.1	58.1	21.6	21.7	21.2	21.4	4.6	7.8	1.9	0.5
July	111.9	103.7	69.4	56.0	22.7	21.9	15.4	16.9	4.4	8.8	1.3	0.6
Aug.	96.0	94.5	57.3	50.3	19.9	21.0	14.8	14.4	4.0	8.8	1.0	0.4
Sep.	106.8	108.7	66.6	60.2	19.8	21.1	16.2	18.7	4.2	8.8	0.9	0.5
Oct.	111.2	107.6	71.7	61.6	19.7	20.4	15.1	17.1	4.6	8.6	2.1	0.5

Source: ECB.

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

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999 Q1	45.5	46.3	2.3	0.9	43.2	45.4	7.8	8.8	12.5	15.0	23.0	21.6
Q2	56.8	57.8	2.3	1.3	54.5	56.5	12.7	8.1	16.2	24.1	25.5	24.3

	Income on direct investment				Income on portfolio investment							
	Equity		Debt		Equity		Debt instruments					
	Credit 13	Debit 14	Credit 15	Debit 16	Credit 17	Debit 18	Total		Bonds and notes		Money market instruments	
							Credit 19	Debit 20	Credit 21	Debit 22	Credit 23	Debit 24
1999 Q1	6.9	8.0	0.9	0.9	1.6	3.6	10.9	11.3	10.5	10.9	0.5	0.5
Q2	11.5	7.0	1.2	1.1	3.4	10.9	12.9	13.1	12.3	12.5	0.6	0.7

*Source: ECB.*

**Table 8.4****Balance of payments: direct and portfolio investment accounts <sup>1)</sup>***(EUR billions (ECU billions to end-1998); net flows)***1. Direct investment; portfolio investment by instrument**

	Direct investment		Portfolio investment <sup>2)</sup>									
	Abroad	In the euro area	Total		Equity		Debt instruments					
			Assets	Liabilities	Assets	Liabilities	Assets			Liabilities		
							Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
1	2	3	4	5	6	7	8	9	10	11	12	
1998	-183.0	80.4	-302.1	216.8	-98.7	98.3	-203.3	-187.1	-16.3	118.5	102.7	15.8
1998 Q3	-25.3	5.3	-60.2	69.1	-13.2	5.5	-47.1	-42.2	-4.8	63.5	47.0	16.6
Q4	-70.0	13.5	-61.4	21.7	-20.1	41.6	-41.2	-29.2	-12.0	-19.9	-18.0	-1.9
1999 Q1	-36.3	20.8	-65.3	10.7	-21.7	-5.4	-43.6	-43.8	0.1	16.1	2.9	13.2
Q2	-76.9	24.3	-85.6	78.6	-40.9	31.3	-44.7	-52.5	7.8	47.3	33.7	13.7
Q3	-19.8	1.2	-56.9	82.0	-24.2	20.5	-32.7	-22.3	-10.5	61.5	24.8	36.7
1998 Aug.	-4.1	-3.5	-16.4	24.4	-0.6	-3.4	-15.8	-14.2	-1.6	27.8	22.1	5.8
Sep.	-19.2	12.7	-19.5	6.9	-8.1	-2.0	-11.4	-7.8	-3.6	8.9	9.4	-0.6
Oct.	-13.0	-5.0	-9.6	-21.1	-2.0	-2.0	-7.6	-6.7	-0.9	-19.1	-24.7	5.6
Nov.	-42.7	7.4	-32.0	35.0	-10.0	36.4	-21.9	-13.8	-8.2	-1.4	-0.8	-0.6
Dec.	-14.2	11.0	-19.8	7.7	-8.1	7.1	-11.7	-8.8	-2.9	0.6	7.5	-6.9
1999 Jan.	-11.8	7.1	-19.1	27.9	-6.4	9.5	-12.7	-9.3	-3.4	18.4	15.7	2.7
Feb.	-12.0	5.8	-16.2	-10.2	-4.3	1.9	-11.9	-13.2	1.3	-12.1	-18.0	6.0
Mar.	-12.5	7.9	-30.0	-7.1	-11.0	-16.9	-19.0	-21.2	2.3	9.7	5.2	4.5
Apr.	-23.3	8.7	-22.2	35.8	-11.7	8.2	-10.5	-14.8	4.3	27.6	27.7	-0.1
May	-28.3	9.1	-37.9	9.4	-15.7	10.8	-22.2	-23.3	1.1	-1.4	-9.2	7.8
June	-25.3	6.4	-25.5	33.4	-13.5	12.3	-12.0	-14.4	2.4	21.1	15.2	5.9
July	0.1	-5.8	-19.0	22.1	-5.2	9.5	-13.9	-13.3	-0.5	12.6	0.7	11.9
Aug.	-9.4	3.5	-20.7	22.5	-10.3	3.1	-10.3	-5.7	-4.6	19.4	7.7	11.7
Sep.	-10.5	3.5	-17.2	37.5	-8.7	8.0	-8.5	-3.2	-5.3	29.5	16.4	13.1
Oct.	-18.5	6.9	-15.3	0.8	-12.2	9.2	-3.0	2.7	-5.7	-8.4	-13.3	4.9

**2. Portfolio investment assets by instrument and sector of holder**

	Equity				Debt instruments							
					Bonds and notes				Money market instruments			
	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Q1	0.1	-0.4	1.1	-22.5	0.1	-0.4	5.1	-48.6	1.4	-0.2	-1.1	0.0
Q2	0.0	-0.3	-3.0	-37.7	0.8	-0.3	-10.5	-42.5	0.5	-0.5	1.1	6.6

Source: ECB.

<sup>1)</sup> Inflows (+); outflows (-).<sup>2)</sup> Data before end-1998 are not closely comparable with later observations and include estimates.



**Table 8.5****Balance of payments: other investment account and reserve assets <sup>1)</sup>***(EUR billions (ECU billions to end-1998); net flows)***1. Other investment by sector <sup>2)</sup>**

	Total		Eurosysteem		General government		MFIs (excluding the Eurosysteem) <sup>3)</sup>						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-67.5	186.0	-0.7	3.5	-1.4	-7.7	-22.6	178.1	-34.2	34.8	11.6	143.3	-42.8	12.1
1998 Q3	-84.3	76.1	0.4	-0.6	0.6	-1.9	-71.2	77.8	-13.2	1.7	-58.0	76.2	-14.0	0.8
Q4	59.1	-0.4	-0.5	2.9	3.0	-2.5	53.7	-4.1	-3.7	14.2	57.4	-18.3	2.9	3.2
1999 Q1	-34.6	67.7	2.9	0.0	-3.3	-4.2	-13.4	58.6	-13.9	7.1	0.6	51.5	-20.9	13.3
Q2	1.0	24.4	4.4	0.0	3.9	-2.9	8.2	19.4	-15.6	13.2	23.9	6.2	-15.6	7.8
Q3	-35.1	21.2	0.0	0.0	-0.1	-3.1	-19.0	24.8	-13.6	7.4	-5.4	17.4	-16.0	-0.6
1998 Aug.	-12.5	16.2	0.1	-0.2	0.5	0.5	-22.0	17.1	-5.6	-1.5	-16.4	18.6	8.9	-1.2
Sep.	-65.1	42.2	0.1	-0.4	-0.2	0.9	-56.4	39.2	-4.8	2.3	-51.6	36.9	-8.5	2.4
Oct.	3.5	41.3	0.0	0.4	0.0	0.2	13.5	38.5	-1.3	2.8	14.8	35.7	-10.1	2.2
Nov.	6.7	41.1	-0.1	-2.6	1.2	2.2	1.6	39.8	-0.8	1.8	2.4	38.0	4.1	1.7
Dec.	49.0	-82.8	-0.4	5.2	1.9	-4.9	38.6	-82.4	-1.6	9.6	40.3	-92.0	8.9	-0.7
1999 Jan.	-64.7	65.1	8.4	0.0	0.0	-4.8	-65.0	65.2	-6.2	3.4	-58.8	61.7	-8.2	4.6
Feb.	30.9	3.9	-4.5	0.0	-2.2	-0.6	48.5	1.5	-0.6	-3.2	49.1	4.6	-10.9	3.1
Mar.	-0.8	-1.3	-1.0	0.0	-1.1	1.2	3.2	-8.1	-7.1	6.8	10.3	-14.9	-1.8	5.6
Apr.	10.5	-19.8	0.4	0.0	-0.2	0.3	15.0	-20.8	-4.7	2.7	19.7	-23.5	-4.8	0.7
May	-10.7	47.6	3.1	0.0	1.0	-0.9	-13.4	50.4	-3.9	6.1	-9.5	44.3	-1.4	-1.9
June	1.1	-3.5	0.9	0.0	3.0	-2.3	6.6	-10.1	-7.1	4.5	13.7	-14.6	-9.4	9.0
July	-16.6	14.8	0.6	0.0	-1.4	-1.7	-8.3	16.7	-2.3	2.3	-6.0	14.4	-7.5	-0.2
Aug.	-3.3	38.3	-1.2	0.0	0.3	-0.1	0.2	38.1	-6.1	3.4	6.3	34.7	-2.7	0.3
Sep.	-15.1	-31.9	0.6	0.0	1.0	-1.2	-10.9	-30.0	-5.2	1.6	-5.7	-31.6	-5.8	-0.7
Oct.	-20.0	77.9	-0.1	0.0	-1.1	-0.6	-22.9	73.2	-4.7	4.2	-18.1	68.9	4.1	5.4

**2. Other investment by sector and instrument****2.1. Eurosysteem**

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999 Q1	3.6	0.0	3.6	-0.7	0.0	-0.7
Q2	4.3	0.0	4.3	0.1	0.0	0.1

Source: ECB.

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

2) Data before end-1998 are not closely comparable with later observations and include estimates.

3) This item is under review.

## 2.2. General government

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 7	Liabilities 8	Balance 9	Assets 10	Liabilities 11	Balance 12	Assets 13	Liabilities 14	Balance 15
1999 Q1	-0.2	0.0	-0.2	-2.9	-4.1	-7.0	-0.3	-0.1	-0.4
Q2	-0.1	0.0	-0.1	5.7	-2.7	3.0	-1.8	-0.2	-2.0

## 2.3. MFIs (excluding the Eurosystem) <sup>1)</sup>

	Loans/currency and deposits			Other assets/liabilities		
	Assets 16	Liabilities 17	Balance 18	Assets 19	Liabilities 20	Balance 21
1999 Q1	-17.1	61.3	44.2	3.7	-2.7	1.0
Q2	9.1	18.4	27.4	-0.8	1.1	0.2

## 2.4. Other sectors

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 22	Liabilities 23	Balance 24	Assets 25	Liabilities 26	Balance 27	Assets 28	Liabilities 29	Balance 30
1999 Q1	-3.5	4.1	0.6	-11.8	3.4	-8.4	-5.5	5.8	0.2
Q2	-6.2	-2.9	-9.1	1.4	9.6	11.1	-10.8	1.0	-9.7

## 3. Reserve assets <sup>2)</sup>

	Total 1	Monetary gold 2	Special drawing rights 3	Reserve position in the IMF 4	Foreign exchange						Other claims 12	
					Total 5	Currency and deposits		Securities				Financial derivatives 11
						With monetary authorities and the BIS 6	With banks 7	Equity 8	Bonds and notes 9	Money market instruments 10		
1999 Q1	5.5	0.0	2.5	0.0	3.3	1.5	3.0	0.0	1.3	-2.5	0.0	-0.3
Q2	6.6	0.0	-1.1	0.8	6.8	-4.6	-2.4	0.0	11.0	2.8	0.0	0.1

Source: ECB.

1) This item is under review.

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

**Table 8.6**
**International investment position**
**1. Net international investment position <sup>1)</sup>**
*(EUR billions (ECU billions in 1997); assets minus liabilities; end-of-period positions)*

	Total	Direct investment			Portfolio investment					Financial derivatives <sup>2)</sup>	Other investment				Reserve assets <sup>2)</sup>
		Total	Equity (including reinvested earnings)	Other capital	Total	Equity securities	Debt instruments <sup>2)</sup>				Total	Trade credits	Loans/currency and deposits <sup>2)</sup>	Other assets/liabilities	
							Total	Bonds and notes	Money market instruments						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1997	42.2	114.4	129.9	-15.5	-599.6	-361.8	-237.8	-210.7	-27.0	-5.7	169.8	80.0	0.4	89.3	363.3
1998	-132.4	164.6	175.4	-10.8	-609.1	-475.5	-133.6	-125.5	-8.2	-3.6	-13.8	86.5	-172.2	71.9	329.4

**2. Reserves and related assets of the Eurosystem <sup>3)</sup>**
*(EUR billions; end-of-period positions, unless otherwise indicated)*

	Reserve assets													Memo: related assets	
	Total	Monetary gold		Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims		Claims on euro area residents denominated in foreign currency
		In fine troy ounces (millions)	Total			Currency and deposits		Securities			Financial derivatives				
						With monetary authorities and the BIS	With banks	Equity	Bonds and notes	Money market instruments					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1998 Dec. <sup>4)</sup>	329.4	99.6	404.131	5.1	23.4	199.8	12.5	18.3	0.0	116.7	52.4	0.0	1.5	7.6	
1999 Jan.	337.3	101.3	404.084	5.3	23.0	206.5	-	-	-	-	-	0.0	1.2	7.6	
Feb.	339.6	105.3	404.084	2.3	23.0	208.7	-	-	-	-	-	0.0	0.2	9.6	
Mar.	348.6	105.1	404.084	3.8	23.3	215.2	-	-	-	-	-	0.0	1.3	10.4	
Apr.	352.1	109.3	404.084	5.4	23.8	212.4	-	-	-	-	-	0.0	1.2	11.7	
May	344.3	103.8	404.084	4.9	23.9	210.4	-	-	-	-	-	0.0	1.2	12.7	
June	346.9	102.0	403.730	3.9	25.1	214.8	-	-	-	-	-	0.0	1.1	12.6	
July	339.4	96.5	403.730	3.6	24.3	213.8	-	-	-	-	-	0.0	1.2	12.7	
Aug.	340.9	96.9	403.730	3.7	24.1	215.0	-	-	-	-	-	0.0	1.1	12.4	
Sep.	353.5	113.2	403.730	3.7	23.6	212.2	-	-	-	-	-	0.0	0.9	12.9	
Oct.	357.6	115.5	403.731	3.7	23.5	214.0	-	-	-	-	-	0.0	0.8	13.5	
Nov.	362.5	116.5	403.730	3.8	23.5	217.9	-	-	-	-	-	0.0	0.9	12.5	

Source: ECB.

1) Obtained by aggregating national data.

2) Data for end-1997 are not closely comparable with those for end-1998.

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

4) Position as at 1 January 1999.

## 9 External trade in goods of the euro area

**Table 9**

### 1. Exports <sup>1)</sup>

(EUR billions (ECU billions to end-1998); f.o.b. value)

	Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manu- factured articles	Machinery, transport equipment	Other	Export trade indices 1995 = 100										
									1	2	3	4	5	6	7	8	Value <sup>2)</sup>	Volume <sup>2)</sup>	Unit value
																	9	10	11
1996	669.7	49.2	14.2	13.1	85.5	195.5	295.9	16.3	107.6	104.7	102.8								
1997	762.8	52.8	16.3	14.4	99.0	216.6	342.8	20.9	122.5	115.9	105.7								
1998	794.3	53.6	15.7	12.6	104.2	221.2	370.2	16.9	127.6	119.7	106.6								
1997 Q1	170.7	12.0	3.8	3.7	22.6	48.9	74.7	5.0	109.7	104.2	105.3								
Q2	191.8	13.4	4.1	3.6	25.1	53.9	86.4	5.3	123.3	117.3	105.1								
Q3	193.5	13.0	4.2	3.4	25.6	55.6	86.5	5.1	124.3	116.6	106.6								
Q4	206.8	14.4	4.2	3.7	25.6	58.2	95.1	5.5	132.9	125.7	105.7								
1998 Q1	194.1	13.2	4.1	3.4	26.6	54.7	87.8	4.2	124.7	115.7	107.8								
Q2	204.0	14.0	3.9	3.3	26.9	56.5	95.2	4.2	131.1	122.8	106.8								
Q3	195.2	12.9	3.9	3.0	25.7	55.1	90.6	4.2	125.5	117.8	106.5								
Q4	200.9	13.5	3.8	2.9	24.9	55.0	96.5	4.3	129.1	122.5	105.4								
1999 Q1	187.4	12.1	3.8	2.6	25.8	50.9	86.4	5.9	120.4	112.3	107.3								
Q2	202.4	13.2	3.9	3.1	27.9	54.7	93.7	6.0	130.1	119.3	109.0								
Q3	204.4	.	.	.	.	.	.	.	131.3	.	.								
1998 Jan.	58.5	4.1	1.3	1.2	8.4	16.3	25.9	1.3	112.7	104.6	107.7								
Feb.	63.7	4.3	1.4	1.0	8.6	18.1	28.9	1.4	122.7	113.8	107.8								
Mar.	72.0	4.8	1.5	1.2	9.6	20.3	33.0	1.5	138.7	128.5	108.0								
Apr.	68.0	4.7	1.3	1.1	9.2	19.0	31.2	1.5	131.0	122.6	106.9								
May	65.7	4.6	1.3	1.1	8.6	18.2	30.6	1.4	126.7	118.5	106.9								
June	70.4	4.7	1.3	1.1	9.1	19.3	33.5	1.4	135.6	127.1	106.7								
July	72.9	4.6	1.3	1.1	9.2	21.1	34.1	1.4	140.5	131.4	106.9								
Aug.	56.3	4.0	1.2	0.9	7.7	15.5	25.6	1.3	108.6	102.5	105.9								
Sep.	66.0	4.3	1.3	0.9	8.8	18.4	30.8	1.5	127.3	119.4	106.6								
Oct.	68.9	4.6	1.3	1.0	8.6	19.6	32.4	1.4	132.9	125.6	105.8								
Nov.	66.9	4.5	1.3	1.0	8.1	18.1	32.4	1.5	128.9	123.0	104.8								
Dec.	65.1	4.4	1.2	0.9	8.2	17.3	31.7	1.4	125.6	119.0	105.5								
1999 Jan.	54.5	3.6	1.2	0.8	7.8	14.6	24.9	1.6	105.0	98.3	106.8								
Feb.	60.1	3.9	1.2	0.8	8.3	16.5	27.3	2.1	115.9	108.5	106.9								
Mar.	72.8	4.6	1.4	1.0	9.8	19.8	34.1	2.2	140.4	130.0	108.0								
Apr.	65.8	4.3	1.3	1.0	9.1	17.7	30.6	1.8	126.8	116.4	109.0								
May	63.6	4.4	1.3	1.0	9.0	17.3	28.8	1.9	122.6	112.9	108.6								
June	73.0	4.5	1.3	1.1	9.8	19.7	34.3	2.3	140.7	128.6	109.4								
July	75.1	4.4	1.4	1.1	10.1	20.5	35.3	2.4	144.8	131.0	110.5								
Aug.	60.2	4.0	1.3	1.1	9.2	15.8	27.0	1.7	116.0	105.6	109.9								
Sep.	69.1	.	.	.	.	.	.	.	133.2	.	.								

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

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

2) ECB calculations based on Eurostat data.

**Table 9****2. Imports <sup>1)</sup>***(EUR billions (ECU billions to end-1998); c.i.f. value)*

	Total 1	Food, drink, tobacco 2	Raw materials 3	Energy 4	Chemicals 5	Other manu- factured articles 6	Machinery, transport equipment 7	Other 8	Import trade indices 1995 = 100		
									Value <sup>2)</sup> 9	Volume <sup>2)</sup> 10	Unit value 11
1996	593.9	46.6	36.5	71.6	54.1	167.0	193.6	24.6	105.5	102.9	102.6
1997	674.2	49.7	41.3	81.2	62.0	188.1	228.8	23.1	119.8	110.3	108.6
1998	712.4	50.8	41.2	62.1	67.6	201.5	269.0	20.1	126.6	123.3	102.7
1997 Q1	159.1	11.4	9.7	21.2	14.7	44.6	51.8	5.8	113.1	106.0	106.7
Q2	168.0	12.6	11.0	18.6	16.0	46.5	57.5	5.7	119.4	111.4	107.2
Q3	166.6	12.2	10.0	20.0	15.2	48.9	55.6	4.7	118.5	106.9	110.8
Q4	180.4	13.5	10.6	21.4	16.1	48.2	63.8	6.8	128.2	117.0	109.6
1998 Q1	180.8	12.7	10.9	17.5	17.6	51.5	65.3	5.3	128.5	119.8	107.3
Q2	179.6	12.7	11.1	15.9	17.2	50.3	67.0	5.3	127.7	121.9	104.7
Q3	171.4	12.3	9.7	14.7	16.4	50.5	63.2	4.6	121.8	119.7	101.8
Q4	180.6	13.1	9.6	13.9	16.4	49.1	73.5	4.9	128.3	131.8	97.4
1999 Q1	177.1	11.7	9.1	13.4	16.9	49.8	70.3	5.7	125.9	127.4	98.8
Q2	187.7	12.4	10.0	16.8	17.6	50.3	74.6	6.0	133.4	128.4	103.9
Q3	186.8	.	.	.	.	.	.	.	132.8	.	.
1998 Jan.	58.0	4.1	3.5	6.2	5.6	16.5	20.3	1.7	123.7	115.0	107.6
Feb.	58.2	4.0	3.5	5.7	5.5	16.7	20.9	1.9	124.2	115.1	107.9
Mar.	64.5	4.6	3.8	5.6	6.5	18.3	24.1	1.7	137.7	129.1	106.6
Apr.	60.2	4.4	3.7	5.4	5.7	16.8	22.5	1.7	128.4	121.7	105.5
May	57.1	4.0	3.5	5.5	5.6	15.8	21.1	1.5	121.9	116.2	104.9
June	62.3	4.2	3.9	4.9	5.9	17.8	23.4	2.1	132.8	128.0	103.7
July	59.4	4.4	3.6	4.9	5.9	17.8	21.1	1.6	126.6	123.9	102.2
Aug.	50.1	3.7	2.8	4.7	4.7	14.9	18.0	1.3	106.9	105.8	101.1
Sep.	61.9	4.2	3.3	5.0	5.8	17.9	24.0	1.7	132.0	129.6	101.9
Oct.	62.5	4.4	3.3	5.0	5.8	17.3	25.0	1.8	133.3	134.0	99.5
Nov.	59.6	4.2	3.1	4.4	5.4	16.2	24.7	1.6	127.2	131.6	96.6
Dec.	58.4	4.5	3.1	4.5	5.3	15.7	23.9	1.5	124.6	129.8	96.0
1999 Jan.	54.4	3.6	2.9	4.5	5.1	15.4	21.1	1.8	116.1	118.3	98.1
Feb.	55.8	3.7	2.9	4.1	5.4	16.0	21.8	2.0	119.0	120.9	98.4
Mar.	66.8	4.4	3.3	4.9	6.4	18.5	27.4	2.0	142.5	142.8	99.8
Apr.	61.0	4.0	3.3	5.6	5.7	15.9	24.4	2.0	130.1	127.2	102.3
May	61.8	4.1	3.3	5.7	5.7	16.4	24.7	1.9	131.8	126.0	104.6
June	64.8	4.3	3.5	5.4	6.1	18.0	25.5	2.1	138.3	132.0	104.7
July	63.0	4.1	3.3	6.5	5.6	18.0	23.5	2.0	134.4	124.4	108.0
Aug.	57.2	3.8	2.6	6.8	5.1	15.9	21.2	1.8	121.9	111.5	109.3
Sep.	66.6	.	.	.	.	.	.	.	142.0	.	.

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

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.2). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998.

2) ECB calculations based on Eurostat data.

**Table 9****3. Trade balance <sup>1)</sup>***(EUR billions (ECU billions to end-1998); exports (f.o.b.) - imports (c.i.f.))*

	Total 1	Food, drink, tobacco 2	Raw materials 3	Energy 4	Chemicals 5	Other manufactured articles 6	Machinery, transport equipment 7	Other 8
1996	75.8	2.7	-22.3	-58.5	31.4	28.5	102.3	-8.3
1997	88.6	3.2	-25.0	-66.8	37.0	28.5	114.0	-2.2
1998	81.9	2.8	-25.5	-49.5	36.5	19.7	101.1	-3.2
1997 Q1	11.6	0.6	-5.8	-17.5	7.9	4.3	22.8	-0.8
Q2	23.8	0.7	-6.9	-15.0	9.1	7.4	28.9	-0.4
Q3	26.8	0.9	-5.9	-16.6	10.4	6.8	30.9	0.3
Q4	26.3	1.0	-6.4	-17.7	9.5	10.0	31.3	-1.3
1998 Q1	13.3	0.5	-6.7	-14.1	9.0	3.2	22.5	-1.1
Q2	24.5	1.3	-7.2	-12.6	9.7	6.1	28.2	-1.1
Q3	23.8	0.5	-5.8	-11.7	9.3	4.5	27.4	-0.5
Q4	20.4	0.4	-5.7	-11.0	8.5	5.8	23.0	-0.7
1999 Q1	10.4	0.4	-5.3	-10.8	8.9	1.0	16.1	0.2
Q2	14.7	0.8	-6.1	-13.7	10.3	4.4	19.1	-0.1
Q3	17.6	.	.	.	.	.	.	.
1998 Jan.	0.4	-0.1	-2.2	-5.0	2.8	-0.2	5.6	-0.4
Feb.	5.4	0.4	-2.2	-4.7	3.1	1.4	8.0	-0.5
Mar.	7.4	0.2	-2.3	-4.4	3.1	2.0	8.9	-0.1
Apr.	7.8	0.3	-2.4	-4.3	3.4	2.2	8.7	-0.2
May	8.6	0.5	-2.3	-4.5	3.1	2.4	9.4	-0.2
June	8.1	0.5	-2.6	-3.8	3.2	1.5	10.1	-0.7
July	13.5	0.2	-2.2	-3.9	3.3	3.3	13.0	-0.2
Aug.	6.2	0.3	-1.6	-3.8	3.0	0.7	7.6	0.0
Sep.	4.1	0.1	-2.0	-4.1	3.0	0.5	6.8	-0.3
Oct.	6.4	0.2	-2.0	-4.0	2.9	2.2	7.5	-0.4
Nov.	7.3	0.3	-1.9	-3.5	2.7	2.0	7.8	-0.1
Dec.	6.7	-0.2	-1.9	-3.5	2.9	1.6	7.8	-0.1
1999 Jan.	0.0	0.0	-1.8	-3.7	2.6	-0.8	3.8	-0.2
Feb.	4.3	0.2	-1.7	-3.2	2.8	0.5	5.6	0.2
Mar.	6.0	0.1	-1.9	-3.9	3.4	1.3	6.7	0.2
Apr.	4.8	0.2	-1.9	-4.6	3.4	1.7	6.2	-0.2
May	1.8	0.3	-2.0	-4.8	3.3	0.9	4.1	0.0
June	8.2	0.3	-2.1	-4.3	3.6	1.7	8.8	0.2
July	12.1	0.2	-1.9	-5.4	4.5	2.4	11.9	0.4
Aug.	3.0	0.2	-1.3	-5.7	4.1	-0.1	5.9	-0.1
Sep.	2.5	.	.	.	.	.	.	.

*Source: Eurostat; the commodity breakdown is in accordance with the SITC Rev. 3.**1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.1). Part of the difference arises from the inclusion of insurance and freight services in the recording of goods imported, which accounted for about 3.8% of the value of imports (c.i.f.) in 1998.*

# 10 Exchange rates

**Table 10**

## Exchange rates

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

	Effective exchange rate of the euro <sup>1)</sup>		Bilateral ECU or euro exchange rates <sup>2)</sup>					
	Nominal 1	Real 2	US dollar 3	Japanese yen 4	Swiss franc 5	Pound sterling 6	Swedish krona 7	Danish krone 8
1996	107.9	108.8	1.270	138.1	1.568	0.814	8.51	7.36
1997	99.1	99.4	1.134	137.1	1.644	0.692	8.65	7.48
1998	101.5	101.3	1.121	146.4	1.622	0.676	8.92	7.50
1999	95.7	95.7	1.066	121.3	1.600	0.659	8.81	7.44
1998 Q4	104.2	103.8	1.177	140.6	1.600	0.702	9.38	7.44
1999 Q1	100.0	100.0	1.122	130.7	1.599	0.687	8.98	7.44
Q2	96.1	96.0	1.057	127.7	1.600	0.658	8.90	7.43
Q3	94.6	94.7	1.049	118.7	1.602	0.655	8.71	7.44
Q4	92.2	92.0	1.038	108.4	1.600	0.636	8.65	7.44
1998 Dec.	103.4	103.2	1.172	137.4	1.594	0.702	9.45	7.45
1999 Jan.	102.0	101.8	1.161	131.3	1.605	0.703	9.08	7.44
Feb.	99.9	99.9	1.121	130.8	1.598	0.689	8.91	7.44
Mar.	98.3	98.3	1.088	130.2	1.595	0.671	8.94	7.43
Apr.	97.1	96.9	1.070	128.2	1.602	0.665	8.91	7.43
May	96.6	96.5	1.063	129.7	1.603	0.658	8.97	7.43
June	94.7	94.7	1.038	125.3	1.595	0.650	8.83	7.43
July	94.8	95.1	1.035	123.7	1.604	0.658	8.74	7.44
Aug.	95.4	95.6	1.060	120.1	1.600	0.660	8.75	7.44
Sep.	93.6	93.4	1.050	112.4	1.602	0.647	8.63	7.43
Oct.	94.4	94.2	1.071	113.5	1.594	0.646	8.73	7.43
Nov.	92.0	91.9	1.034	108.2	1.605	0.637	8.63	7.44
Dec.	90.1	90.0	1.011	103.7	1.601	0.627	8.59	7.44
% ch. vs. <sup>3)</sup> prev. month								
1999 Dec.	-2.1	-2.1	-2.2	-4.2	-0.2	-1.6	-0.5	0.1
% ch. vs. <sup>3)</sup> prev. year								
1999 Dec.	-12.9	-12.8						

	Bilateral ECU or euro exchange rates <sup>2)</sup>						
	Greek drachma 9	Norwegian krone 10	Canadian dollar 11	Australian dollar 12	Hong Kong dollar 13	Korean won 14	Singapore dollar 15
1996	305.5	8.20	1.731	1.623	9.68	1,007.9	1.765
1997	309.3	8.02	1.569	1.528	8.75	1,069.8	1.678
1998	330.7	8.47	1.665	1.787	8.69	1,568.9	1.876
1999	325.8	8.31	1.584	1.652	8.27	1,267.3	1.806
1998 Q4	331.5	8.82	1.814	1.887	9.16	1,516.6	1.942
1999 Q1	322.7	8.60	1.696	1.770	8.69	1,342.6	1.911
Q2	325.0	8.24	1.557	1.618	8.19	1,258.8	1.810
Q3	326.1	8.22	1.558	1.613	8.14	1,252.8	1.772
Q4	329.2	8.19	1.528	1.613	8.07	1,217.4	1.737
1998 Dec.	328.8	8.91	1.807	1.893	9.11	1,426.3	1.941
1999 Jan.	323.6	8.65	1.765	1.839	8.99	1,362.4	1.950
Feb.	322.0	8.65	1.679	1.751	8.68	1,330.2	1.905
Mar.	322.5	8.51	1.651	1.726	8.43	1,336.2	1.881
Apr.	325.5	8.32	1.594	1.668	8.30	1,292.2	1.834
May	325.2	8.23	1.553	1.605	8.24	1,272.1	1.820
June	324.2	8.17	1.524	1.580	8.05	1,212.6	1.775
July	325.0	8.18	1.540	1.576	8.03	1,229.4	1.756
Aug.	326.4	8.26	1.583	1.645	8.23	1,269.1	1.779
Sep.	327.0	8.23	1.552	1.619	8.15	1,260.1	1.781
Oct.	329.2	8.29	1.581	1.641	8.32	1,289.9	1.793
Nov.	328.7	8.19	1.516	1.618	8.04	1,215.9	1.727
Dec.	329.7	8.10	1.491	1.580	7.86	1,149.6	1.694
% ch. vs. <sup>3)</sup> prev. month							
1999 Dec.	0.3	-1.1	-1.7	-2.4	-2.2	-5.5	-1.9

Source: ECB.

- 1) ECB calculations; based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 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 (HICP for the euro area and the other EU Member States). Where CPI data are not yet available, estimates are used.
- 2) To December 1998, rates for the ECU (source BIS); from January 1999, rates for the euro.
- 3) The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year (for the effective exchange rate only). A positive change denotes an appreciation of the euro.
- 4) As the ECB does not provide official reference rates, indicative rates are shown.





# 12 Economic and financial developments outside the EU

**Table 12.1**

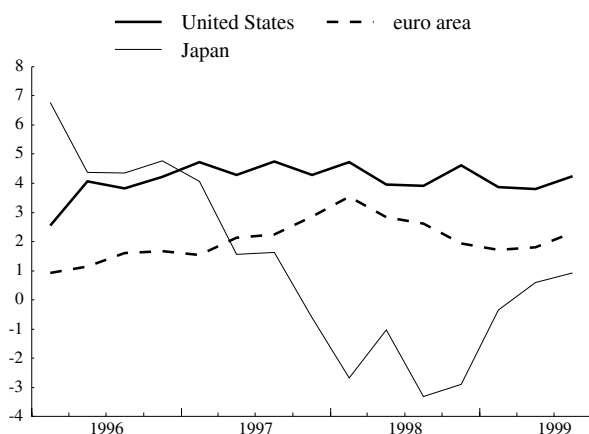
## Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs <sup>1)</sup>	Real GDP	Industrial production index <sup>1)</sup>	Unemployment rate as a % of labour force (s.a.)	M2 <sup>2)</sup>	3-month interbank deposit rate <sup>3)</sup> as a % per annum	10-year government bond yield <sup>3)</sup> as a % per annum	Exchange rate <sup>4)</sup> as national currency per ECU or euro	Fiscal deficit (-)/surplus (+) as a % of GDP	Gross public debt <sup>5)</sup> as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
<b>United States</b>											
1996	2.9	-2.3	3.7	4.7	5.4	4.8	5.43	6.54	1.270	-2.2	58.8
1997	2.3	0.0	4.5	7.0	4.9	5.0	5.62	6.45	1.134	-0.9	56.5
1998	1.6	0.7	4.3	4.9	4.5	7.4	5.00	5.33	1.121	0.4	53.5
1999	2.1	-0.9	-22.5	3.9	4.2	7.2	5.41	5.64	1.066	.	.
1998 Q3	1.6	1.4	3.9	4.2	4.5	7.3	5.20	5.27	1.118	0.6	53.7
Q4	1.5	-0.8	4.6	3.7	4.4	8.4	5.00	4.72	1.177	0.7	53.5
1999 Q1	1.7	-1.6	3.9	3.5	4.3	8.4	4.99	5.00	1.122	0.8	53.1
Q2	2.1	-1.4	3.8	4.1	4.3	7.9	5.04	5.54	1.057	1.0	51.4
Q3	2.3	-0.8	4.2	4.4	4.2	7.5	5.44	5.88	1.049	1.2	50.6
Q4	2.6	.	.	4.3	4.1	5.6	6.15	6.13	1.038	.	.
1999 July	2.1	-	-	5.4	4.3	7.8	5.30	5.80	1.035	-	-
Aug.	2.3	-	-	3.7	4.2	7.6	5.46	5.94	1.060	-	-
Sep.	2.6	-	-	4.1	4.2	7.0	5.56	5.91	1.050	-	-
Oct.	2.6	-	-	4.1	4.1	6.5	6.20	6.10	1.071	-	-
Nov.	2.6	-	-	4.6	4.1	6.0	6.09	6.03	1.034	-	-
Dec.	.	-	-	.	.	.	6.15	6.26	1.011	-	-
<b>Japan</b>											
1996	0.1	-1.9	5.1	2.3	3.4	3.3	0.31	3.03	138.1	-4.2	-
1997	1.7	-2.2	1.6	3.6	3.4	3.1	0.36	2.15	137.1	-3.4	-
1998	0.6	6.3	-2.5	-7.1	4.1	4.4	0.18	1.30	146.4	-6.0	-
1999	.	.	.	.	.	.	0.22	1.75	121.3	.	-
1998 Q3	-0.2	7.6	-3.3	-8.5	4.3	4.2	0.12	1.14	156.3	-	-
Q4	0.5	5.1	-2.9	-6.8	4.4	4.5	0.18	1.03	140.6	-	-
1999 Q1	-0.1	3.6	-0.4	-4.2	4.6	4.1	0.31	1.96	130.7	-	-
Q2	-0.3	-1.3	0.6	-1.0	4.8	4.1	0.13	1.50	127.7	-	-
Q3	0.0	-4.6	0.9	2.6	4.7	3.6	0.13	1.78	118.7	-	-
Q4	.	.	.	.	.	.	0.31	1.78	108.4	-	-
1999 July	-0.1	-2.6	-	0.2	4.9	3.9	0.12	1.69	123.7	-	-
Aug.	0.3	-6.9	-	5.2	4.7	3.5	0.13	1.89	120.1	-	-
Sep.	-0.2	-4.0	-	2.7	4.6	3.3	0.14	1.75	112.4	-	-
Oct.	-0.7	.	-	1.3	4.6	3.6	0.24	1.79	113.5	-	-
Nov.	-1.2	.	-	.	4.5	3.0	0.31	1.81	108.2	-	-
Dec.	.	.	-	.	.	.	0.39	1.73	103.7	-	-

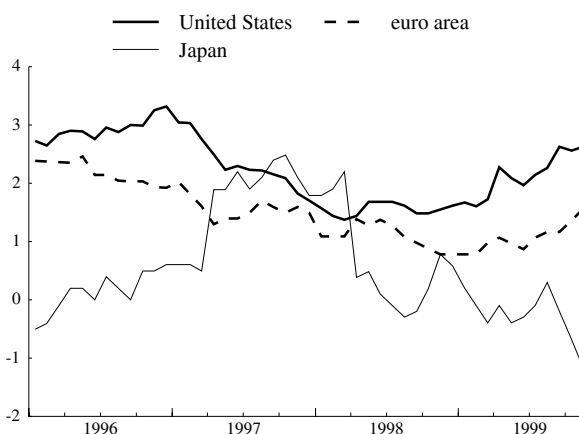
### Real gross domestic product

(annual percentage changes; quarterly)



### Consumer price indices

(annual percentage changes; monthly)



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

1) Manufacturing.

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

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

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)

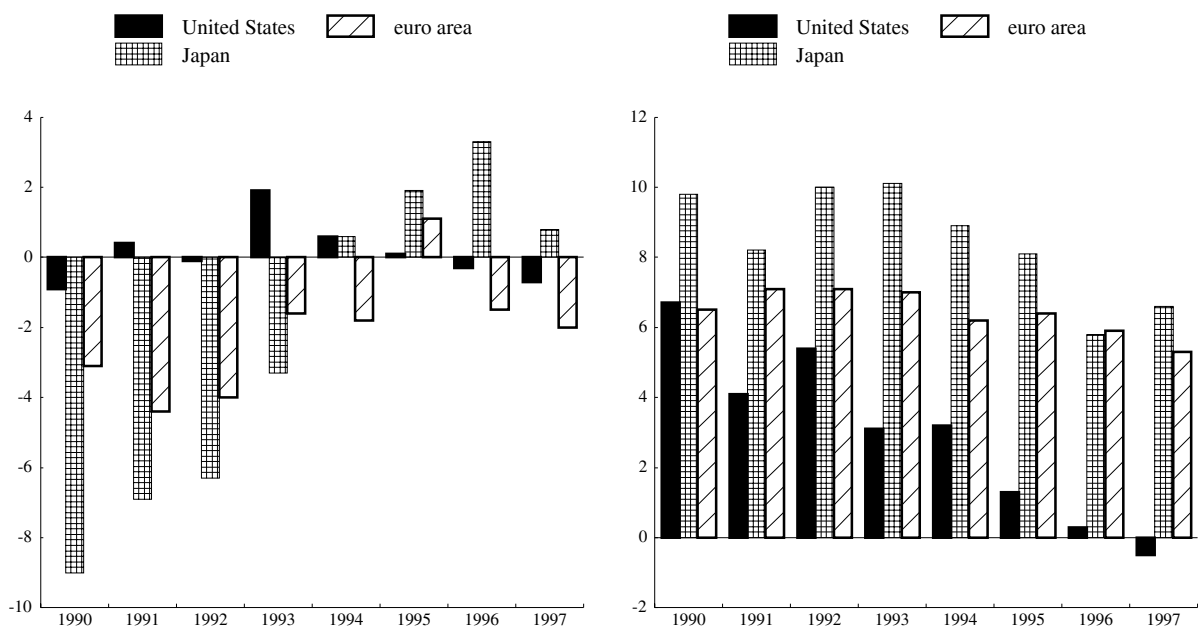
	National saving and investment			Investment and financing of non-financial corporations					Investment and financing of households <sup>1)</sup>				
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial 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
<b>United States</b>													
1995	17.0	18.7	-1.3	8.6	7.9	5.4	8.4	5.3	2.5	11.7	6.3	13.6	4.9
1996	17.3	19.1	-1.4	8.7	8.3	4.8	8.7	5.1	1.2	11.8	5.2	12.9	4.9
1997	18.3	19.8	-1.5	9.1	8.3	3.5	8.8	4.2	2.2	11.6	4.0	12.5	4.5
1998	18.8	20.5	-2.3	9.5	8.7	3.1	8.7	4.2	1.7	12.1	5.4	12.1	5.7
1997 Q4	18.6	19.9	-1.7	8.9	8.1	2.7	8.8	3.3	3.3	11.6	3.5	12.5	4.1
1998 Q1	18.9	20.6	-1.8	9.8	8.6	4.1	8.8	5.8	3.3	11.9	3.8	12.3	5.8
Q2	18.6	20.3	-2.2	9.3	8.7	3.3	8.7	4.0	3.9	12.1	8.9	12.1	5.6
Q3	18.9	20.6	-2.6	9.4	8.5	4.1	8.7	4.4	0.7	12.0	5.1	12.0	5.4
Q4	18.8	20.7	-2.6	9.5	8.9	1.1	8.6	2.6	-0.9	12.3	3.6	12.2	6.1
1999 Q1	19.0	20.8	-2.8	9.4	8.9	6.3	8.7	7.8	6.0	12.5	3.0	11.8	6.5
Q2	18.7	20.5	-3.3	9.6	9.4	4.2	8.7	5.6	-0.5	12.8	6.9	11.6	6.7
Q3	18.7	20.8	-3.6	9.7	9.2	4.4	8.7	5.9	3.4	12.6	5.9	11.2	6.1
<b>Japan</b>													
1995	30.8	28.6	2.1	14.9	14.9	3.0	13.5	2.3	0.5	5.3	10.2	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
1998	.	.	.	.	.	-6.9	.	-8.8	-1.4	.	5.9	.	-0.3
1997 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	.	.	-16.0	.	-18.6	-0.7	.	-4.3	.	3.2
Q2	.	24.1	.	.	.	-25.6	.	-10.4	0.4	.	11.5	.	-6.3
Q3	.	26.7	.	.	.	2.6	.	-2.0	1.3	.	2.7	.	0.8
Q4	.	.	.	.	.	9.6	.	-4.4	-6.3	.	13.1	.	1.0
1999 Q1	.	.	.	.	.	3.6	.	-17.7	-3.3	.	-4.4	.	12.5
Q2	.	.	.	.	.	-13.4	.	-3.0	2.1	.	15.9	.	-3.5
Q3	.	.	.	.	.	.	.	.	.	.	.	.	.

**Net lending of non-financial corporations**

(as a percentage of GDP)

**Net lending of households <sup>1)</sup>**

(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.

# Technical notes

## Relating to Table 2.4

### Seasonal adjustment of the euro area monetary aggregates

Multiplicative versions of X-12-ARIMA (version 0.2.2<sup>1</sup>) and TRAMO/SEATS<sup>2</sup> (beta version, July 1998) are used. For technical reasons, the results of X-12-ARIMA are published as the official figures. Seasonal adjustment for monetary aggregates includes a day-of-the-week adjustment for some components of M2. The seasonal adjustment of M3 is carried out indirectly by aggregating the seasonally adjusted series of M1, M2 less M1, and M3 less M2 to fulfil the additivity constraint.

Seasonal factors are estimated for the index of adjusted stocks (Table 2.4.1). They are then applied to the levels expressed in EUR billions and to the adjustments due to reclassifications, other revaluations, etc., yielding seasonally adjusted values for the levels, the adjustments, and thus for the flows.

### Calculation of growth rates

Growth rates may be calculated (a) from flows, or (b) from the index of adjusted stocks.

If  $F_t$  represents the flow in month  $t$ ,  $L_t$  the level outstanding at the end of month  $t$ ,  $X_t$  the rate of change in month  $t$  defined as  $X_t = (F_t \div L_{t-1} + 1)$ , and  $I_t$  the index of adjusted stocks in month  $t$ , the annual percentage change  $a_t$  – i.e. the change in the latest 12 months – may be calculated as follows:

$$(a) \quad a_t = ((X_t * X_{t-1} * X_{t-2} * X_{t-3} * X_{t-4} * X_{t-5} * X_{t-6} * X_{t-7} * X_{t-8} * X_{t-9} * X_{t-10} * X_{t-11}) - 1) * 100$$

$$(b) \quad a_t = (I_t \div I_{t-12} - 1) * 100$$

Roundings may give rise to differences from the annual percentage changes shown in Table 2.4. The index of adjusted stocks is available with a higher level of precision on the ECB's Web site (<http://www.ecb.int>) on the "Euro area statistics – download" page (in csv file format), from which the exact percentage changes shown in Table 2.4 may be calculated.

1 For details see Findley, D., Monsell, B., Bell, W., Otto, M., and Chen, B.C. (1998), "New Capabilities and Methods of the X-12-ARIMA Seasonal Adjustment Program", *Journal of Business and Economic Statistics*, 16, 2, 127-152, or "X-12-ARIMA Reference Manual Version 0.2.2", (December 1998), *Time Series Staff, Bureau of the Census, Washington, D.C.*

2 For details see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", *Bank of Spain, Working Paper No. 9628, Madrid.*

## 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.<sup>1</sup>

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 which have adopted the single currency, pre-1999 amounts converted from the participating currencies into ECU at current ECU exchange rates are affected by movements in the currencies of Member States which have not adopted the euro. To avoid this effect in the monetary statistics, the pre-1999 data in Tables 2.1 to 2.6 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless indicated otherwise, price and cost statistics before 1999 are based on the data expressed in national currency terms.

Methods of aggregation and/or consolidation (including cross-country consolidation) have been used as appropriate.

As a general rule, the cut-off date for the statistics included in the ECB Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, it was 4 January 2000.

Recent data are often provisional and may be revised. Discrepancies between totals and their components may arise from rounding.

### Monetary policy and financial statistics

Tables 1.1 to 1.5 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations, statistics relating to minimum reserves, and the banking system’s liquidity position. Monetary data relating to Monetary Financial Institutions (MFIs), including the Eurosystem, are shown in Tables 2.1 to 2.3. Table 2.3 is consolidated; inter-MFI positions within the euro area are not shown, but any difference between the sum total of such claims and liabilities as recorded is shown in column 13. Table 2.4 sets out monetary aggregates drawn from the consolidated MFI balance sheet; they also include some (monetary) liabilities of central government. Table 2.5 shows a quarterly sectoral and maturity analysis of loans by MFIs to euro area residents. Table 2.6 shows a quarterly currency analysis of certain MFI balance sheet items. More quarterly detail will be available shortly. 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” (ECB, November 1999). The “Money and Banking Statistics Compilation Guide” (EMI, April 1998) explains recommended practices to be followed by the NCBs. From 1 January 1999 the statistical information is collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16).

Statistics on money market interest rates, long-term government bond yields and stock market indices (Tables 3.1 to 3.3) are produced by the ECB using data from wire services. For details concerning the statistics on retail bank interest

<sup>1</sup> 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).

rates (Table 3.4), see the footnote at the bottom of the relevant page.

Statistics on securities issues, redemptions and amounts outstanding are shown in Table 3.5. More detailed data will become available shortly.

### **Prices and real economy indicators**

The data presented in the ECB Monthly Bulletin are, with a few exceptions, produced by the European Commission (mainly Eurostat) and national statistical authorities. Euro area results are obtained by aggregating data for individual countries. As far as possible, the data are harmonised and comparable. However, the availability of comparable data is, as a general rule, better for the more recent periods than for earlier periods.

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. It is based on national HICPs that follow the same methodology in all euro area countries. Estimates for periods before 1995 based on national consumer price indices are not fully comparable.

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 has begun to pave the way for fully comparable data, including quarterly summary accounts, across the euro area. Before 1999 the deflators of GDP in Table 4.2.2 are derived from national data in domestic currency. National accounts in this issue are based mainly on the ESA 95.

Table 5.2 shows selected other real economy indicators. The implementation of Council Regulation (EC) No. 1165/98 of 19 May 1998 concerning short-term statistics will enlarge the range of available euro area data.

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

Employment data (Table 5.4) are based on the ESA 95. Since coverage of the euro area was not complete in time for this issue, some data are ECB estimates based on the information available. Unemployment rates conform to International Labour Organization (ILO) guidelines.

### **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 this year.

### **General government fiscal position**

The general government fiscal position in the euro area is presented in Table 7 by reference to general government receipts, expenditure, saving, deficit and debt as a percentage of GDP. These data are aggregated by the ECB from harmonised data provided by the NCBs.

In addition, general 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.

### **Balance of payments and international investment position of the euro area (including reserves), trade in goods and exchange rates**

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.5) and international investment position (i.i.p.) statistics generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of 1 December 1998 (ECB/1998/17) on the statistical reporting requirements of the European Central Bank, and to Eurostat's documentation. The common methodology agreed between the ECB and the European Commission (Eurostat) and the aggregation method used for the euro area balance of payments statistics were explained on pages 26-27 of the May 1999 issue of the Monthly Bulletin.

The euro area balance of payments is compiled by the ECB. Data up to December 1998 are expressed in ECU. The recent monthly figures for balance of payments statistics should be regarded as provisional. These data are revised with the publication of the detailed quarterly balance of payments data.

The euro area i.i.p. (Table 8.6) is compiled on a net basis by aggregating national data. The i.i.p. is valued at current market prices with the exception of direct investment stocks, where book values are used to a large extent. Data for end-1997, especially for reserve assets, are not fully comparable with those for end-1998. The methodology used for the compilation of the i.i.p. was explained on page 56 of the December 1999 issue of the Monthly Bulletin.

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.6.2. Corresponding summary net flows are shown in Table 8.1 with quarterly detail in Table 8.5.3. Data before end-1998 are compiled by aggregating figures following national definitions and include instruments issued by other residents

of the euro area; they are therefore not fully comparable with later data.

Table 9 gives data on euro area external trade in goods, and indices – value, volume and unit value – for total exports and imports. The value index is calculated by the ECB. The volume index is derived from the unit value index provided by Eurostat and the value index. Owing to differences in definitions, classification, coverage and time of recording, external trade data, in particular imports, are not fully comparable with the goods item in the balance of payments statistics (Tables 8.1 and 8.2).

Table 10 shows nominal and real effective exchange rate indices for the euro compiled by the ECB. The bilateral rates shown are those against the 13 currencies used in the calculation. For all except the Hong Kong and Singapore dollars and the Korean won the bilateral rates are daily reference rates published by the ECB. Box 5 on pages 29-31 of the October 1999 issue of the Monthly Bulletin gives more information about the new effective exchange rate index.

Detailed methodological notes on euro area balance of payments and i.i.p. statistics, external trade in goods of the euro area and exchange rates are available on the ECB's Web site. In addition, a complete set of balance of payments, external trade in goods and exchange rate statistics, including the historical data at the highest frequencies available – which are not shown in the Monthly Bulletin – are available in a downloadable format (csv files) on the ECB's Web site.

### **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**

“-”	Data do not exist.
“.”	Data are not yet available.
“...”	nil or negligible
“billion”	10 <sup>9</sup>
<sup>(p)</sup>	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 109I (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, Denmark's 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  $\pm 2.25\%$  will be observed around the euro central rate for the Danish krone. The standard fluctuation band of  $\pm 15\%$  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%.

## 12 January 1999

Following the decision of the Governing Council of the ECB on 22 December 1998, the ECB announces that the first longer-term refinancing operations of the Eurosystem will be conducted as variable rate tenders using the single rate method of allotment. With a view to phasing in the longer-term refinancing operations, the first such operation is conducted through three parallel tenders with three different maturities, namely 25 February, 25 March and 29 April 1999. The ECB also announces that the intention is to allot an amount of €15 billion in each of these parallel tenders. For the subsequent longer-term refinancing operations in the first three months of 1999, the intention is to allot an unchanged amount of €15 billion per operation.



### **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%.

### **18 February 1999**

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 24 February and 3 March 1999 the same conditions will apply as for the previous 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%.

### **4 March 1999**

The Governing Council of the ECB decides that for the main refinancing operations to be settled

on 10 and 17 March 1999 the same conditions will apply as for the previous 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%. The Governing Council also decides that for forthcoming longer-term refinancing operations of the Eurosystem the multiple rate method of allotment will be applied (starting from the operation with a settlement date of 25 March 1999) until otherwise indicated.

### **18 March 1999**

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 24 and 31 March and 7 April 1999 the same conditions will apply as for the previous 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%.

### **8 April 1999**

The Governing Council of the ECB decides to reduce the interest rate on the main refinancing operations by 0.5 percentage point to 2.5%, starting with the operation to be settled on 14 April 1999. In addition, it decides to lower the interest rate on the marginal lending facility by 1 percentage point to 3.5% and the interest rate on the deposit facility by 0.5 percentage point to 1.5%, both with effect from 9 April 1999.

### **22 April 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively. In addition, the

Governing Council announces that for the longer-term refinancing operations to be settled during the next six months, the intention is to continue to allot an amount of €15 billion per operation.

### **6 May 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

### **20 May 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively. The Governing Council also decides to change the maturity of the longer-term refinancing operation scheduled to be settled on 30 September 1999. The redemption date of this operation will be brought forward from 30 December to 23 December 1999. Correspondingly, the longer-term refinancing operation which was originally scheduled to be announced on 27 December 1999 and to be allotted and settled on 30 December 1999 will be announced on 21 December, allotted on 22 December and settled on 23 December 1999. The rescheduling of operations is intended to alleviate the working procedures for financial market participants at the turn of the year.

### **2 June, 17 June, 1 July, 15 July, 29 July, 26 August, 9 September 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

### **23 September 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

The ECB releases to the public the indicative calendar for the Eurosystem's tender operations in 2000. It also announces that no new main refinancing operation will be initiated in the first week of the year 2000, and that no such operation will mature during that week. For this reason the maturity of the main refinancing operation of 21 December 1999 will be lengthened exceptionally to three weeks. To avoid two main refinancing operations maturing on 12 January 2000, the maturity of the operation of 30 December 1999 will also be lengthened to three weeks. These steps are taken to minimise any potential problem for counterparties and for the financial market which could result from the conduct and settlement of a large operation directly after the transition to the new century.

### **7 October 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

### **21 October 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 2.5%, 3.5% and 1.5% respectively.

It also decides that for the longer-term refinancing operations to be settled on 28 October 1999, 25 November 1999 and 23 December 1999, the intention is to allot an amount of €25 billion per operation. This amount is higher than the amount of €15 billion

allotted for all previous longer-term refinancing operations conducted in 1999. This decision takes into account the intention of the ECB to contribute to a smooth transition to the year 2000.

#### **4 November 1999**

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.5 percentage point to 3.0%, with effect from the operation to be settled on 10 November 1999. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.5 percentage point to 4.0% and 2.0% respectively, both with effect from 5 November 1999.

#### **18 November 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

#### **2 December 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

The Governing Council also decides to confirm the reference value for monetary growth, namely an annual growth rate of 4½% for the broad monetary aggregate M3. This decision is taken on the grounds that the components underlying the derivation of the reference value, namely the Eurosystem's definition of price stability (an annual increase in the HICP for the euro area of below 2%), the estimate for the trend of real GDP growth (2% to 2½% per annum) and that for the trend decline in M3

income velocity (½% to 1% per annum), have basically remained unchanged. As before, the Governing Council will assess monetary developments in relation to the reference value on the basis of a three-month moving average of annual growth rates. The Governing Council also decides to review the reference value henceforth on a regular annual basis. The next review will take place in December 2000.

With regard to the minimum reserve system of the Eurosystem, the Governing Council, after reviewing new statistical evidence, decides to increase from 10% to 30% the standardised deduction from the reserve base to be applied to debt securities issued with an agreed maturity of up to two years and to money market paper. This decision shall take effect as from the determination of the reserve requirement to be fulfilled in the maintenance period starting on 24 January 2000.

#### **15 December 1999**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

#### **4 January 2000**

The ECB announces that on 5 January 2000 the Eurosystem will conduct a liquidity-absorbing fine-tuning operation with same-day settlement. This measure aims at restoring normal liquidity conditions in the money market after the successful transition to the year 2000.

#### **5 January 2000**

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.0%, 4.0% and 2.0% respectively.

# 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 the ECB's Web site (<http://www.ecb.int>).

## Annual Report

"Annual Report 1998", April 1999.

---

## 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.

"The role of short-term economic indicators in the analysis of price developments in the euro area", April 1999.

"Banking in the euro area: structural features and trends", April 1999.

"The operational framework of the Eurosystem: description and first assessment", May 1999.

"The implementation of the Stability and Growth Pact", May 1999.

"Longer-term developments and cyclical variations in key economic indicators across euro area countries", July 1999.

"The institutional framework of the European System of Central Banks", July 1999.

"The international role of the euro", August 1999.

"The balance sheets of the Monetary Financial Institutions of the euro area in early 1999", August 1999.

"Inflation differentials in a monetary union", October 1999.

"ESCB preparations for the year 2000", October 1999.

"Stability-oriented policies and developments in long-term real interest rates in the 1990s", November 1999.

"TARGET and payments in euro", November 1999.

"Legal instruments of the European Central Bank", November 1999.

"The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure", January 2000.

"Foreign exchange reserves and operations of the Eurosystem", January 2000.

---

### **Working Paper Series**

- 1 "A global hazard index for the world foreign exchange markets" by V. Brousseau and F. Scacciavillani, May 1999.
  - 2 "What does the single monetary policy do? A SVAR benchmark for the European Central Bank" by C. Monticelli and O. Tristani, May 1999.
  - 3 "Fiscal policy effectiveness and neutrality results in a non-Ricardian world" by C. Detken, May 1999.
  - 4 "From the ERM to the euro: new evidence on economic and policy convergence among EU countries" by I. Angeloni and L. Dedola, May 1999.
  - 5 "Core inflation: a review of some conceptual issues" by M. Wynne, May 1999.
  - 6 "The demand for M3 in the euro area" by G. Coenen and J.-L. Vega, September 1999.
  - 7 "A cross-country comparison of market structures in European banking" by O. de Bandt and E. P. Davis, September 1999.
  - 8 "Inflation zone targeting" by A. Orphanides and V. Wieland, October 1999.
- 

### **Other publications**

- "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.
- "Third progress report on the TARGET project", November 1998.
- "Correspondent central banking model (CCBM)", December 1998.
- "Payment systems in the European Union: Addendum incorporating 1997 figures", January 1999.
- "Possible effects of EMU on the EU banking systems in the medium to long term", February 1999.
- "Euro area monetary aggregates: conceptual reconciliation exercise", July 1999.
- "The effects of technology on the EU banking systems", July 1999.
- "Payment systems in countries that have applied for membership of the European Union", August 1999.
- "Improving cross-border retail payment services: the Eurosystem's view", September 1999.

“Compendium: collection of legal instruments, June 1998 – May 1999”, October 1999.

“European Union balance of payments/international investment position statistical methods”, November 1999.

“Money and Banking Statistics Compilation Guide, Addendum I: Money market paper”, November 1999.

“Money and Banking Statistics Sector Manual”, second edition, November 1999.

“Report on the legal protection of banknotes in the European Union Member States”, November 1999.

“Correspondent central banking model (CCBM)”, November 1999.

“Cross-border payments in TARGET: A users’ survey”, November 1999.

“Money and Banking Statistics: Series keys for the exchange of balance sheet items time series”, November 1999.

“Money and Banking Statistics: Handbook for the compilation of flow statistics”, December 1999.

---

### **Information brochures**

“TARGET”, July 1998.

“The euro banknotes and coins”, July 1999.

“TARGET: facts, figures, future”, September 1999.



