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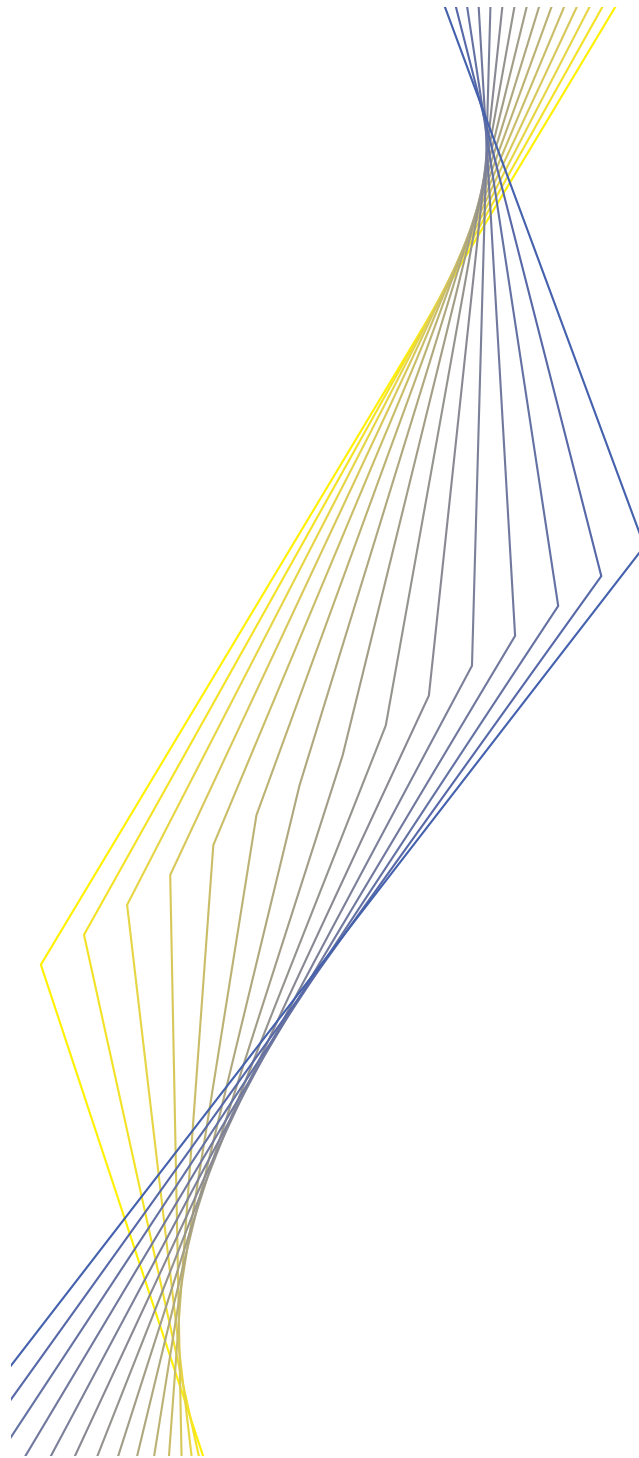
MONTHLY BULLETIN January 2001

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

January 2001



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The cut-off date for the statistics included in this issue was 3 January 2001.

ISSN 1561-0136

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Abbreviations

Countries

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

Others

BIS	Bank for International Settlements
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
MFI	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 the Governing Council meeting held on 4 January 2001, the Governor of the Bank of Greece participated as a member of the Governing Council for the first time, since Greece adopted the euro on 1 January 2001. At the meeting, the Governing Council decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem at 4.75%. The interest rates on the marginal lending facility and on the deposit facility were also left unchanged, at 5.75% and 3.75% respectively.

These decisions were based on the following considerations. Starting with the first pillar of the monetary policy strategy of the ECB, the three-month average of the annual growth rates of M3, covering the period from September to November 2000, declined to 5.1%, from 5.4% in the period from August to October 2000. The slowdown in M3 growth which has been observed over recent months is mainly attributable to a considerable dampening of the expansion of the most liquid components of M3. This dampening probably reflects the gradual increase in ECB interest rates since November 1999. The annual growth rate of total credit to euro area residents has also declined over recent months; in November 2000 there was a decrease in the annual rates of growth of both credit to general government and credit to the private sector. Overall, the further moderation in money and credit seems to confirm the assessment that the risks to price stability stemming from the monetary side have become more balanced when compared with the situation some months ago. However, caution is still warranted given the upward deviation of M3 growth from the reference value of 4½%.

Turning to indicators relating to the second pillar, recent information on economic activity in the euro area points to a picture of continuing robust, albeit slightly lower, growth rates. Data up to October 2000 indicate that euro area industrial production growth may have seen a peak in the second quarter of the year and moderated slightly thereafter. This picture is confirmed by

recent business survey data. At the same time, positive developments in the labour market have contributed to the stabilisation of consumer confidence at high levels over the past few months, after the decline which occurred in September 2000.

With regard to the external environment, there is increasing uncertainty surrounding the economic growth performance in the United States which may also have implications for the economic performance of other areas of the world. Pointing to a weakening in economic activity in the United States, the Federal Open Market Committee of the US Federal Reserve System decided, on 3 January 2001, to reduce its target for the federal funds rate by 50 basis points to 6%. In Japan recent economic developments have also been less favourable than anticipated some months ago.

Developments in financial markets reflect this general outlook for sustained growth in the euro area in a global environment of heightened uncertainty. Bond yields suggest that markets expect economic growth in the euro area to remain strong in both relative and absolute terms, and inflation to develop in line with the ECB's definition of price stability over the medium term. The nominal effective exchange rate of the euro appreciated significantly between end-November 2000 and 3 January 2001, by approximately 7%.

With regard to short-term developments in euro area consumer prices, HICP inflation in November 2000 rose to 2.9%, up from 2.7% in the previous month. While a rise in the annual rate of change was recorded for most HICP components, it was most pronounced for energy prices. In this respect, the pattern of inflation continued to mainly reflect developments in oil prices which increased up to mid-November. The subsequent significant fall in oil prices and the pronounced appreciation of the exchange rate of the euro which have occurred since late November should lead to a decline in annual consumer price inflation as from December 2000.

However, some further gradual pass-through of earlier rises in oil and import prices via non-energy HICP components should be expected.

Over the medium term, there are still elements of upward risks to price stability which warrant close monitoring. One risk relates to wage developments in the period ahead. It is important that wage moderation continue. Economic growth can be best sustained, and the reduction in unemployment extended, if wage bargainers take into account the ECB's firm determination to maintain price stability in the euro area over the medium term. The continuation of wage moderation should be facilitated by the decline in consumer price inflation which is expected to occur over the coming months.

A second important factor which may involve upward risks to price stability relates to fiscal policy in the euro area. The tax reforms which are being implemented in several euro area countries and the resulting reduction in the tax burden are a welcome development. However, in many countries the reduction in taxation will need to be accompanied by a structural reduction in expenditure, in order not to contribute to inflationary pressures and threaten the progress in fiscal consolidation made thus far. Further fiscal consolidation and structural reforms would contribute to sustained non-inflationary growth in the euro area over the medium term.

In addition to these much needed fiscal policy measures, further progress in the area of structural reform will be a key factor in supporting economic growth in the euro area. In this respect, the need for further structural reform was also highlighted in the Employment Guidelines for 2001 as endorsed by the Nice European Council in December 2000. These Employment Guidelines reiterate the goal of strengthening the conditions for full employment in a knowledge-based society, as mentioned in the Conclusions of the Lisbon European Council of March 2000, and stress the need to strengthen the flexibility and adaptability of EU labour markets.

This issue of the Monthly Bulletin contains three articles. The first reviews the completion of the Greek convergence process in the second half of 2000 and provides an overview of key structural economic features of the euro area including Greece. The second article discusses in conceptual terms how uncertainty factors – concerning, for example, current economic developments or the structure of the economy – should be taken into account in the conduct of monetary policy and the formulation of a monetary policy strategy. A third article presents an overview of the ECB's relations with international organisations (such as the IMF, the OECD and the BIS) and fora (such as the G7, the G10 and the G20).

Economic developments in the euro area

On 1 January 2001 Greece became the twelfth EU Member State to adopt the single currency. In the “Economic developments in the euro area” section of the ECB Monthly Bulletin, Greek data are generally included in euro area aggregates which refer to periods from January 2001 onwards. For data referring to periods prior to January 2001, the treatment varies depending on the particular series.

Greece is not included in the euro area data referring to periods prior to January 2001 in the sections entitled “Monetary and financial developments” and “Exchange rates and balance of payments developments”. In the sections entitled “Price developments” and “Output, demand and labour market developments”, however, Greek data – where available – are included in euro area aggregates for such periods.

For further information, see the article entitled “The euro area after the entry of Greece”, in particular the box on “Statistical implications of the entry of Greece into the euro area”, and the “Euro area statistics” section in this issue of the ECB Monthly Bulletin.

I Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

At its meeting on 4 January 2001 the Governing Council of the ECB decided to leave the minimum bid rate for the main refinancing operations (conducted as variable rate tenders) at 4.75%. The interest rates on the deposit facility and the marginal lending facility were also kept unchanged at 3.75% and 5.75% respectively (see Chart 1).

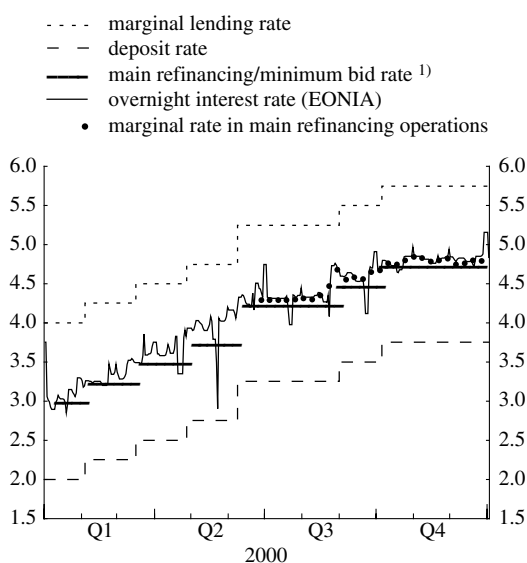
Continuing slowdown in M3 growth in November

The monetary data for November 2000 show a continuation of the moderation in monetary growth which started in the second quarter of 2000 (see Chart 2). The annual rate of increase in the broad monetary aggregate M3 decreased to 4.9% in November 2000, from 5.2% in October (the latter figure was revised downwards from 5.3%). The three-month average of the annual rates of growth of M3 covering the period from September to November 2000 declined to 5.1%, from 5.4% in the period from August to October 2000 (the latter figure was revised downwards from 5.5%). The seasonally adjusted and annualised six-month growth rate of M3 was 3.7% in November 2000, unchanged from the

previous month. The slowdown in M3 growth over recent months is mainly attributable to a considerable weakening in the expansion of its most liquid components. This, in turn, is likely to reflect the progressive increase in interest rates in the euro area since November 1999.

Chart 1 ECB interest rates and money market rates

(percentages per annum; daily data)



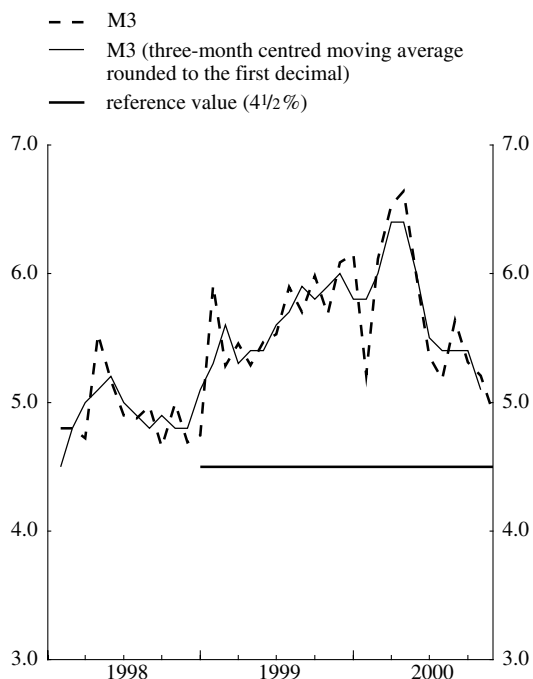
Sources: ECB and Reuters.

1) Starting from the operation settled on 28 June 2000, the main refinancing rate refers to the minimum bid rate applied to variable rate tenders.

Chart 2

M3 growth and the reference value

(annual percentage changes)



Source: ECB.

The annual growth rate of M1 fell further in November 2000, to 5.0%, from 5.8% in the previous month. While the annual rate of growth of currency in circulation was practically unchanged at 2.0% in November, the annual growth rate of overnight deposits continued to decline from 6.6% in October to 5.7% in November (see Chart 3).

The annual growth of short-term deposits other than overnight deposits increased to 2.4% in November 2000, from 1.8% in the previous month. This reflected divergent developments in the components of this item. The demand for deposits with an agreed maturity of up to two years continued to increase strongly (the annual growth of this component was 13.5% in November, following 11.5% in October). By contrast, deposits redeemable at a period of notice of up to three months declined considerably during 2000 (the annual rate of change was -5.1% in November compared with -4.8% in October). As explained in more detail in previous issues of the ECB Monthly Bulletin, the divergent developments in demand for the two instruments can be attributed to the behaviour of the retail rates paid on them, as interest rates on deposits with an agreed maturity of up to two years followed the rise in market rates since mid-1999 much more closely (see Chart 5).

The increase in the annual growth of short-term deposits other than overnight deposits offset the slowdown in the annual rate of increase in M1 in November 2000. As a consequence, the annual growth of the intermediate aggregate M2 stood at 3.7% in November, unchanged from the previous month.

Table I

M3 and its main components

(end-of-month levels and seasonally adjusted month-on-month changes)

	Nov. 2000 levels	Sep. 2000 change		Oct. 2000 change		Nov. 2000 change		Sep. 2000 to Nov. 2000 average change	
	EUR billions	EUR billions	%	EUR billions	%	EUR billions	%	EUR billions	%
M3	4,996.0	1.2	0.0	28.1	0.6	13.1	0.3	14.1	0.3
Currency in circulation and overnight deposits (= M1)	2,008.0	-6.6	-0.3	0.8	0.0	2.3	0.1	-1.2	-0.1
Other short-term deposits (= M2 - M1)	2,176.0	6.0	0.3	5.9	0.3	9.8	0.4	7.2	0.3
Marketable instruments (= M3 - M2)	812.0	1.8	0.2	21.4	2.7	1.0	0.1	8.1	1.0

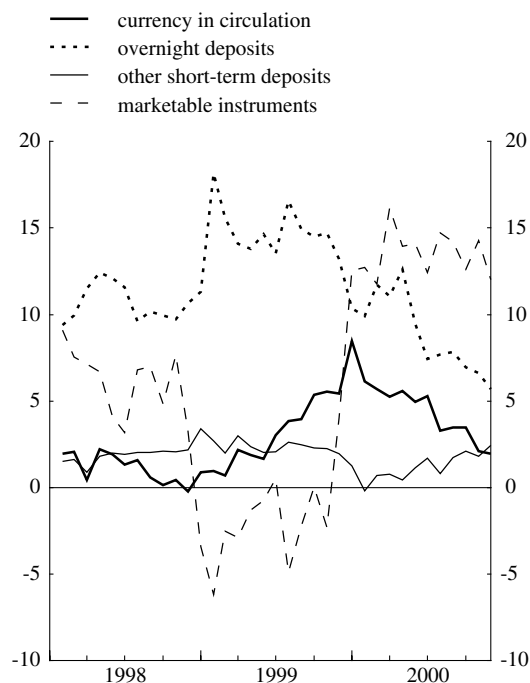
Source: ECB.

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

Chart 3

Components of M3

(annual percentage changes)



Source: ECB.

The annual rate of growth of marketable instruments included in M3 fell to 12.0% in November 2000, from 14.3% in the previous month. The annual growth of money market fund shares/units and money market paper declined to 9.3% in November, from 14.5% in October. This decline, however, was attributable at least in part to a base effect (in November 1999 there had been substantial issuance of money market paper, partly linked to the uncertainties surrounding the transition to the year 2000). The annual rate of increase in repurchase agreements declined to 9.6% in November 2000 (from 10.1% in October). By contrast, the annual growth of debt securities issued with a maturity of up to two years rose strongly, to 31.9%, from 19.7% in October. Overall, the relatively strong growth in marketable instruments is likely to be related to the flattening of the yield curve over recent months. It should be kept in mind, however, that the information content of marketable instruments has to be interpreted with caution: it is not possible within the current

statistical framework of the Eurosystem to identify separately the amount of these instruments issued by euro area MFIs which is held by non-euro area residents.

Decline in the growth of credit to euro area residents

Turning to the counterparts of M3, the annual growth rate of total credit granted to euro area residents fell to 5.8% in November 2000, from 6.4% in October. This further slowdown was attributable to both credit extended to general government and credit extended to the private sector.

The further decline in credit to general government (the annual rate of change fell to -6.8% in November, from -6.4% in October) reflected a more pronounced annual decline both in securities other than shares (-9.6%, after -9.1% in October) and in loans (-2.9% compared with -2.4% in the previous month).

With regard to credit to the private sector, the annual rate of growth of all components declined in November 2000. The growth of loans decreased to 9.2%, from 9.7% in the previous month. The increase in MFI holdings of securities other than shares fell to 18.5%, from 22.5% in October, and the growth in holdings of shares and other equity was 18.4%, down from 19.9% in the previous month.

The annual rate of increase in longer-term financial liabilities of the MFI sector has decreased over recent months. In November 2000 it stood at 6.1%, down from 6.7% in October. This development was mainly due to declines in the annual growth of deposits with an agreed maturity of over two years (0.3%, after 1.5% in October) and of debt securities issued with a maturity of over two years (4.5%, after 5.3% in October). The flattening of the yield curve in the euro area is likely to have dampened the demand for these instruments. By contrast, the annual rate of increase in deposits redeemable with a period of notice of over three months

Table 2**M3 and its main counterparts***(end-of-month levels and 12-month flows; EUR billions)*

	Amounts outstanding	12-month flows					
		2000 Nov.	2000 June	2000 July	2000 Aug.	2000 Sep.	2000 Oct.	2000 Nov.
1. Credit to the private sector	6,754.1	583.7	581.9	600.8	645.6	648.1	616.5
2. Credit to general government	1,932.8	-22.2	-25.6	-49.2	-88.5	-132.2	-142.0
3. Net external assets	233.2	-112.6	-136.5	-98.7	-139.8	-118.9	-115.0
4. Longer-term financial liabilities	3,806.5	234.4	241.1	251.0	244.2	235.5	216.8
5. Other counterparts (net liabilities)	117.5	-33.2	-61.5	-58.4	-73.0	-80.6	-89.0
M3 (=1+2+3-4-5)	4,996.0	247.7	240.2	260.2	246.0	242.2	231.8

*Source: ECB.**Note: Due to rounding, the counterparts of M3 may not add up to the total reported for M3.*

continued to rise strongly, to 12.6%, from 10.3% in the previous month.

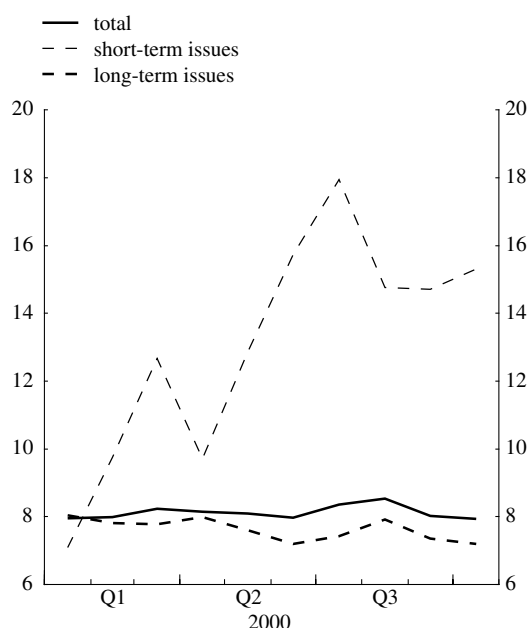
The annual rate of change in central government deposits held with the MFI sector decreased to 15.4% in November, from 27.7% in October. This decline was to some extent linked to the German Government's redemption of debt using some of the revenues from its UMTS licence auction.

In November 2000 the net external assets of the euro area MFI sector decreased by €7 billion in absolute and non-seasonally adjusted terms. Over the 12 months up to November 2000 the net external assets of the MFI sector declined by €115 billion, compared with a decline of €119 billion for the 12 months up to October 2000 (see Table 2).

Debt securities issuance remained stable in October

The annual growth of outstanding debt securities issued by euro area residents remained broadly unchanged at 7.9% in October 2000, compared with 8.0% in September 2000 (see Chart 4). Underlying this development were a decline in the annual growth of outstanding long-term debt securities, from 7.4% in September 2000 to 7.2% in October, and an increase in the annual growth of outstanding short-term debt securities, from 14.7% in September 2000 to 15.3% in October.

The breakdown of the data by currency shows that the annual growth of outstanding euro-denominated debt securities issued by euro area residents declined from 6.4% in September 2000 to 6.1% in October. At the same time, the value of outstanding debt securities issued by euro area residents in currencies other than the euro increased strongly; however, this partly reflected valuation changes relating to the depreciation of the euro up to October.

Chart 4**Amounts outstanding of debt securities issued by euro area residents***(annual percentage changes)**Source: ECB.*

The sectoral breakdown reveals that private sector net issuance of debt securities remained high in October 2000. The annual growth of outstanding euro-denominated debt securities issued by non-monetary financial corporations was 20.1% in October 2000, up from 18.9% in the previous month. The annual growth of outstanding debt securities issued by non-financial corporations also increased, from 16.8% in September 2000 to 18.2% in October. This may have been partly driven by telecommunications companies issuing securities to finance their purchases of UMTS licences. By contrast, the annual growth of outstanding debt securities issued by MFIs fell from 9.6% in September 2000 to 8.5% in October 2000.

By contrast with the high growth rates in the private sector, public sector issuance of debt securities remained subdued in October. The annual growth of outstanding debt securities issued by central government decreased slightly, from 2.8% in September 2000 to 2.6% in October. By contrast, the annual growth of outstanding debt securities issued by other parts of general government picked up, from 6.0% in September 2000 to 8.9% in October.

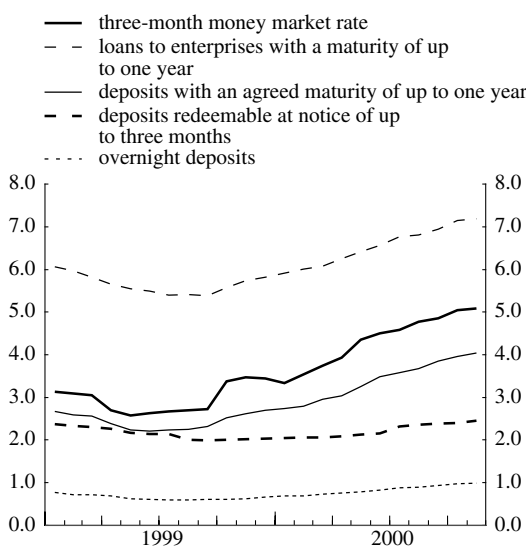
Retail bank interest rates continued to increase slightly at shorter maturities, while remaining stable at longer maturities in November

Short-term retail bank interest rates in the euro area continued to edge upwards in November 2000 (see Chart 5). The increases compared with October varied between 1 basis point for overnight deposits and 7 basis points for deposits with an agreed maturity of up to one year. Turning to longer-term developments, from August 1999, when short-term retail bank interest rates generally started to rise, to November 2000 the average rates on deposits with an agreed maturity of up to one year and on loans to enterprises with a maturity of up to one year increased by around 175 basis

points. By contrast, the average rates on deposits redeemable at a period of notice of up to three months and on overnight deposits only rose by about 40 basis points during the same period. These changes in short-term bank rates were smaller than the increase of around 240 basis points in average three-month money market rates which took place between August 1999 and November 2000.

Long-term retail bank rates were more or less unchanged in November 2000, reflecting the stability of government bond yields in previous months (see Chart 6). Over the longer term, from May 1999, when long-term retail bank interest rates started to rise, to November 2000 the increases in long-term retail interest rates varied between 157 basis points for the average rate on deposits with an agreed maturity of over two years and 191 basis points for the average rate on loans to enterprises with a maturity of over one year. During the same period, the average five-year government bond yield increased by 182 basis points.

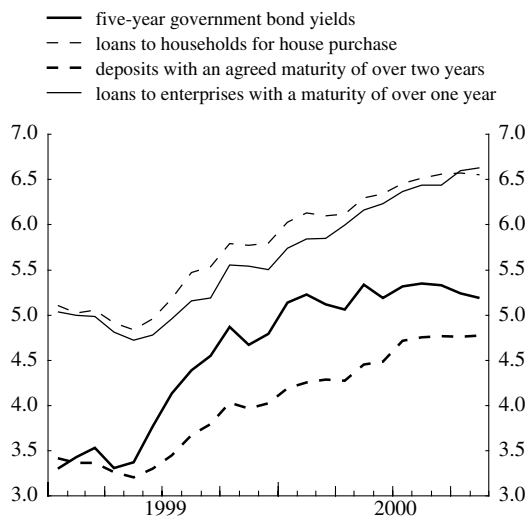
Chart 5
Short-term retail bank interest rates and a comparable market rate
(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.

Chart 6
Long-term retail bank interest rates and a comparable market rate

(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.

Money market interest rates fell further in December

The decline in money market interest rates that started around the end of October 2000 continued in December 2000 and early January 2001. As was the case in November 2000, money market rates at longer maturities experienced the most significant fall in December, causing the slope of the money market yield curve to turn negative in the course of that month. Rates on three-month EURIBOR futures for delivery in 2001 also declined further in December 2000 and early January 2001, especially for contracts with maturity dates in the second half of 2001.

The overnight interest rate, as measured by the EONIA, remained at levels fairly close to the minimum bid rate of the ECB's main refinancing operations (4.75%) for most of the reserve maintenance period ending on 23 December 2000 (see Box 1). In the first few trading days of the new reserve maintenance period starting on 24 December 2000, the EONIA stood a few basis points below 4.90%, before increasing sharply to 5.16% on 29 December. This increase was

due to the end-of-year effect which over past months has affected other money market interest rates when their respective maturities began to span the end of the year, and reflects a desire on the part of financial institutions to adjust their balance sheets at the end of the year. The EONIA normalised on the first trading day of 2001, standing at 4.82% on 3 January. In the ECB's main refinancing operations, the marginal rate of allotment stood between 4.75% and 4.80% in all operations settled in December 2000 and the operation settled on 3 January 2001.

The one-month and three-month EURIBOR were 4.84% and 4.81% on 3 January 2001. This was, respectively, 19 and 24 basis points lower than the levels at the end of November (see Chart 7). The decline was to some extent due to the disappearance of the end-of-year effect. In addition, it reflected a change in financial market expectations regarding monetary policy decisions in early 2001.

In the longer-term refinancing operation of the Eurosystem settled on 29 December, the marginal and average rates of allotment were 4.75% and 4.81%. This was 11 and 5 basis points, respectively, below the three-month EURIBOR on the day the operation was conducted.

At the longer end of the money market yield curve, the six-month and twelve-month EURIBOR fell by 34 and 47 basis points respectively between the end of November 2000 and 3 January 2001. On 3 January 2001 the twelve-month EURIBOR stood at 4.62%, which was around the same level as in early May 2000. The slope of the money market yield curve, measured as the difference between the twelve-month and one-month EURIBOR, was -22 basis points on 3 January 2001.

The expected path of the three-month EURIBOR in 2001, as implied in futures contracts with delivery dates this year, was adjusted downwards in December 2000 and early January 2001, thus continuing the fall seen since late October. On 3 January 2001 the three-month EURIBOR implied in contracts

Box I**Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 December 2000****Allotments in monetary policy operations**

During the reserve maintenance period, which lasted from 24 November to 23 December 2000, the Eurosystem settled four main refinancing operations and one longer-term refinancing operation.

The main refinancing operations were carried out as variable rate tenders with a minimum bid rate of 4.75%. The allotted volumes ranged between €91 billion and €128 billion. The ratio of the amount bid to the volume allotted varied between 1.01 and 1.60, with an average of 1.29. In the first operation, the marginal rate was 4.82%. After decreasing in the second operation to 4.75%, it increased again to 4.76% in the third operation and 4.80% in the fourth. The spread between the weighted average rate and the marginal rate was relatively large in the second and fourth operations of the reserve maintenance period, amounting to 4 and 6 basis points respectively. In the second operation, this spread reflected the small amount bid relative to the amount allotted, which resulted in a lower marginal rate than expected by counterparties when submitting their bids. In the fourth operation, which was the first operation maturing in the new year, the relatively large spread reflected uncertainty and heterogeneity of preferences relating to the year-end. In the other two operations the spreads were only 1 and 2 basis points respectively. The number of bidders participating in the tenders varied between 496 and 680.

On 29 November the Eurosystem conducted a longer-term refinancing operation through a variable rate tender with a pre-announced allotment volume of €15 billion. A total of 226 bidders participated in this operation, submitting total bids of €32.0 billion. The marginal rate of the operation was 5.03%, and the weighted average rate was 2 basis point higher, at 5.05%.

Starting the reserve maintenance period at 4.83%, the EONIA rose by 1 basis point on each of the following three days before climbing to 4.94% on 30 November, reflecting the usual end-of-month effect. It immediately dropped the following day by 10 basis points and then decreased further to reach 4.78% on 6 December, reflecting in part comfortable liquidity conditions. During the following two weeks the EONIA moved within a relatively narrow band around 4.80%, before resuming its downward trend to reach 4.74% on 20 December and 4.73% on 21 December. However, it subsequently rose to 4.85% on 22 December, the last business day of the reserve maintenance period.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 November to 23 December 2000

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	255.8	0.2	+ 255.6
Main refinancing operations	210.4	-	+ 210.4
Longer-term refinancing operations	45.0	-	+ 45.0
Standing facilities	0.4	0.2	+ 0.2
Other operations	0.0	0.0	0.0
(b) Other factors affecting the banking system's liquidity	394.4	532.6	- 138.2
Banknotes in circulation	-	360.4	- 360.4
Government deposits with the Eurosystem	-	61.1	- 61.1
Net foreign assets (including gold)	394.4	-	+394.4
Other factors (net)	-	111.1	- 111.1
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			117.4
(d) Required reserves			116.6

Source: ECB.

Totals may not add up due to rounding.

Use of standing facilities

Compared with the previous reserve maintenance period, the average daily use of the marginal lending facility increased from €0.2 billion to €0.4 billion, while the average use of the deposit facility remained unchanged at €0.2 billion.

Liquidity factors not related to monetary policy

The net liquidity-absorbing impact of the autonomous factors (the factors not related to monetary policy) on the banking system's liquidity (item (b) in the table above) was €138.2 billion on average, i.e. €25.2 billion more than in the previous reserve maintenance period. This rather substantial rise was mainly due to both the seasonal increase in banknotes in circulation of €7.7 billion on average and a rise in government deposits, which were €11.3 billion higher on average compared with the previous reserve maintenance period. The daily sum of autonomous factors fluctuated between €119.4 billion and €158.6 billion.

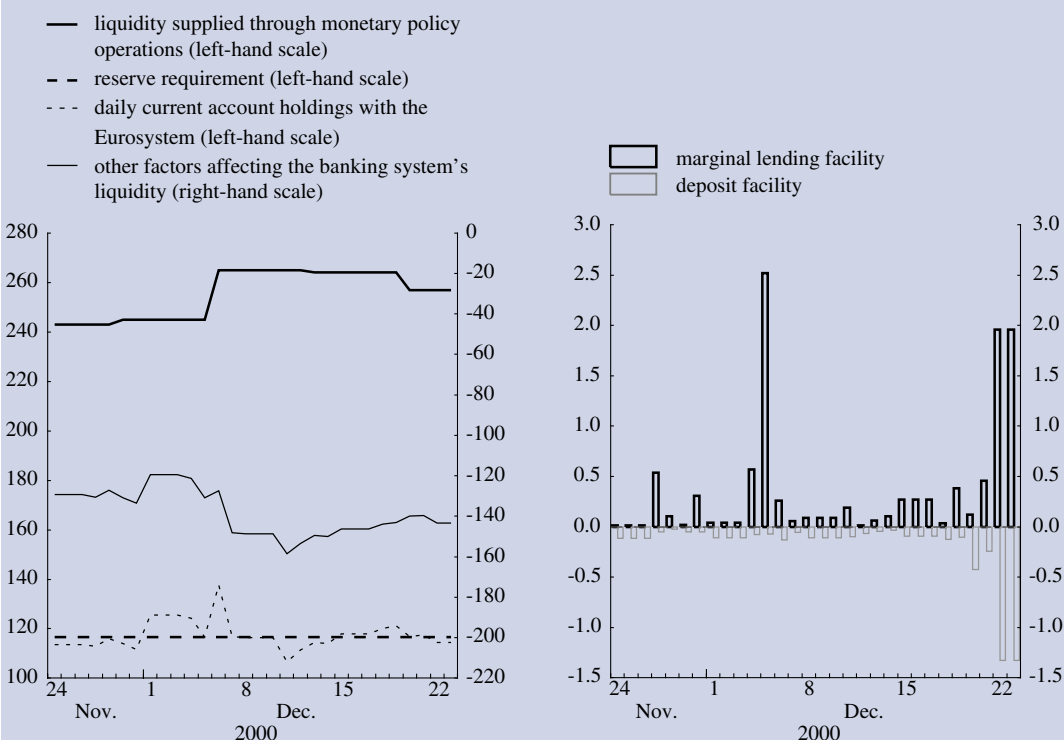
The published estimates of average liquidity needs stemming from autonomous factors ranged between €126.1 billion and €149.8 billion. They differed from the ex post figures by between minus €1.2 billion and plus €0.4 billion.

Current account holdings of counterparties

Average current account holdings amounted to €117.4 billion, and reserve requirements to €116.6 billion. The difference between the two (€0.8 billion) was €0.2 billion more than in the previous reserve maintenance period. The increase was caused by higher excess reserves due to the fact that the reserve maintenance period ended on a Saturday. As in the previous reserve maintenance period, an amount of €0.2 billion of the current account holdings did not contribute to the fulfilment of reserve requirements.

Factors contributing to the banking system's liquidity during the maintenance period ending on 23 December 2000

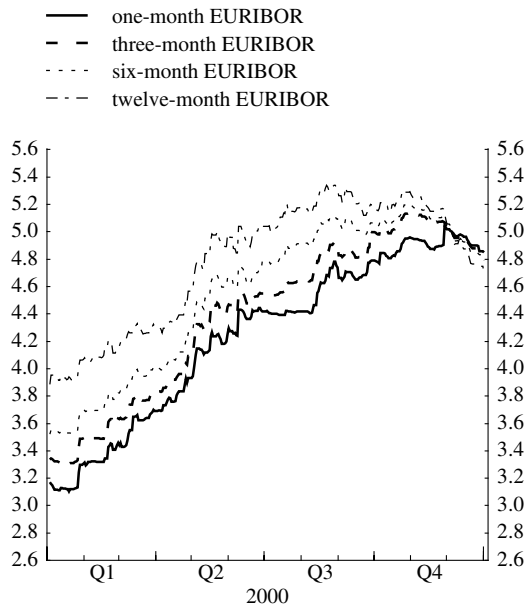
(EUR billions; daily data)



Source: ECB.

Chart 7
Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

maturing in March, June and September 2001 were 4.65%, 4.38% and 4.21% respectively. This was, respectively, 30, 51 and 64 basis points lower than at the end of November 2000.

Long-term bond yields declined further in December and early January

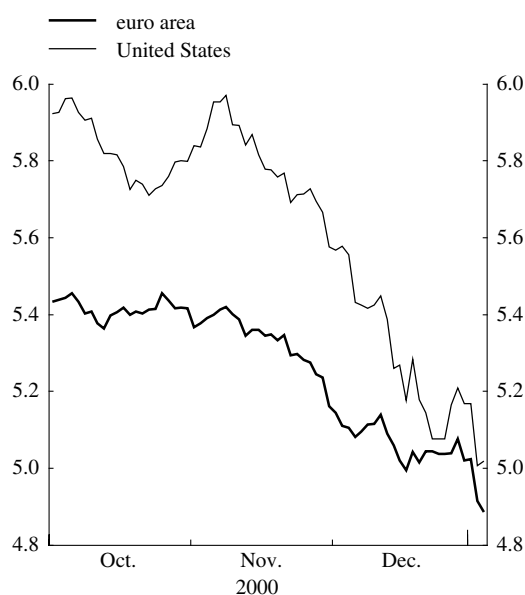
Continuing a pattern that started in early November 2000, the average ten-year government bond yield in the euro area declined by around 30 basis points in December 2000 and early January 2001, to stand at 4.9% on 3 January (see Chart 8). In the United States ten-year government bond yields fell by around 60 basis points during this period. As a result, the differential between US ten-year bond yields and comparable yields in the euro area declined by 30 basis points, reaching a level of 13 basis points by 3 January.

In the United States the significant drop in long-term government bond yields in December 2000 and early January 2001 brought the ten-year bond yield to around

5% on 3 January 2001, its lowest level since the spring of 1999. As in November 2000, the primary factor behind the downward pressure on US long-term interest rates seemed to be further downward revisions by market participants of their expectations for the future pace of US economic activity. This was reinforced when the Federal Open Market Committee (FOMC) of the Federal Reserve System issued an announcement on 19 December 2000 emphasising risks of economic weakness, which it followed up by reducing the target for the federal funds rate by 50 basis points on 3 January. In this environment, market participants also seem to have lowered their long-term inflation expectations. Reflecting these changing views, US long-term index-linked bond yields and break-even inflation rates fell in the course of December 2000 and early January 2001. A further influence which seemed, at times, to exert downward pressure on US bond yields in this period was the continued volatility in the equity markets which may have led investors increasingly to invest in government bonds rather than in stocks.

Chart 8
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.

In Japan ten-year government bond yields stood at around 1.6% on 3 January 2001, thus showing little change from the end of November 2000. However, Japanese bond yields were volatile during December in an environment in which data releases raised uncertainty among investors regarding the outlook for economic activity in Japan.

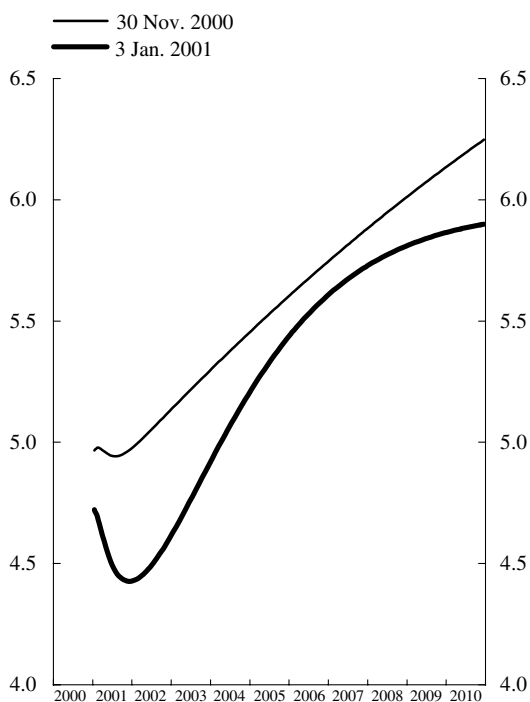
In addition to the influence of the US bond market, domestic factors also seemed to play a role in explaining developments in euro area government bond yields in December 2000 and early January 2001. In particular, a gradual reassessment of euro area growth prospects among investors – towards a slight moderation in the pace of economic activity in the short term – appeared to have placed some downward pressure on yields. In line

with this, the real yield on the French ten-year index-linked bond declined by around 10 basis points between end-November 2000 and 3 January 2001, to stand at around 3.4% on the latter date. In the same period, the ten-year “break-even” inflation rate obtained from French nominal and index-linked bond yields declined significantly, standing at around 1.4% on 3 January. As always, developments in index-linked bond yields and break-even inflation rates should be interpreted with caution, as a number of well-known caveats related to, inter alia, the low liquidity of index-linked bond markets, may complicate the interpretation of their significance for the underlying fundamentals.

The slope of the euro area yield curve, as measured by the difference between ten-year government bond yields and the three-month EURIBOR, remained broadly unchanged in December 2000, as declines in three-month money market rates were similar to those in ten-year bond yields. At the same time, given substantial falls in bond yields with maturities of up to two years, the inversion of the yield curve over maturities between three months and two years was further reinforced. Reflecting these changes in the spot yield curve, the implied forward euro area overnight interest rate curve had by 3 January 2001 inverted further at shorter horizons, while at longer maturities it had changed less compared with end-November 2000 (see Chart 9). These developments in the spot and the forward yield curves could be seen as an indication that the markets’ slight downward revisions to their growth expectations were concentrated on the shorter term, while longer-term growth expectations were less affected.

Chart 9
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.

Stock markets remained volatile in December

Stock price indices in the major stock markets continued to fluctuate sharply in December 2000 and early January 2001. This reflected heightened uncertainty on the part of market

participants about the prospects for corporate profitability and the future development of interest rates amid indications of a slowdown in the pace of global economic activity. Overall, stock prices in the United States, as measured by the Standard and Poor's 500 index, increased by 2% between end-November and 3 January, while stock prices in Japan, as measured by the Nikkei 225 index, declined by 8%. Over the same period stock prices in the euro area, as measured by the Dow Jones EURO STOXX index, declined by 3% (see Chart 10).

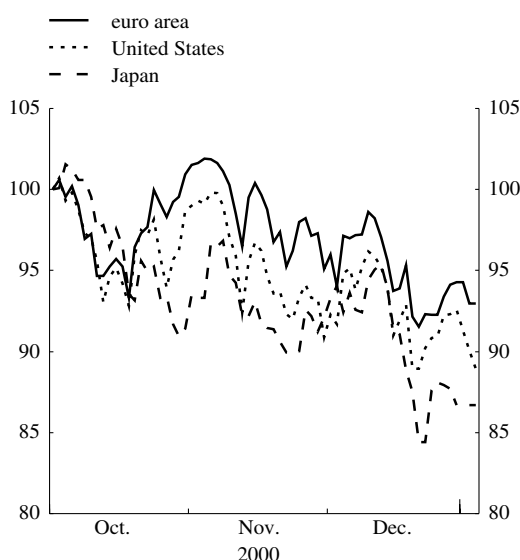
The swings in international stock price indices mainly originated in the United States, where market participants continued to reassess their expectations regarding the degree of the slowdown in the pace of US economic activity and its likely effects on corporate earnings and interest rates. These uncertainties were most pronounced in the "New Economy" segment of the stock market, and were reflected by wide swings in the Nasdaq Composite index (which is mainly composed of high technology stocks).

On 3 January 2001 the Nasdaq stood at a level which was 36% below end-1999 levels and 48% below the all-time high reached in March 2000. The overall decline in the Nasdaq Composite index in 2000 was significantly larger than the drop of 8% which took place in the Standard and Poor's 500 index between end-1999 and 3 January 2001.

In Japan stock prices in December 2000 continued the general downward trend which had been apparent from April 2000 onwards. By 3 January 2001 the Nikkei 225 index was 28% lower than at the end of 1999. The weakness of the stock market during December 2000 seemed to have arisen from increasing uncertainty among investors regarding the outlook for economic activity in Japan. Additional downward pressure emanated from a further rise in corporate bankruptcies in Japan, which prompted market uncertainties about the earnings prospects of banks.

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

(index: 1 October 2000 = 100; daily data)



Source: Reuters.

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.

In the euro area the decline in the Dow Jones EURO STOXX index between the end of November 2000 and 3 January 2001 brought it to a level 8% lower than at end-1999 and 18% below the peak reached in March 2000. This decline – which took place in volatile market conditions – mainly reflected uncertainties on the part of market participants about the earnings prospects of some segments of the euro area corporate sector. Market participants seemed particularly uncertain about the telecommunications sector, increasing existing concerns that the riskiness of firms in this sector had risen owing to increasing debt resulting from the major investments necessary to develop telecommunications networks and the need to finance UMTS licences. Reflecting this, the Dow Jones EURO STOXX telecommunications index declined by 9% between end-November 2000 and 3 January 2001, bringing the cumulative decline in this index since its peak in March 2000 to almost 60%. Significant declines were also seen in the technology sector in December, with the Dow Jones EURO STOXX technology index dropping by 9% between end-November 2000 and 3 January 2001.

2 Price developments

HICP inflation rose again in November, mainly as a result of energy prices

The annual rate of increase in the overall Harmonised Index of Consumer Prices (HICP) for the euro area plus Greece rose from 2.7% in October to 2.9% in November 2000 (see Table 3). Meanwhile, over the same period, the annual rate of increase in the HICP, excluding unprocessed food and energy, remained unchanged at 1.5%.

The rise in overall HICP inflation between October and November 2000 was mostly attributable to energy prices, for which the year-on-year change increased to 15.5% in

November 2000, up 0.6 percentage point from October. This upward movement reflected the rise in oil prices (from €36.8 per barrel in October to €38.0 per barrel in November 2000) and was therefore expected.

Food price developments also contributed to the rise in inflation. The annual rate of increase in processed food prices rose from 1.4% in October to 1.5% in November 2000. Meanwhile, the year-on-year rate of change in unprocessed food prices rose by 0.2 percentage point to stand at 3.3% in November 2000. However, despite this increase, the short-term dynamics in

Table 3
Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1998	1999	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
				Q1	Q2	Q3	Q4	July	Aug.	Sep.	Oct.	Nov.	Dec.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	1.2	1.1	.	2.1	2.1	2.5	.	2.4	2.4	2.8	2.7	2.9	.
<i>of which:</i>													
Goods	0.8	0.9	.	2.3	2.3	2.9	.	2.7	2.7	3.3	3.3	3.5	.
Food	1.8	0.7	.	0.5	0.9	1.9	.	1.7	2.1	2.1	2.0	2.2	.
Processed food	1.5	1.0	.	1.1	1.1	1.2	.	1.0	1.2	1.3	1.4	1.5	.
Unprocessed food	2.1	0.1	.	-0.3	0.7	3.1	.	2.6	3.5	3.2	3.1	3.3	.
Industrial goods	0.2	1.0	.	3.3	3.0	3.4	.	3.3	3.0	4.0	3.9	4.1	.
Non-energy industrial goods	1.0	0.7	.	0.6	0.6	0.7	.	0.6	0.6	0.8	1.0	1.1	.
Energy	-2.6	2.2	.	13.8	12.4	13.7	.	13.5	12.0	15.6	14.9	15.5	.
Services	2.1	1.6	.	1.6	1.7	1.8	.	1.7	1.8	1.8	1.9	1.9	.
Other price and cost indicators													
Industrial producer prices ¹⁾	-0.7	-0.4	.	4.4	5.2	5.8	.	5.6	5.6	6.3	6.5	.	.
Unit labour costs ²⁾	0.3	1.3	.	0.6	0.5	.	.	-	-	-	-	-	-
Labour productivity ²⁾	1.2	0.7	.	1.7	1.3	.	.	-	-	-	-	-	-
Compensation per employee ²⁾	1.5	2.0	.	2.4	1.9	.	.	-	-	-	-	-	-
Total hourly labour costs ³⁾	1.8	2.2	.	3.6	3.7	.	.	-	-	-	-	-	-
Oil prices (EUR per barrel) ⁴⁾	12.0	17.1	31.3	27.1	29.1	33.9	35.0	30.6	33.6	37.4	36.8	38.0	29.4
Commodity prices ⁵⁾	-12.5	-3.1	18.4	19.9	18.3	18.0	17.6	14.3	18.3	21.4	23.1	18.2	12.1

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.

Box 2

Analysis of HICP developments based on seasonally adjusted data

In line with the Eurosystem's definition of price stability in terms of annual rates of change, the "Economic developments in the euro area" section of the ECB Monthly Bulletin regularly analyses HICP developments in terms of year-on-year changes (i.e. the percentage change in the level of a variable compared with the level a year earlier). Annual rates of change have the advantage of being well known and understood by the general public. Nevertheless, it is useful to supplement the analysis of developments in the annual rates of change with the analysis of short-term dynamics in consumer prices. The most important reason for this is that an annual inflation rate for a given month reflects developments in prices over a relatively long time span (of 12 months), as opposed to reflecting only the most recent price dynamics. This also implies that the development in the annual rate of change from one month to the next reflects not only price developments in the latest month, but also developments in the same month of the previous year, thereby giving rise to "base effects".

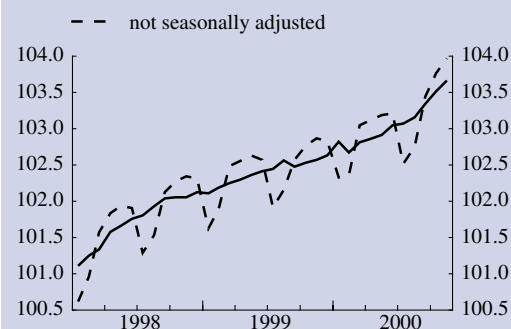
However, while annual percentage changes are generally not affected by seasonal variations, month-on-month or other changes over a year can be significantly affected by seasonal factors and are, therefore, only useful when using seasonally adjusted data. Seasonal adjustment corrects for the regular movements in the time series which occur every year during the same period. Although seasonal patterns in overall price statistics are generally less pronounced than in some other macroeconomic variables, such as measures of output and turnover, reasons for seasonal variation in consumer price statistics include fluctuations in the availability of food items, end-of-season sales or regular changes in administered prices (e.g. those associated with annual fiscal budgets). In September 2000, the ECB published a document entitled "Seasonal adjustment of monetary aggregates and Consumer Price Indices (HICP) for the euro area", which is available on the ECB website and discusses in detail the adjustment carried out by the ECB.

Seasonally adjusted data for the overall HICP in the euro area are compiled as the sum of the seasonally adjusted euro area-wide HICP components. More specifically, the seasonally adjusted HICP index is based on four seasonally adjusted components (unprocessed food, processed food, non-energy industrial goods and services) and the energy component, which is unadjusted, since no significant, stable seasonal variation could be identified for this component. For the analysis of price developments, this approach ensures consistency between the developments in the overall HICP and its components and facilitates explanation of euro area-wide developments (for further information see Box 3 entitled "An analysis of price developments: the breakdown of the overall HICP into its main components" in the December 2000 issue of the ECB Monthly Bulletin). Chart A shows the unadjusted and seasonally adjusted HICP results for non-energy industrial goods

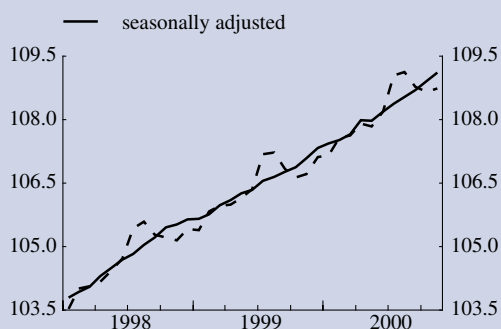
Chart A: Seasonal patterns in two main HICP components

(index: 1996 = 100; monthly data)

Non-energy industrial goods



Services

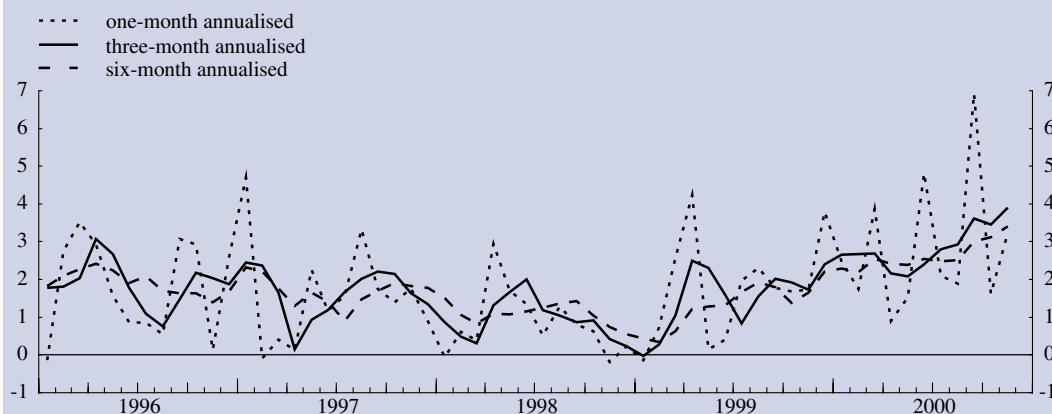


Sources: Eurostat and ECB calculations.

and services, two components which account for around 70% of the total HICP weight and which display a considerable and very regular seasonal pattern. However, since patterns around mid-year tend to move in the opposite direction, to some extent they cancel each other out, making the seasonal pattern in the overall index less pronounced.

Chart B: Short-term movements in the overall HICP

(annualised rates of change; seasonally adjusted; monthly data)

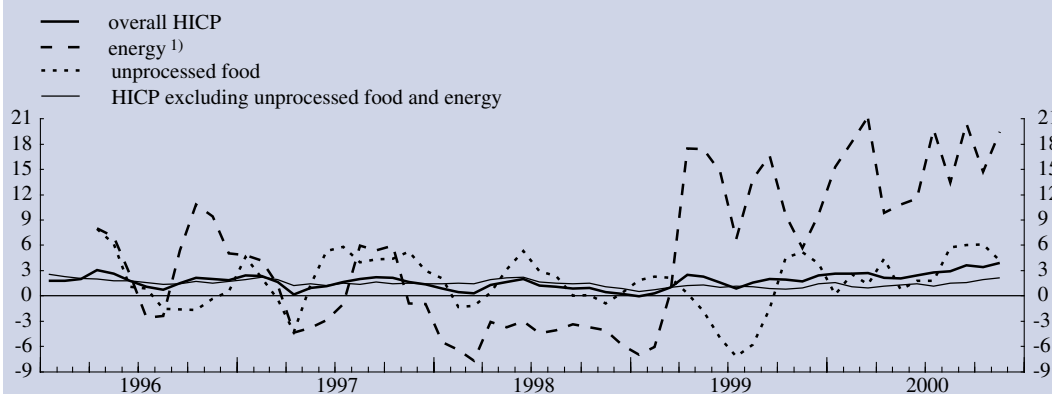


Sources: Eurostat and ECB calculations.

Based on seasonally adjusted data, several measures of short-term developments in the HICP can be calculated. As an example, one-month, three-month and six-month annualised rates of change are presented in Chart B. These rates of change can be interpreted as the annual rate of increase which would result if the price increase recorded over the latest one-month, three-month and six-month periods was sustained for a full year. It can be noted that since early 1999, all three measures have shown a broad upward movement. In addition, the very short-term developments in prices measured by the one-month annualised rates tend to be very volatile. Annualised changes over six months are the least volatile of the measures presented in Chart B, but this measure captures more than just the most recent price developments. The longer-term measures show short-term dynamics in prices with a time-lag which increases with the length of the period over which these measures are calculated. While many instances of this can be observed for the data shown in Chart B, it can be most clearly seen in 1998 and early 1999. More specifically, the one-month annualised rate reached a local peak in April 1998, as did the three-month rate in June 1998 and the six-month rate in September 1998. Similarly, the one-month annualised rate reached a local trough in November 1998, as did the three-month rate in January 1999 and the six-month rate in February 1999.

Chart C: Short-term movements in the HICP and its components

(three-month annualised rates of change; seasonally adjusted, unless otherwise indicated; monthly data)



Sources: Eurostat and ECB calculations.

1) Energy is not seasonally adjusted.

Looking at the three-month annualised rates of change in the components of the overall HICP, it is clear that energy prices have been a major factor behind the rise in short-term price increases since early 1999 (see Chart C). However, since mid-1999, unprocessed food prices, the other highly volatile component of the HICP, have also contributed to this upward movement. From the chart it can also be seen that the three-month rates show a decline in unprocessed food prices in mid-1999 and a clear rise in mid-2000. This indicates that the rise in the annual rate of change in unprocessed food prices in mid-2000 reflects both the rise in unprocessed food prices at that time as well as the base effect stemming from the declining price level one year earlier. By comparison, the three-month rate in the HICP, excluding these more volatile components, has remained much more stable throughout the last five years, although it has risen somewhat recently.

From now on, the seasonally adjusted HICP will be included in Table 4.1 of the “Euro area statistics” section of the ECB Monthly Bulletin.

unprocessed food prices actually indicate that there has been less pressure on unprocessed food prices since August 2000, as measured by a fall in the seasonally adjusted three-month annualised rates of change. (For further information on seasonally adjusted HICP data, see Box 2.)

While the annual rate of change in non-energy industrial goods prices remained relatively subdued at 1.1% in November 2000, the upward movement of recent months continued. The rise in the annual rate of change by 0.1 percentage point from October to November 2000, although fairly moderate, is consistent with the view that increases in industrial producer prices, induced by the rise in oil prices and the depreciation of the euro, are gradually feeding through to consumer prices.

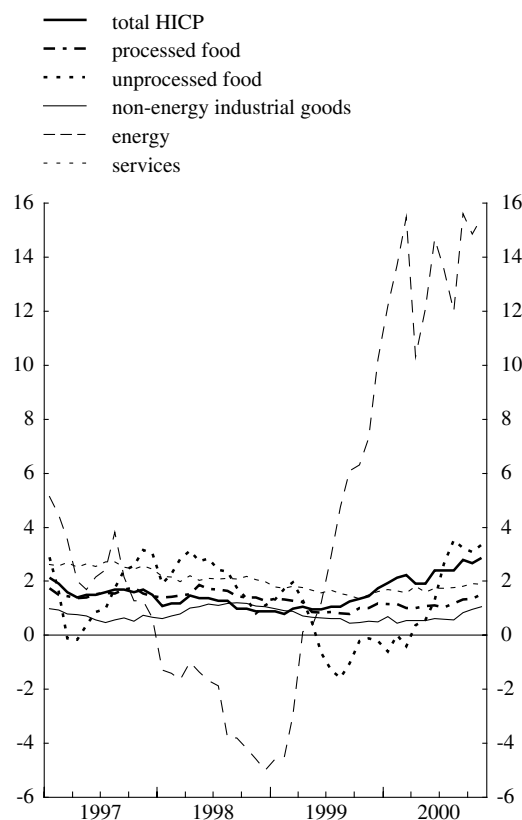
By contrast, services prices were the only HICP component for which the annual rate of increase remained unchanged from October to November 2000, at 1.9% (see Chart 11). However, looking at the sub-components of services prices, a further rise in the rate of change in the prices of transportation services was recorded in November 2000, partly reflecting the pass-through of past increases in fuel prices.

Since the end of November 2000, oil prices have declined and the euro has appreciated. These developments led to a fall in the price

of oil to an average of €29.4 per barrel in December 2000, down from €38.0 per barrel in November. This should have a relatively

Chart 11
Breakdown of HICP inflation in the euro area by components

(annual percentage changes; monthly data)



Source: Eurostat.

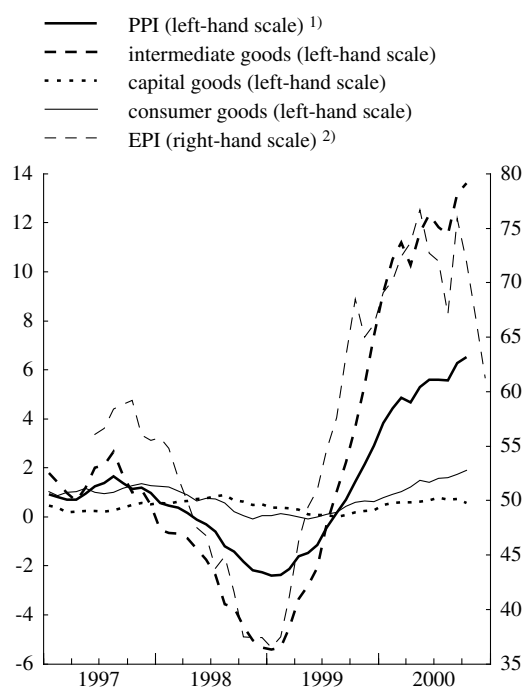
swift and significant downward effect on the annual rate of increase in the HICP energy component in December 2000, while a further gradual upward impact on the non-energy HICP components, owing to indirect effects associated with the prolonged period of high oil prices and exchange rate depreciation, is still expected. These indirect effects were among the factors affecting the short-term outlook for euro area inflation as described in Section 5 of the December 2000 issue of the ECB Monthly Bulletin. In addition, respondents to the November 2000 Survey of Professional Forecasters (see Box 3) also said that they expected further indirect effects.

The annual rate of increase in producer prices further increased in October

As was already reported in the December 2000 issue of the ECB Monthly Bulletin, the annual rate of increase in industrial producer prices in the euro area plus Greece rose from 6.3% in September to 6.5% in October 2000, thus continuing the upward trend in evidence since the beginning of 1999 (see Chart 12). The rise from September to October 2000 was the result of a higher year-on-year change in intermediate and consumer goods prices, while there was a slight decline in capital goods prices. The Eurozone Price Index (EPI) fell significantly in December 2000,

but remained above 50, suggesting a moderation of upward pressures on manufacturers' input prices in the euro area.

Chart 12
Producer prices and manufacturing input prices for the euro area
(monthly data)



Sources: Eurostat and Reuters.

- 1) Producer Price Index; annual percentage changes; excluding construction.
- 2) Eurozone Price Index; manufacturing input prices from the Purchasing Managers' Survey. An index value above 50 indicates an increase in manufacturing input prices, whereas a value below 50 indicates a decrease.

Box 3

The Survey of Professional Forecasters

As described in the article entitled “Price and cost indicators for the euro area: an overview” in the August 2000 issue of the ECB Monthly Bulletin, the ECB compiles a quarterly survey of inflation expectations in the euro area known as the Survey of Professional Forecasters (SPF). The results of the SPF have often been presented in the ECB Monthly Bulletin and have been compared with the short-term outlook for inflation obtained from other sources, including the forecasts of other international institutions. In the December 2000 issue of the ECB Monthly Bulletin some of the results of the latest SPF were presented in Box 7, entitled “Forecasts by other institutions”. Below, the nature of the SPF is briefly recalled and further details on the results of the latest survey carried out in November 2000 are presented.

Based on the replies to a questionnaire submitted to 84 forecasters throughout the European Union (EU), the SPF provides a quantitative estimate of the expected future change in the euro area HICP. The horizons for which respondents are asked to report their expectations are normally set at one and two years, although once a year – usually in February – inflation expectations for a five-year horizon are also requested. The sample of respondents includes experts from both financial and non-financial institutions, who base their replies on techniques ranging from the application of formal econometric models to the use of more simple “rules of thumb” or subjective judgement. The wide variety of approaches used, coupled with the fact that a number of different assumptions often underlie the reported expectations, means that the SPF should be viewed more as an estimate of average inflation expectations than as a forecast or a projection in the traditional sense.

In addition to the estimate of the expected rate of HICP inflation, respondents to the SPF are asked to provide information on the broader economic context by reporting their expectations for growth in area-wide real GDP and developments in the euro area unemployment rate over one-year and two-year horizons. For all three variables, respondents are also asked to provide their outlook over “rolling horizons” set one and two years ahead of the latest period for which published data for each particular variable are available. The forecasts for these rolling horizons help identify expected patterns in inflation, GDP growth and the unemployment rate, which are difficult to detect from forecasts for annual average developments in the calendar years.

Results of the November 2000 Survey of Professional Forecasters

In early November 2000 the ECB undertook its eighth quarterly SPF. The results of the November survey are based on 64 replies to a questionnaire submitted to 84 forecasters, giving a response rate of 76%. According to the November 2000 SPF, *HICP inflation in the euro area* is expected to have risen on average from 1.1% in 1999 to 2.3% in 2000, and to fall thereafter to 2.0% in 2001, and further to 1.8% in 2002 (see the table below). Compared with the August 2000 survey, these results represent a 0.2 percentage point upward revision of the expected rate of inflation for 2000 and 2001, while for 2002 the expected rate of HICP inflation in the euro area remains unchanged.

According to respondents, the main factors behind the upward revision of expected inflation in 2000 appear to have been the rise in oil prices as well as a further depreciation of the euro exchange rate which occurred between August and early November 2000. In 2001 and 2002, forecasters expect that a decline in oil prices together with an appreciation of the euro will have a downward impact on inflation. However, from 2001 onwards most forecasters expect indirect effects associated with oil price and exchange rate developments in 1999 and 2000 to gradually pass through to consumer prices. In addition, they mention the risk of second-round effects on inflation via wages in the light of current high inflation and also domestic inflationary pressures associated with the prospects of relatively high economic growth. However, some forecasters expect

Table: Results from the Survey of Professional Forecasters*(annual percentage changes, unless otherwise indicated)*

	Survey horizon				
	2000	2001	Sep. 2001	2002	Sep. 2002
Overall HICP					
Latest survey, November 2000	2.3	2.0	1.8	1.8	1.7
Previous survey, August 2000	2.1	1.8	-	1.8	-
	2000	2001	2001 Q2	2002	2002 Q2
Real GDP growth					
Latest survey, November 2000	3.5	3.1	3.1	2.8	2.9
Previous survey, August 2000	3.5	3.2	-	2.9	-
	2000	2001	Aug. 2001	2002	Aug. 2002
Unemployment rate ¹⁾					
Latest survey, November 2000	9.1	8.5	8.5	8.1	8.1
Previous survey, August 2000	9.1	8.4	-	8.0	-

1) *As a percentage of the labour force.*

wage growth in the euro area to remain subdued. In addition, a few forecasters explicitly mention competition and “new economy” features as having a downward effect on inflation in the euro area. It should be noted that the expectations of the professional forecasters were formed before the decline in oil prices and the appreciation of the euro that took place in late November and December 2000. These developments will reduce the direct impact on HICP inflation of import prices in general and energy prices in particular. However, they will not eradicate the delayed indirect effects on inflation (via the domestic chain of production) associated with the earlier rise in oil prices and the depreciation of the euro.

The November 2000 SPF shows that professional forecasters expect *real GDP growth* to rise to 3.5% in 2000, but to decline to 3.1% in 2001 and again to 2.8% in 2002. This implies that the expected rate of growth for 2000 remains unchanged from the August 2000 SPF, while for 2001 and 2002 it has been revised downward by 0.1 percentage point. The downward revisions to the growth expectations of respondents appear to be related to the terms of trade loss associated with the rise in oil prices, to indicators pointing to lower growth in the euro area released shortly before the November SPF was concluded and to firmer expectations of a slowdown in growth in the United States. The most common factor mentioned by forecasters for supporting euro area growth in 2001 and 2002 is a relaxation of fiscal policy as a result of planned tax reductions. This, together with employment growth, is expected to support private consumption.

The current survey indicates that the *unemployment rate* is expected to fall gradually from 9.1% on average in 2000 to 8.5% and 8.1% in 2001 and 2002 respectively. While euro area unemployment is foreseen to be on a downward trend, the expectations for 2001 and 2002 have been revised upwards by 0.1 percentage point, which may be linked to the downward revision of expectations for euro area GDP growth.

3 Output, demand and labour market developments

Real GDP growth remains at a high level

According to the first estimate released by Eurostat, as reported in the December issue of the ECB Monthly Bulletin, euro area real GDP growth in the third quarter of 2000 was 0.7% quarter-on-quarter (see Table 4). By comparison, growth in the last two quarters of 1999 was 1.0%, while in the first and second quarters of 2000 it stood at 0.9% and 0.8% respectively. Thus, while remaining at a high level, the pattern of growth in the euro area in 2000 points to a moderation. In year-on-year terms, growth was 3.4% in the third quarter of last year, having been 3.7% in the previous quarter.

Data on industrial production for the euro area are now available up to October 2000 and indicate that production growth may have peaked in the second quarter of last year, moderating slightly since. In the three-month period from August to October 2000, manufacturing production rose by 1.3% compared with the period from May to July

of the same year. This was only slightly lower than the rates of quarter-on-quarter growth of 1.7% and 1.5% recorded in the second and third quarters of last year respectively (see Table 5). With regard to the main categories of the manufacturing sector, the greatest contribution to growth continued to come from the capital goods sector, which recorded an increase of 2.7% in the three-month period from August to October 2000 compared with the preceding three-month period, which was slightly higher than the growth rates recorded in the second and third quarters of the year. At the same time, growth in the consumer goods industries and intermediate goods industries weakened further to rates of below 1%. On a year-on-year basis, growth in the manufacturing sector stood at 4.1% in October 2000, which was lower than in the previous few months but still a high level.

The pattern of some moderation in industrial activity is in line with recent survey data. In particular, as reported in the December issue

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

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1997	1998	1999	1999	1999	2000	2000	2000	1999	1999	2000	2000	2000
				Q3	Q4	Q1	Q2	Q3	Q3	Q4	Q1	Q2	Q3
Real gross domestic product	2.3	2.8	2.5	2.6	3.3	3.5	3.7	3.4	1.0	1.0	0.9	0.8	0.7
<i>of which:</i>													
Domestic demand	1.7	3.4	3.0	3.0	2.9	2.7	3.1	3.4	0.6	0.8	0.8	0.9	0.9
Private consumption	1.6	3.0	2.7	2.6	2.6	2.5	2.9	2.6	0.7	0.6	0.9	0.7	0.4
Government consumption	1.0	1.1	1.5	1.6	1.5	1.7	1.6	1.4	0.4	0.4	0.7	0.2	0.2
Gross fixed capital formation	2.4	4.8	5.3	5.8	5.5	5.4	5.0	4.4	2.0	0.2	1.8	0.9	1.4
Changes in inventories ^{3), 4)}	0.1	0.4	0.0	-0.1	-0.1	-0.3	0.0	0.6	-0.3	0.3	-0.2	0.3	0.3
Net exports ³⁾	0.6	-0.6	-0.4	-0.3	0.5	0.8	0.6	0.1	0.4	0.2	0.1	-0.1	-0.2
Exports ⁵⁾	10.5	7.0	4.7	5.7	10.2	12.8	12.1	11.7	3.3	3.4	2.6	2.2	3.0
Imports ⁵⁾	9.0	9.5	6.4	7.1	9.2	10.8	10.7	12.1	2.4	2.9	2.4	2.6	3.7

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.

Table 5
Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	1998	1999	2000 Aug.	2000 Sep.	2000 Oct.	2000			2000				
						Aug.	Sep.	Oct.	May	June	July	Aug.	Sep.
						month-on-month			three-month moving averages				
Total industry excl. construct.	4.3	1.9	6.5	5.7	3.8	0.3	0.7	-0.2	1.7	1.1	0.5	0.8	0.9
Manufacturing	4.7	1.9	7.2	6.2	4.1	1.0	0.0	-0.3	1.7	1.3	1.1	1.5	1.3
by main industrial groupings:													
Intermediate goods	4.0	2.3	6.5	4.9	3.6	0.4	0.5	-0.3	1.3	1.1	0.2	0.9	0.7
Capital goods	6.5	1.5	12.1	10.7	8.8	1.4	0.7	0.4	2.5	2.3	2.2	2.5	2.7
Consumer goods	5.6	3.0	8.4	5.4	1.4	2.3	-2.2	-1.0	1.9	1.2	1.0	1.6	0.9
Durable consumer goods	6.3	3.2	10.1	5.8	1.6	2.6	-2.6	-1.3	1.8	1.0	0.9	1.7	0.9
Non-durable consumer goods	1.9	1.5	1.6	2.5	0.6	0.3	0.3	0.3	3.0	2.1	1.4	0.9	0.8

Sources: Eurostat and ECB calculations.

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

of the ECB Monthly Bulletin, both the industrial confidence and business climate indicators, derived from the European Commission's Business Survey, declined slightly in November 2000, but remained at a high level, close to their respective peaks recorded in June of last year (see Table 6). In December 2000 the Purchasing Managers' Index (PMI) for the manufacturing sector declined further to 53.4 and reached its

lowest level since July 1999 (see Chart 13). The pace of decline in the PMI index increased in the last quarter of 2000 as compared with the previous quarter, but the PMI remained above the level of 50, which indicates zero growth. Compared with the industrial confidence indicator derived from the European Commission Business Survey, the PMI points to a more marked fall in industrial production growth in the last

Table 6
Results from European Commission Business and Consumer Surveys for the euro area

(seasonally adjusted data)

	1997	1998	1999	1999				2000						
				Q4	Q1	Q2	Q3	June	July	Aug.	Sep.	Oct.	Nov.	
Economic sentiment index ¹⁾	2.4	2.9	0.0	1.0	1.1	0.2	-0.4	0.0	0.0	0.0	-1.0	-0.1	-0.1	
Consumer confidence indicator ²⁾	-4	6	8	10	11	11	10	10	11	12	8	8	8	
Industrial confidence indicator ²⁾	3	6	0	6	10	13	13	15	14	13	13	13	12	
Construction confidence indicator ²⁾	-12	2	14	18	21	23	23	24	23	26	20	23	20	
Retail confidence indicator ²⁾	-4	2	0	-2	5	8	3	12	2	2	4	4	2	
Business climate indicator ³⁾	0.3	0.7	-0.1	0.5	1.1	1.4	1.4	1.7	1.4	1.4	1.4	1.4	1.2	
Capacity utilisation (%) ⁴⁾	81.4	82.9	82.0	82.5	83.4	83.8	84.3	-	83.9	-	-	84.7	-	

European Commission Business and Consumer Surveys and European Commission (DG ECFIN).

1) Percentage changes compared with the previous period.

2) Percentage balances; data shown are calculated as deviations from the average over the period since January 1985.

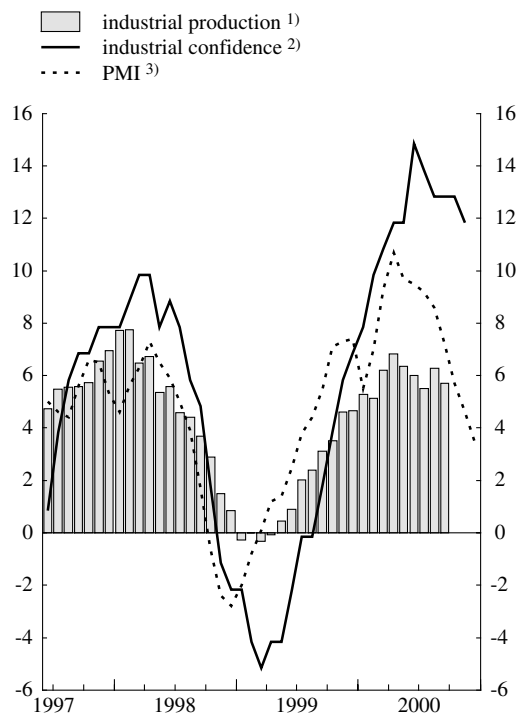
3) Units are defined as points of standard deviation.

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

Chart 13

Industrial production, industrial confidence and the PMI for the euro area

(monthly data)



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

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

quarter of last year, but it should be noted that it has a much shorter history and, particularly in recent months, has tracked year-on-year growth in manufacturing production less closely.

Stable consumer confidence from September to November

According to the European Commission's Consumer Survey, consumer confidence remained unchanged from September to November 2000, following a fall in September from the high levels which had been observed throughout 2000 until August (see Table 6). The one-off decline in consumer confidence reflected a less positive assessment by

households of the general economic situation and was probably linked to the impact of the sharp rise in oil prices. While the high oil prices have been reflected in lower increases in real disposable income, households' assessment of both their present and future financial situation did not change significantly over the course of 2000; this most likely reflects the continued positive developments in euro area labour markets in recent months.

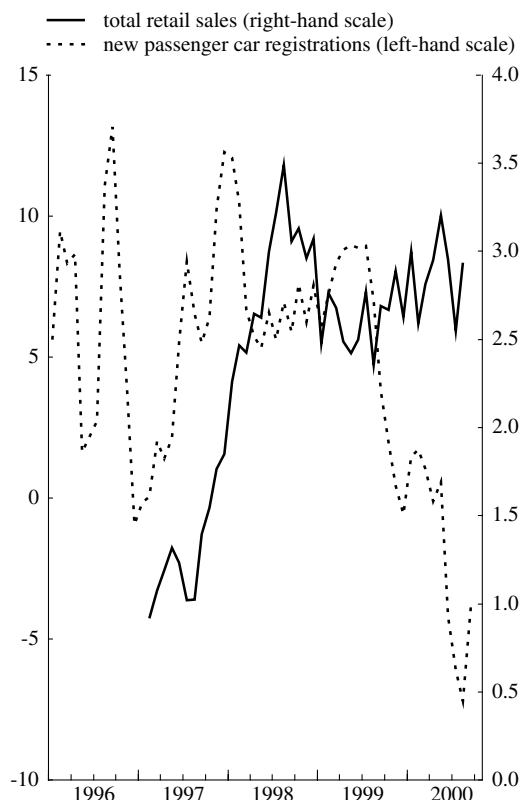
Retail sales rose by 2.6% year-on-year in the third quarter of 2000. Although this is below the rate of growth of 3.4% recorded in the second quarter of 2000, it is in line with the average 1999 growth rate (see Chart 14).

Overall, the latest developments in indicators of euro area output and demand suggest that

Chart 14

New passenger car registrations and retail sales in the euro area

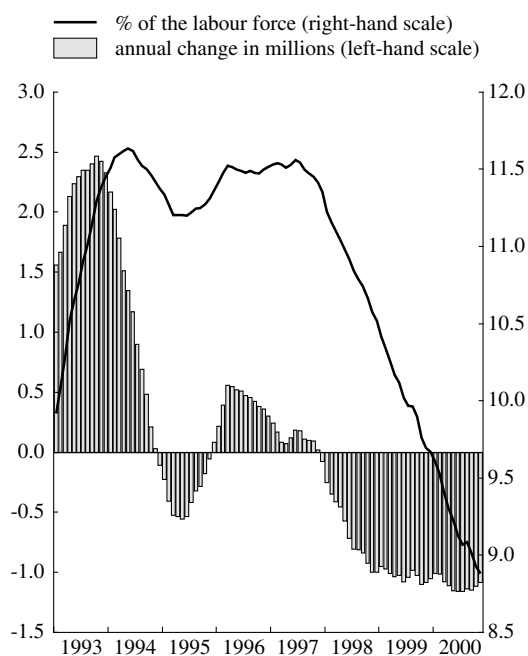
(annual percentage changes; three-month centred moving averages; seasonally adjusted)



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

Chart 15 Unemployment in the euro area

(monthly data; seasonally adjusted)



Source: Eurostat.

growth may have reached a peak during the first half of 2000 and that somewhat lower growth can be expected for the last quarter of 2000. Higher oil prices are among the main factors that could explain the slight slowdown in growth in the course of 2000; however, the overall impact of this on the euro area economy is expected to remain relatively moderate.

The unemployment rate was unchanged in November

In November 2000 the standardised rate of unemployment in the euro area stood at 8.9% of the labour force, which was unchanged from the rate for October (see Chart 15). Owing to the inclusion of Greece, the estimate of the standardised unemployment rate for the euro area was revised upwards in October, and in general for the year 2000, by around 0.1 percentage point; however, this has not changed the pattern of unemployment developments. While the unemployment rate was unchanged in November 2000, the number of unemployed declined by 62,700 compared with the previous month, thus confirming the general downward trend in unemployment. Compared with the same month a year earlier, unemployment declined by almost 1.1 million in November 2000.

In terms of the breakdown by age, both the unemployment rate for those aged 25 and above and the rate for those below 25 years of age fell by 0.1 percentage point, to 7.7% and 17.4% respectively, in November 2000 (see Table 7). Recent developments point to a slight slowdown in the reduction in unemployment among those under the age of 25, while the pace of decline has remained broadly stable for those aged 25 and above.

Table 7 Unemployment in the euro area

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

	1997	1998	1999	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 June	2000 July	2000 August	2000 Sep.	2000 Oct.	2000 Nov.
Total	11.5	10.9	10.0	9.7	9.5	9.2	9.1	9.1	9.1	9.1	9.0	8.9	8.9
Under 25 years ¹⁾	23.5	21.6	19.6	18.7	18.5	18.0	17.9	17.8	17.8	18.0	17.8	17.5	17.4
25 years and over ²⁾	9.8	9.4	8.7	8.5	8.3	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.7

Source: Eurostat.

Note: According to ILO recommendations.

1) In 1999 this category represented 23.7% of total unemployment.

2) In 1999 this category represented 76.3% of total unemployment.

Table 8**Employment growth in the euro area***(annual percentage changes, unless otherwise indicated; seasonally adjusted)*

	1998	1999	1999	1999	2000	2000	1999	1999	2000	2000	2000	2000	2000
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	May	June	July
	Quarterly rates ¹⁾												
Whole economy	1.6	1.8	1.8	1.8	1.9	2.2	0.5	0.4	0.6	0.6	-	-	-
Total industry excl. construct.	0.2	-0.7	-0.9	-0.7	-0.3	-0.1	-0.2	0.0	0.2	0.0	-0.1	0.0	0.2
Manufacturing	0.5	-0.5	-0.8	-0.5	0.0	0.4	-0.1	0.1	0.3	0.1	0.4	0.5	0.6

*Sources: National data and Eurostat (Short-term Business Statistics).**1) Quarterly rates: percentage change compared with the previous quarter.***Employment growth is estimated to have remained strong in the third quarter of 2000**

As mentioned in the December 2000 issue of the ECB Monthly Bulletin, early estimates based on available national data point to continued strong employment growth in the third quarter of 2000, although slightly below the 0.6% quarter-on-quarter growth rates recorded in the first half of the year.

No new data have been released at the sectoral level since the previous issue of the ECB Monthly Bulletin (see Table 8). Employment expectations in industry and

services, as seen from the European Commission's Business Surveys and the Purchasing Managers' Surveys, indicate sustained strong employment growth in the third quarter of 2000 in both sectors.

As stressed in previous issues of the ECB Monthly Bulletin, further structural reform efforts in labour and product markets should be pursued in order to reduce structural unemployment in the euro area and to foster participation. In this context, the ECB welcomes the adoption of the Employment Guidelines for 2001, which are summarised in Box 4.

Box 4**The Employment Guidelines for 2001**

In recent years, a number of initiatives have been taken to address the problems of high unemployment and labour market rigidities in the European Union (EU). In particular, with the inclusion of a new title on employment in the Treaty of Amsterdam and following the Luxembourg European Council on Employment in November 1997, a co-ordinated strategy for employment was set up at the EU level. According to the newly established Article 126 of the Treaty establishing the European Community, Member States shall contribute to a high level of employment through their national employment policies, which must be consistent with the Broad Economic Policy Guidelines.¹ To this end, under the new strategy, an annual procedure has been established which consists of the adoption of Employment Guidelines and country-specific recommendations, the submission by Member States of National Action Plans for Employment and the preparation by the European Commission and the EU Council of a Joint Employment Report. At the end of each year, the European Council reviews and draws conclusions on the Joint Employment Report, in which the European

¹ For more details, see Box 3 on page 29 of the July 2000 issue of the ECB Monthly Bulletin on the Broad Economic Policy Guidelines 2000.

Commission and the EU Council jointly assess the employment situation in the European Community. This report, which draws in particular on the National Action Plans for Employment submitted by Member States, provides an assessment of how Member States have implemented the Employment Guidelines in the previous year and how they have incorporated the Employment Guidelines for the current year in their National Action Plans. The Joint Employment Report also establishes the factual basis for the Employment Guidelines for the subsequent year, which are adopted by the EU Council following their endorsement by the European Council.

The Employment Guidelines for 2001, i.e. the fourth annual edition since the Luxembourg Summit, were endorsed by the Nice European Council in December 2000. The Employment Guidelines for this year reiterate the goal of strengthening the conditions for full employment in a knowledge-based society, already mentioned in the Conclusions of the Lisbon European Council in March 2000. In particular, the objective is to raise the employment rate in the EU to a level as close as possible to 70% by 2010 and to increase the number of women in employment to more than 60% by 2010. The Employment Guidelines for the EU countries are presented in a four-pillar structure.

Under the *first pillar*, entitled “*Improving employability*”, Member States are requested to tackle youth unemployment and prevent long-term unemployment. They are also called upon to review their benefit, tax and training schemes so that they become more employment friendly. In addition, they are invited to develop a policy which would enhance the capacity of and the incentives for older workers to remain in the labour force for as long as possible. Efforts should also be made to provide people with the capacity to access and reap the benefits of a knowledge-based society. Furthermore, Member States are to implement policies so as to reduce mismatches between job seekers and vacancies and to prevent and combat emerging labour market bottlenecks. They are also requested to combat discrimination and promote social inclusion by improving access to employment.

According to the *second pillar*, entitled “*Developing entrepreneurship and job creation*”, Member States should make it easier to start up and run businesses and exploit the employment potential of a knowledge-based society and the services sector. They are also requested to identify the potential for job creation at the local level, promote partnership between all actors involved and strengthen the role of the Public Employment Services. In order to make tax systems more employment friendly, they should be reformed so as to reverse the long-term trend towards higher taxes on labour. Member States are encouraged to set a target both to gradually reduce the overall tax burden and, where appropriate, to gradually reduce the fiscal pressure on labour and non-wage labour costs, particularly for relatively unskilled and low-paid workers. Such reforms should be undertaken without jeopardising the consolidation of public finances or the financial equilibrium of social security systems.

Under the *third pillar*, entitled “*Encouraging adaptability of businesses and their employees*”, Member States are called upon to promote the modernisation of work organisation and develop strong partnerships at all appropriate levels. In particular, there should be the possibility to introduce more flexible types of contracts under national law. In order to develop skills within enterprises, social partners are invited to conclude agreements on lifelong learning so as to facilitate adaptability and innovation.

Under the *fourth pillar*, entitled “*Strengthening equal opportunities for women and men*”, Member States are invited to reinforce their policies towards gender equality and to address all relevant conditions influencing women’s decisions to take up employment. In addition, Member States are requested to tackle gender-related pay gaps and to favour women’s access to jobs and policies that reconcile work and family life.

4 Exchange rate and balance of payments developments

The euro strengthened further in December

In December 2000 the euro rebounded against all major currencies amid further signs of a slowdown in major economies among the euro area's trading partners and favourable growth prospects for the euro area. The euro's gains were particularly sizeable against the US dollar and the Japanese yen and resulted in a substantial increase in its effective exchange rate.

The euro appreciated against the US dollar following signs of decelerating economic activity in the United States, as confirmed by a further downward revision of the US real GDP growth rate for the third quarter of 2000, reports of a substantial weakening in sales and earnings of US companies, as well as lower consumer confidence. Long-term

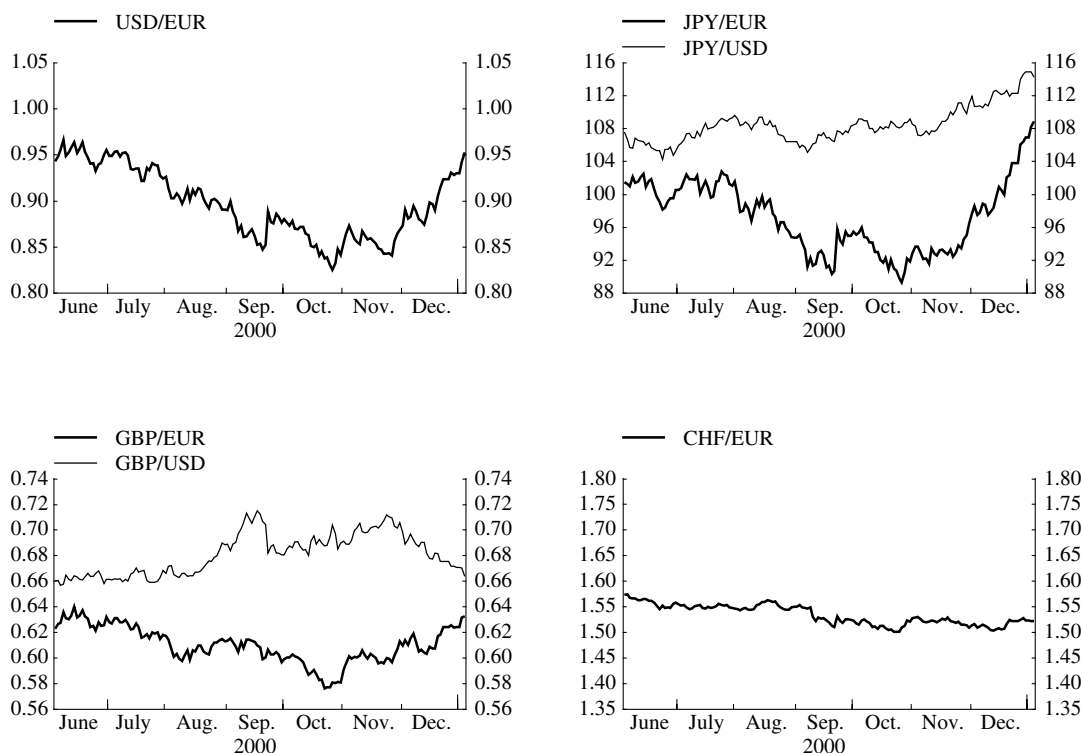
bond spreads between the United States and the euro area continued to narrow in the course of December 2000. On 19 December the Federal Reserve System decided to keep its target for the federal funds rate unchanged at 6½% and said that the risks were weighted mainly towards conditions that may generate economic weakness in the foreseeable future. On 3 January 2001 the Federal Open Market Committee decided to lower its target for the federal funds rate to 6%. Prior to this decision, the euro had traded on that day at USD 0.95, more than 9% higher than at the beginning of December 2000, but still roughly 5½% lower than at the beginning of 2000.

The euro also recorded significant gains against the Japanese yen, reaching at the beginning of 2001 its highest level since spring 2000. The weakening of the yen, which fell

Chart 16

Patterns in exchange rates

(daily data)



Source: ECB.

against the US dollar to its lowest level in 16 months, relates to renewed market doubts about the strength of the economic recovery in Japan. Domestic spending remains rather weak and the fragility of the Japanese financial system is still apparent. The recent release of weaker than expected industrial production data for November, as well as news that the third quarter economic growth figure may be revised downwards, weighed on the Japanese currency. On 3 January 2001 the euro was recorded at JPY 108.9, more than 11% higher than at the beginning of December 2000 and almost 6% above its level at the beginning of 2000.

The euro also continued to strengthen against the pound sterling in December, although at a slower pace than against the US dollar or the yen. This development took place amid mixed signals regarding the prospects for economic growth in the United Kingdom. Against the US dollar, however, sterling rose by almost 5% compared with the beginning of December 2000 and settled at its highest level in more than four months. On 3 January 2001 the euro traded at GBP 0.63 against the pound sterling, more than 3½% higher than at the beginning of December 2000 and roughly 1% above the level at the beginning of 2000.

Within ERM II, the Danish krone remained broadly stable at around DKK 7.46. The Greek drachma had by mid-December already reached its central parity of GRD 340.75, which was officially determined in June 2000 as its entry rate. With a view to Greece's entry into the euro area on 1 January 2001, the Bank of Greece took a series of steps in December 2000 to lower its key interest rates to the respective ECB interest rates.

With regard to other currencies, the euro continued to be relatively stable against the Swiss franc in December, albeit appreciating slightly towards the end of the month to trade on 3 January at CHF 1.52, roughly ½% higher than at the beginning of December. The euro also strengthened against the Swedish krona in the second half of

December. On 3 January it was quoted at SEK 8.94, roughly 4½% above its level at the beginning of 2000.

In nominal effective terms, the euro strengthened by more than 6½% between the beginning of December and 3 January, trading at its highest level since early 2000. This reflected the recent rebound against the currencies of the euro area's major trading partners. Compared with the beginning of 2000, the depreciation of the euro now amounts, on balance, to less than ½%. Trends in the euro's real effective exchange rates, which are adjusted for the price development differentials between the euro area and its major trading partners, continue to track the nominal index fairly closely.

Current account deficit levelled off in October

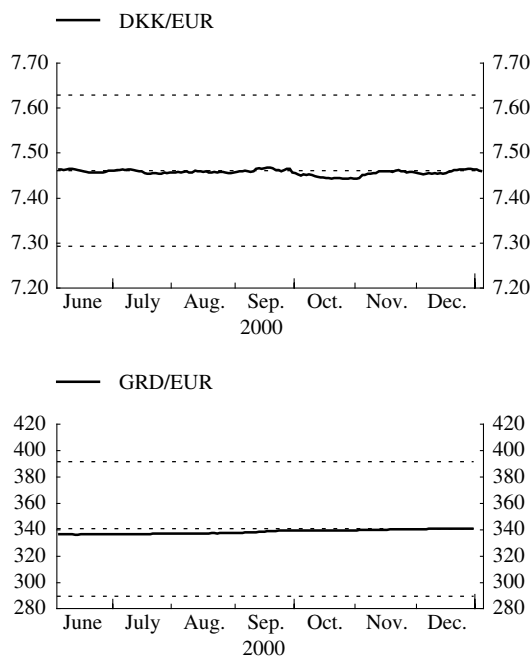
In October 2000 the current account deficit decreased to €0.1 billion, compared with €0.5 billion in October 1999 (see Table 9). This slight decline was due to a reduction in the income deficit, which more than offset increases in the deficits in both services and current transfers, and a small decrease in the goods surplus.

The cumulative current account balance for the first ten months of 2000 amounted to a deficit of €20.5 billion, compared with a small surplus of €0.2 billion for the same period in 1999. This change stems mainly from a decrease in the goods surplus (from €71.6 billion to €49.7 billion), as the €5.8 billion decline in the income deficit was largely offset by a rise in the deficit in current transfers, along with a slight increase in the services deficit. Exports of goods increased by 20.4% during the first ten months of 2000 compared with the same period in 1999, but the increase in imports was even stronger (26.6%). The increase in imports is, to a large extent, attributable to a rise in import prices resulting from the combined effect of the substantial rise in oil prices and the depreciation of the euro.

Chart 17

Patterns of exchange rates within ERM II

(daily data)



Source: ECB.

Note: The horizontal lines indicate the central parities (DKK 7.46; GRD 340.75, with the latter being effective from 17 January 2000) and the respective fluctuation bands ($\pm 2.25\%$ for DKK and $\pm 15\%$ for GRD).

Moreover, strong economic activity in the euro area led to higher import volumes. By contrast, exports grew primarily as a result of increasing export volumes related to improving price competitiveness and strong foreign demand.

An interesting development in recent months has been the significant slowdown in the decline in the goods surplus. Over the period from August to October 2000 the surplus was only marginally lower than in the same months in 1999, mostly on account of an acceleration in export growth against a background of stable import growth. This occurred despite the growing deterioration in the energy deficit, thereby suggesting improvements in the non-energy goods balance.

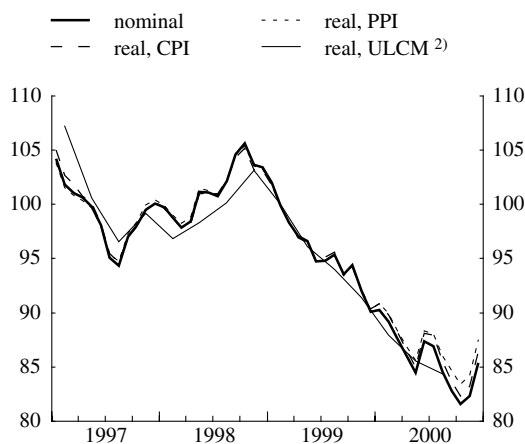
Combined net direct and portfolio investment outflows declined in October

In October 2000, combined direct and portfolio investment recorded net outflows of €17.4 billion, compared with €30.4 billion in both August and September, mainly as a result of lower net direct investment outflows (€15.7 billion in October, compared with €34.3 billion in September and €45.7 billion in August). In particular, direct investment abroad by euro area residents was sharply lower in October (€24.8 billion) compared with levels of around €50 billion in each of the previous two months. By contrast, direct investment in the euro area remained roughly constant at around €10 billion in each of the three months to October (€9.2 billion in that month). Regarding portfolio investment, in October a net outflow from equities (€6.7 billion) was not fully offset by a net inflow into debt instruments (€5.0 billion), resulting overall in a small net outflow (€1.7 billion), compared with net inflows of €3.9 billion in September and €15.3 billion in August.

Chart 18

Nominal and real effective exchange rates¹⁾

(monthly/quarterly averages; index: 1999 Q1 = 100)



Source: ECB.

1) Data are ECB calculations (see the article in the April 2000 issue of the ECB Monthly Bulletin). An upward movement of the index represents an appreciation of the euro. The latest observations are for December 2000 and for the ULCM-based real effective exchange rate for 2000 Q3.

2) Unit Labour Costs in Manufacturing.

Table 9
Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

	1999 Jan. - Oct.	1999 Oct.	2000 Jan. - Oct.	2000 Aug.	2000 Sep.	2000 Oct.
Current account balance	0.2	-0.5	-20.5	-2.2	-1.5	-0.1
Credit	1,094.6	116.7	1,274.2	120.8	133.2	140.7
Debit	1,094.4	117.1	1,294.7	123.0	134.7	140.9
Goods balance	71.6	9.1	49.7	4.6	4.5	8.2
Exports	662.5	75.2	797.8	75.5	85.3	92.9
Imports	590.9	66.1	748.1	70.9	80.9	84.7
Services balance	-8.0	-0.4	-8.5	0.3	-1.5	-1.2
Exports	199.3	20.8	218.8	23.4	22.3	23.0
Imports	207.3	21.3	227.3	23.1	23.7	24.2
Income balance	-28.0	-5.0	-22.2	-1.6	-1.1	-1.2
Current transfers balance	-35.4	-4.1	-39.5	-5.6	-3.4	-6.0
Capital account balance	9.4	1.6	6.5	0.1	0.7	0.1
Financial account balance	24.9	8.4	37.7	-3.9	-3.5	-6.8
Direct investment	-83.3	-9.3	22.9	-45.7	-34.3	-15.7
Abroad	-163.6	-16.5	-270.8	-53.7	-47.2	-24.8
Equity capital and reinvested earnings	-102.3	-14.8	-208.5	-55.3	-26.2	-27.9
Other capital, mostly intercompany loans	-61.3	-1.7	-62.3	1.6	-21.1	3.1
In the euro area	80.4	7.1	293.7	8.0	13.0	9.2
Equity capital and reinvested earnings	37.9	1.2	234.5	3.6	4.7	6.5
Other capital, mostly intercompany loans	42.5	5.9	59.2	4.4	8.3	2.6
Portfolio investment	-53.6	-14.6	-129.2	15.3	3.9	-1.7
Equity	-41.9	-3.6	-250.5	-0.0	-4.8	-6.7
Assets	-113.3	-13.3	-234.5	-17.5	-8.1	-15.6
Liabilities	71.5	9.7	-15.9	17.5	3.3	8.9
Debt instruments	-11.8	-11.0	121.2	15.3	8.7	5.0
Assets	-131.2	-8.1	-110.1	-4.2	-18.5	-10.9
Liabilities	119.5	-2.9	231.3	19.4	27.2	15.9
Memo item:						
Combined net direct and portfolio investment	-136.9	-23.9	-106.4	-30.4	-30.4	-17.3
Financial derivatives	6.3	-2.2	3.3	-0.6	2.0	-2.2
Other investment	144.4	34.2	132.4	25.9	20.6	11.8
Reserve assets	11.1	0.3	8.3	1.2	4.2	1.0
Errors and omissions	-34.5	-9.5	-23.7	6.1	4.3	6.8

Source: ECB.

Note: Figures may not add up due to rounding. For the financial account, a positive sign indicates an inflow, a negative sign an outflow; for reserve assets, a negative sign indicates an increase, a positive sign a decrease. A more detailed set of tables can be found in 8 of the "Euro area statistics" section of this issue of the ECB Monthly Bulletin.

In the first ten months of 2000, combined net direct and portfolio investment outflows (€106.3 billion) were lower than in the same period of 1999 (€136.9 billion). A main determinant of this decline was the fact that the balance for debt instruments became a net inflow of €121.2 billion, following a net outflow of €11.8 billion in 1999. Moreover,

direct investment registered a swing from net outflows of €83.3 billion in the first ten months of 1999 to net inflows of €22.9 billion in the corresponding months of 2000. These developments offset the increase in the net outflow of equity portfolio investment (from €41.9 billion to €250.5 billion).

The euro area after the entry of Greece

In the first two years of its existence, the euro area comprised 11 countries. On 1 January 2001, Greece entered the euro area and thus became the 12th European Union Member State to adopt the single currency. The Greek fulfilment of the convergence criteria for entering the euro area is a significant achievement and the result of impressive developments in the Greek economy in recent years. This article briefly reviews the completion of the Greek convergence process in the second half of 2000 and then focuses on the key structural economic features of the euro area including Greece. Given its fairly small size relative to the euro area as a whole, the entry of Greece has not materially changed the features of the euro area. As in previous years, data on these key features have been updated to provide the public at large with frequently used reference material on the main properties of the euro area, now also including Greece.

I Introduction and overview

Greece has been participating fully in European Economic and Monetary Union (EMU) since 1 January 2001, following the decision by the ECOFIN Council on 19 June 2000 confirming that Greece had fulfilled the necessary conditions to adopt the single currency. During the interim period, intense preparations for the technical and organisational inclusion of the Bank of Greece in the Eurosystem were successfully completed.

Against this background, this article first briefly describes the completion of the

convergence process of Greece prior to its participation in EMU. This is followed by a presentation of the key structural macroeconomic features of the euro area including Greece, providing an update of the article in the January 2000 ECB Monthly Bulletin entitled “The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure”. Comparisons are made with the two other large economic entities, the United States and Japan, which are taken as a reference.

2 Completion of the convergence process of Greece in the second half of 2000

The convergence of Greek short-term interest rates towards comparable euro area levels started well before ECOFIN’s decision that Greece fulfilled the necessary conditions to participate in the single currency (for an overview of developments up to March 2000, see the ECB’s Convergence Report 2000). However, in June 2000, Greek short-term interest rates were still above comparable euro area levels and the Greek drachma was trading above its ERM II central parity against the euro. Thereafter, the second half of 2000 saw further progress with regard to interest rate convergence and an alignment of the drachma with its irrevocable conversion rate against the euro.

By the end of 2000, the short-term interest rate spread between Greece and the euro

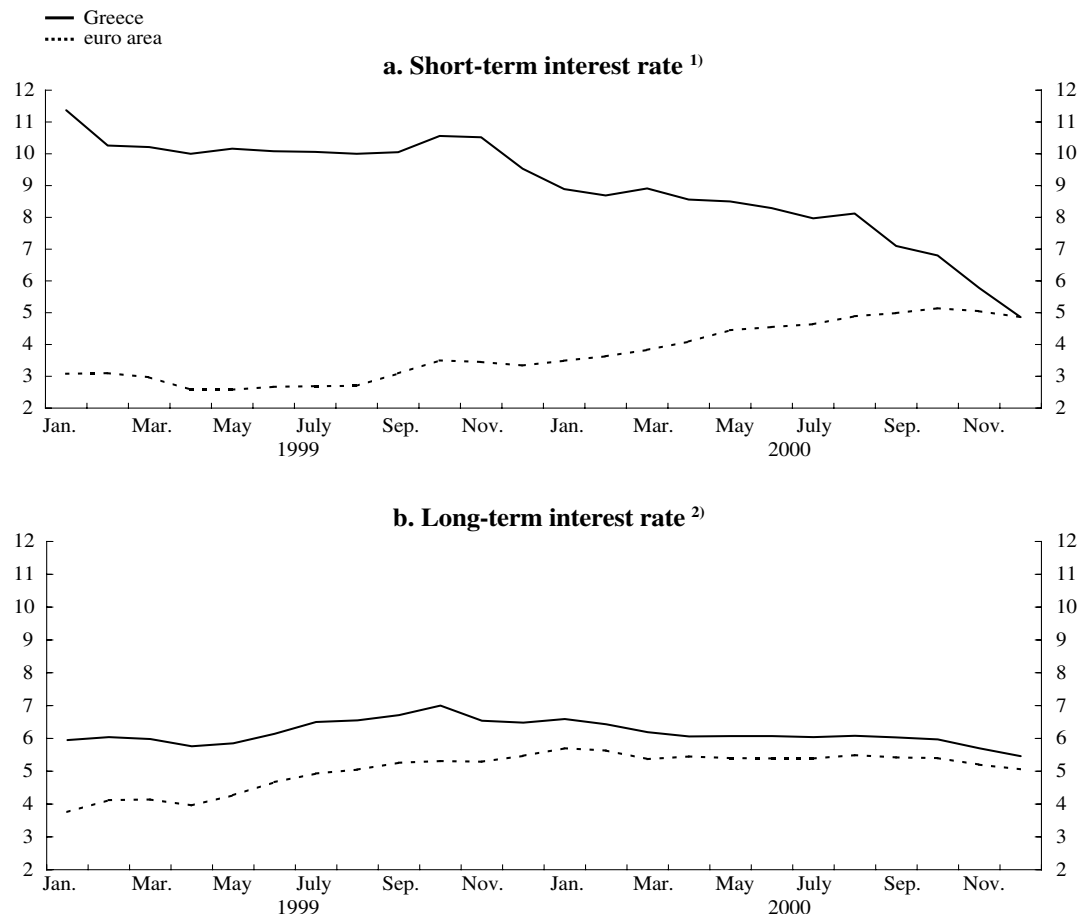
area had completely disappeared (see Chart 1). The Greek three-month interest rate (as measured by the Athens interbank offered rate ATHIBOR) was 390 basis points above the three-month euro interbank offered rate (EURIBOR) in June 2000 and subsequently declined by 354 basis points to 4.86% at the end of December 2000. During the same period, the EURIBOR increased by 36 basis points.

On 19 June 2000 when the ECOFIN Council agreed that Greece had qualified to participate in the single currency, the Council also decided that, with effect from 1 January 2001, the irrevocable conversion rate between the drachma and the euro should be equal to its central rate against the euro in the exchange rate mechanism ERM II.

Chart I

Short and long-term interest rates in Greece and the euro area

(end-of-period observations in percentages)



Source: ECB.

1) Three-month interest rates.

2) Ten-year government bond yields.

On the day of this decision, the drachma was trading at GRD 336.6 to the euro, whereas on 29 December 2000 it was irrevocably fixed at GRD 340.750 to the euro.

The convergence of the drachma towards its ERM II central rate had already started in the second half of 1999 (see Chart 2). Moreover, the convergence process was facilitated by a revaluation of the drachma's ERM II central rate on 17 January 2000.

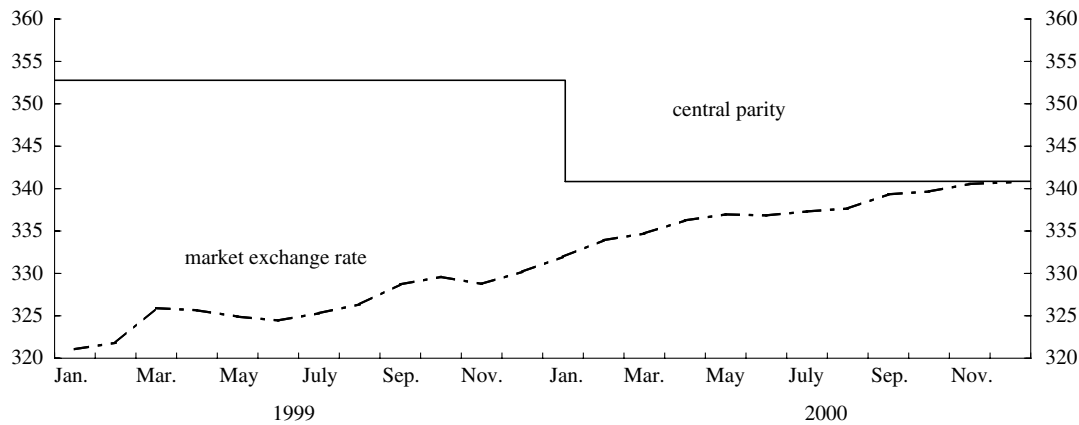
Turning to consumer prices and fiscal variables, the average rate of HICP (Harmonised Index of Consumer Prices) inflation in Greece during the 12-month

period to November 2000 was 2.8%, 0.5 percentage point above the HICP inflation rate for the euro area. In line with the methodology used in the ECB's Convergence Reports, these inflation rates are calculated using the increase in the latest available 12-month average of the HICP over the previous 12-month average. In 1999 as a whole, Greece's average annual inflation rate stood at 2.1%, one percentage point above the comparable euro area rate. According to the European Commission's Autumn 2000 Forecasts, the general government deficit ratio is expected to be 0.8% of GDP and the corresponding debt ratio 103.9% of GDP in 2000. Compared with 1998, this would imply

Chart 2

Exchange rate of the Greek drachma against the euro

(end-of-period observations, GRD/EUR)



Source: ECB.

falls in the Greek deficit and debt ratios of 2.3 and 1.6 percentage points of GDP, respectively.

At the end of December 2000, the spread between Greek long-term interest rates (as measured by the ten-year government bond yield) and comparable euro area rates amounted to 40 basis points, i.e. 34 basis points less than in June 2000 when Greek long-term interest rates stood at 6.1%. Compared with the annual averages for 1998 and 1999, Greek long-term bond yields had declined by 298 and 80 basis points respectively by the end of December 2000.

The resulting small spread relative to euro area bond yields demonstrates the success of the stability-oriented policies pursued in Greece in the past decade. In line with the experience of other euro area Member States, it can be expected that some spread between Greek and average euro area long-term rates is likely to persist after the entry of Greece. In December 2000, long-term government bond yields in the euro area Member States ranged from 4.90% to 5.31%. These differences reflect, inter alia, differences in risk premia and the size and depth of the national government bond markets.

3 Key macroeconomic features of the euro area including Greece

This section updates the information provided in the article in the January 2000 issue of the ECB Monthly Bulletin entitled "The euro area one year after the introduction of the euro: key characteristics and changes in the financial structure". The 1999 euro area data referred to in this section include Greece unless otherwise stated.¹ The macroeconomic features of the euro area as a whole reflect the aggregate structures of the individual euro area countries. In general, these structures are a weighted average of the individual country data. While adding a comparatively small country to the euro area leads to a noticeable change in a few

features of the area as a whole, the impact for most variables is naturally very limited. Extending the euro area to include an additional country has a number of implications for euro area statistics, which are elaborated upon further in the box overleaf.

¹ At the time of writing, the latest available calendar year data on financial market and key macroeconomic characteristics of the euro area referred to 1999. These data have been compiled for analytical purposes, while official data for the euro area including Greece will cover the period from 1 January 2001 onwards, as stated in the box.

Box

Statistical implications of the entry of Greece into the euro area

The enlargement of the euro area to include Greece as from 1 January 2001 has two main statistical implications. First, residents of Greece have become residents of the euro area. Second, the Greek drachma is a national denomination of the euro. Consequently, from a statistical perspective, the composition of the “rest of the world” and of “foreign currencies” have changed. This in turn affects all monetary, financial and other economic statistics for the euro area as a whole.

To ensure smooth and timely availability of the new euro area statistics including Greece, statistical preparations have been stepped up since the ECOFIN Council decided on 19 June 2000 that Greece fulfilled the criteria for participating in the single currency from 1 January 2001. The preparations required changes to Greek statistics as well as changes to statistical reporting in other euro area Member States to enable euro area aggregates to be calculated correctly following the entry of Greece. The preparation of statistics for the enlarged euro area has been co-ordinated, where necessary, with the European Commission to ensure consistency in all statistical domains.

Regarding the presentation of euro area statistics in the statistical section of the ECB Monthly Bulletin, reference statistical series relating to the euro area will continue to cover the Member States making up the euro area at the time in question. This implies that stock data, such as employment and Monetary Financial Institution (MFI) balance sheet data, and flow data, such as balance of payments statistics, referring to periods up to and including December 2000 cover the euro area of 11 participating countries, while data referring to periods or dates from January 2001 onwards cover the extended euro area of 12 participating countries (i.e. including Greece). To the extent possible, absolute and percentage changes for 2001, which are calculated from a base in 2000, make allowance for the change in composition of the euro area.

All changes will be implemented in the statistical section of the ECB Monthly Bulletin, as data for the year 2001 become available. Monetary policy statistics (the first block in the “Euro area statistics” section) and data on monetary developments, financial markets, interest rates and consumer prices for the extended euro area will be available first. Balance of payments data as well as real economy statistics for the extended euro area are expected to become available later, reflecting the normal timetable for release.

For analytical purposes, historical data for the 11 euro area countries plus Greece for a number of key series such as those described in this article are presented in a supplementary table in the “Euro area statistics” section of the ECB Monthly Bulletin and on the ECB’s website.

Population and economic activity

Measured in terms of population, the euro area is one of the largest economic entities in the world, with a total population of 302 million people including the Greek population of 10 million. By way of comparison, the populations of the United States and Japan are 272 million and 127 million, respectively.

Euro area economic activity, as measured by GDP, was just below €6,250 billion in 1999, of which Greece contributed around

€120 billion (see the table opposite). While the share of the United States in world GDP still remains higher than that of the euro area, the entry of Greece has led to a rise in the euro area’s share of world GDP from 15.8% to 16.2%. Since the Greek contribution to the euro area is composed of a somewhat large population relative to the level of economic activity, the entry of Greece implies a slight decline in the average level of euro area GDP per capita. However, excluding the Greek data, GDP per capita in the euro area is lower than in the United States and Japan.

Table**Key characteristics of the euro area including and excluding Greece**

	Reporting period	Unit	Euro area incl. Greece	Euro area excl. Greece	United States	Japan
Population ¹⁾	2000	m	302	292	272	127
GDP (share of world GDP) ²⁾	1999	%	16.2	15.8	21.9	7.6
GDP	1999	€ bn	6,245	6,127	8,666	4,081
GDP per capita	1999	€	20,667	21,013	31,916	32,205
Sectors of production ³⁾						
Agriculture, fishing, forestry	1999	% of GDP	2.8	2.6	1.6	1.8
Industry (including construction)	1999	% of GDP	28.5	28.6	27.3	36.4
Services	1999	% of GDP	68.7	68.7	71.1	61.9
Unemployment rate (share of labour force)	1999	%	10.0	9.9	4.2	4.7
Labour force participation rate ⁴⁾	1999	%	67.3	67.4	77.2	72.4
Employment rate ^{4), 5)}	1999	%	60.5	60.6	73.9	68.9
Exports of goods ⁶⁾	1999	% of GDP	12.9	13.3	7.4	9.3
Exports of goods and services ⁶⁾	1999	% of GDP	16.9	17.2	10.3	10.7
Imports of goods ⁶⁾	1999	% of GDP	11.8	11.9	11.1	6.4
Imports of goods and services ⁶⁾	1999	% of GDP	15.9	16.1	13.2	9.1
Exports (share of world exports) ⁷⁾	1999	%	18.9	19.0	15.2	9.1
Current account balance ⁶⁾	1999	% of GDP	-0.2	-0.1	-3.6	2.5
General government						
Surplus (+) or deficit (-)	1999	% of GDP	-1.3	-1.3	1.0	-8.9
Gross debt	1999	% of GDP	72.7	72.2	63.2	125.6
Revenue	1999	% of GDP	47.7	47.8	32.9	31.0
Expenditure	1999	% of GDP	49.0	49.1	31.9	39.9
Bank deposits ⁸⁾	1999	% of GDP	79.4	80.0	41.0	134.5
Stock of loans to the private sector ⁹⁾	1999	% of GDP	90.1	91.1	76.1	136.3
Outstanding domestic debt securities ¹⁰⁾	1999	% of GDP	89.8	90.1	178.0	157.9
Stock market capitalisation	1999	% of GDP	66.1	64.7	128.7	73.9

Sources: Eurostat, IMF, European Commission, OECD, Reuters, ECB and ECB calculations.

1) As of 1 January 2000.

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

3) Based on real value added. Data for the United States and Japan refer to 1997.

4) Data for Greece refer to 1998.

5) As a ratio of the number of persons in employment to the working age population (those aged between 15 and 64).

6) Balance of payments data, only extra-euro area trade flows for the euro area. For euro area imports and exports including Greece: ECB estimate based on Eurostat and ECB balance of payments data.

7) External trade statistics, world exports exclude intra-euro area trade flows.

8) Euro area: total deposits with MFIs; United States: demand, time and savings deposits with banking institutions; Japan: demand and time deposits with deposit money banks.

9) Euro area: MFI loans to other euro area residents; United States and Japan: domestic credit.

10) Data for domestic debt securities refer to December 1999.

It must be noted that these international comparisons can be heavily influenced by the developments in exchange rates in a given year.

The structure of production in the euro area is broadly similar to that of the United States and Japan. In particular, the services sector accounts for the largest share of production in all three economic entities. While the entry of Greece led to a 0.2 percentage point rise in the share of agriculture, fishing and forestry in the euro area, it remained low at 2.8%. Nevertheless, this share is clearly higher in

the euro area than it is in the United States and Japan.

Labour market

Although structural labour market reforms have been implemented in some euro area countries and the euro area unemployment rate has fallen in recent years, it remains significantly higher than in the world's other large economies. Euro area unemployment stood at 9.9% in 1999, compared with 4.2% in the United States and 4.7% in Japan. It is

noteworthy that, besides the higher unemployment rate, the labour force participation rate, which stands at 67.3%, is considerably lower in the euro area than in the United States (77.2%) and Japan (72.4%). The significant gap between the labour force participation rates in the euro area and the United States is much wider for women (around 14 percentage points) than it is for men (about 7 percentage points). Owing partly to a lower than average labour force participation rate among Greek women compared with that in the other euro area countries, the entry of Greece has led to a 0.1 percentage point decline in the labour force participation rate in the euro area as a whole.

The combination of the lower participation rate and the higher unemployment rate in the euro area is also reflected in the employment rate of just above 60% (measured as the number of persons in employment as a percentage of the population aged between 15 and 64). This is much lower than in the United States and Japan where the employment rate was close to or above 70%.

External trade

As noted above, the features of the euro area are generally a weighted average of those of the individual Member States. One notable exception to this is the fact that trade between the individual euro area Member States is now considered to be trade within the euro area and is thus not recorded as international trade for the area as a whole. This implies that, while the individual euro area countries prior to the establishment of Monetary Union could be considered small open economies, the euro area as a whole forms a large, much more closed economy. It also implies that the trade between the 11 founding euro area Member States and Greece since 1 January 2001 is no longer recorded as euro area exports and imports.

The degree of openness of the euro area has been further reduced by the entry of Greece. Nevertheless, it is still greater than that of the world's other two major economies. Accordingly, the exports of the euro area account for a larger share of total world exports (18.9%) than those of the United States (15.2%) and Japan (9.1%). One reason for this is the high level of trade between the euro area and the remaining European Union countries.

Euro area exports of goods and services represented almost 17% of euro area GDP, significantly higher than the corresponding figures for the United States and Japan at 10-11%. Measured in terms of imports, the difference between the euro area and the United States is less marked. Imports of goods and services accounted for 15.9% of GDP in the euro area, while the corresponding share in the United States was 13.2%. In Japan, imports represented 9.1%, considerably lower than in the other two large economies. Trade in goods accounted for the largest share (of around 75%) of both euro area imports and exports.

The euro area recorded a slight current account deficit of 0.2% of GDP in 1999, while the deficit excluding Greece amounted to 0.1% of GDP. This close-to-balance situation was in marked contrast to the deficit in the United States and the surplus in Japan.

Fiscal position and size of the government sector

Moving on to the fiscal position and the size of the government sector, general government gross debt for the euro area as a whole stood at 72.7% of GDP in 1999, thus remaining clearly above the 60% reference value set for individual countries in the Treaty establishing the European Community. The debt ratio of Greece is higher than the average of the 11 countries that participated in the euro in 1999 and 2000. In fact, the debt ratio excluding Greece was 0.5 percentage point lower.

At the same time, the general government deficit in the euro area came to 1.3% of GDP in 1999. This reflects a share of government expenditure of 49.0% of GDP, compared with a ratio of general government revenue to GDP of 47.7%. In the euro area, the general government sector makes up a larger share of the economy than in the United States and Japan. In the United States, the general government sector accounted for just below 33% of GDP in terms of revenue and slightly less than 32% of GDP in terms of expenditure. In Japan, the large government deficit in 1999 is reflected in a government expenditure-to-GDP ratio of almost 40% and a government revenue-to-GDP ratio of 31%. The general government sector accounts for a smaller share of the Greek economy than the euro

area aggregate for the 11 initial countries. As a result, the entry of Greece led to a decrease of 0.1 percentage point in the ratios of both general government revenue and expenditure to GDP in the euro area.

Financial structure

The entry of Greece into the euro area does not imply significant changes to the average financial structure of the euro area. As can be seen from the table, indicators such as the ratio of loans to the private sector to GDP, or that of stock market capitalisation to GDP, are little affected by the inclusion of Greece in the euro area.

4 Concluding remarks

The Greek fulfilment of the convergence criteria for entering the euro area reflects impressive developments in the Greek economy in recent years. Given its fairly small size relative to the euro area as a whole, the entry of Greece has not materially changed the key features of the euro area. The most notable changes are the 3.4% rise in the euro area population and the 1.9% increase in the level of euro area GDP.

The entry of Greece into the euro area represents the first occasion on which statistical series for the euro area have needed to include an additional Member State. A range of statistical issues thus needs to be addressed, concerning both data availability for the additional country and the procedures for calculating the area-wide aggregates.

Monetary policy-making under uncertainty

Uncertainty is a characteristic of the real world that plays an important part in the decision-making process of all economic agents. This also applies to central banks, which need to take policy decisions in an environment of considerable uncertainty regarding current and future economic conditions and the functioning of the economy. The relevance of uncertainty has been recognised in the design and implementation of monetary policy for a long time. In recent years advances in academic research have attempted to shed new light on the implications of uncertainty for monetary policy-making. This article provides an overview of the concepts discussed in the literature with a bearing on the conduct of monetary policy.

Three broad forms of uncertainty are identified and their implications examined. The first relates to the imperfect knowledge of the “state” of the economy, that is, the current economic conditions and developments. This issue is linked to the availability and quality of information on economic developments. The second is related to the “structure” of the economy, that is, the relations describing the behaviour of economic agents that shape the transmission mechanism of monetary policy. The third aspect arises from strategic interactions between central banks and private agents, which affect market expectations and the behaviour of economic agents.

It is argued that the presence of these three forms of uncertainty lends support to monetary policy strategies characterised by three basic features. First, an orientation towards the medium term, which eschews attempts at fine-tuning economic developments at shorter horizons. Second, a diversified approach to the analysis of information, which is robust to different views (or paradigms) about the functioning of the economy. Third, a clear and overriding focus on the objective of price stability as a credible anchor for expectations. The ECB’s stability-oriented monetary policy strategy provides an example of a strategy which reflects these features and which can – in turn – be seen as an answer to the three main sources of uncertainty identified in this article. This article thus complements the article entitled “The two pillars of the ECB’s monetary policy strategy” published in the November 2000 issue of the ECB Monthly Bulletin.

I Introduction

The presence of uncertainty has important implications for monetary policy-making. This has been recognised in academic research for a long time and has generated a considerable body of literature that attempts to analyse and to evaluate monetary policy-making under uncertainty.¹ In the light of this, this article first identifies different categories of uncertainty that all central banks face. In this regard, the situation

of the ECB is by no means unique, although the specific features of the euro area create additional challenges. The article then summarises the general findings that have emerged from the literature concerning the appropriate conduct of monetary policy in an uncertain environment. Finally, it examines the implications for the ECB’s monetary policy strategy.

2 Different sources of uncertainty that affect monetary policy-making

In this section, three broad categories of uncertainty are discussed: uncertainty about the state of the economy, uncertainty about the structure of the economy and uncertainty arising from strategic interactions between central banks and private agents.

¹ Recent contributions to this literature were presented at the conference on “Monetary policy-making under uncertainty” organised by the ECB and the Center for Financial Studies (CFS) in December 1999. These contributions and a summary of the conference proceedings can be found on the ECB’s website at <http://www.ecb.int>.

Uncertainty about the state of the economy

A challenge that faces all central banks is to assess accurately the prevailing economic conditions, which are sometimes referred to as the state of the economy. Such an assessment is essential, as it helps to identify the nature of shocks hitting the economy and the resulting risks to price stability. It thereby forms the basis of the monetary policy decisions needed to ensure price stability over the medium term. Uncertainty surrounding the analysis of current economic conditions arises at two levels.

First, the information that underlies this analysis is often imperfect. Such imperfections concern data on a broad range of monetary, financial and economic variables. The availability and the quality of these data, including their timeliness and reliability, vary across different types of data (see the box opposite). Some data, such as certain financial market prices, are available on a continuous and timely basis and are normally not revised. However, most economic and financial data are only available with some delay and can be revised following their initial release. Such revisions typically arise from further information becoming available (including the updating of weights and samples), from the correction of measurement errors or, albeit less frequently, from reclassifications and changes of methods and definitions. The first of these factors, of course, reflects the potential trade-off between timeliness and reliability.

In the case of the euro area, the data for the Harmonised Index of Consumer Prices (HICP) are available at a monthly frequency, in a timely fashion, and are normally not revised. Data on monetary aggregates – while subject to some revision – can also be compiled at a monthly frequency and with only a short delay from the balance sheets of Monetary Financial Institutions. These data are available earlier (and with less uncertainty) than most information on economic activity. Moreover, the fact that

monetary aggregates are measured directly rather than indirectly by means of surveys or similar techniques greatly enhances their reliability.

However, while the quality, including timeliness, of both HICP data and monetary and financial data is high, further improvements are still needed. In some other areas, timeliness can certainly be improved, and, in many cases, there are problems with data quality that lead to sometimes considerable revisions at the euro area level. These issues are addressed notably in the Action Plan on EMU statistical requirements prepared by the European Commission in close co-ordination with the ECB and presented to the ECOFIN Council in September 2000.

Second, data on monetary, financial and other economic indicators can be distinguished from unobservable “synthetic” indicator variables that have been proposed as a way of structuring and summarising a possibly large amount of the observable data. Examples of such indicators are potential output as a measure of the economy’s productive capacity and the output gap (i.e. the deviation of actual from potential output) as a measure of the degree of capacity utilisation in the economy. Other examples of unobservable indicators include various notions of equilibrium real interest rates, equilibrium exchange rates and various measures of excess liquidity conditions.

The uncertainty surrounding these unobservable indicator variables may be expected to be significantly greater than for observable information, since these indicators have to be estimated. These estimates are not only affected by uncertainty with respect to the data that are used in the estimation, but can also be significantly affected by the statistical methods that are employed for estimation. Moreover, the concepts on which their definitions are based may be controversial. With respect to the uncertainties regarding the notion of potential output and the output gap, see, for example,

Box

Timeliness and reliability of statistics

A broad range of monetary, economic and financial data is used in the assessment of the outlook for price developments. The availability and quality of these data are essential for ensuring that appropriate monetary policy decisions are taken. Indeed, availability and quality are issues of concern to all users of statistics. In the case of euro area statistics, which are aggregated from national statistics, defining harmonised methods and practices is an additional issue of importance.

In this box, timeliness and reliability, which are regarded as integral parts of the quality of the data, are briefly discussed. All other things being equal, faster data availability is desirable, but there is generally a trade-off between timeliness and reliability. For instance, indicators designated as “flash estimates” are released on a very timely basis. However, this may be achieved by the use of only partial information, which increases the risk of significant revisions in later releases. How the balance between timeliness and reliability can best be resolved varies between indicators, depending on factors such as their importance in economic assessment, their frequency, their level of aggregation and their volatility.

Timeliness

As regards the timely availability of data, it is important that data are released with a short lag following the end of the reference period. Some data, such as those on market interest rates or stock prices, are available in “real time”. However, most other data become available with various lags, which partly depend on the frequency of the indicator.

Qualitative survey data are often available within a few days following the end of the month to which they refer, or even during this month. Price indicators for the euro area (such as the HICP) and monetary aggregates are usually available within a month following the end of the period to which they refer. Data on euro area producer prices are released after slightly more than one month. With regard to labour market indicators, the data on unemployment are generally released around one month after the end of the month of reference. Other euro area data, such as those on wages, employment and the labour force, tend to be less timely. Quantitative indicators related to the real economy, such as monthly industrial production or quarterly national accounts, are usually available with delays of two to three months. There are similar publication lags for monthly data on euro area external trade. Finally, the timeliness of fiscal data, most of which are released at annual frequency, varies significantly across countries. Sufficient geographical coverage of the euro area needs to be available before euro area aggregates can be compiled. Thus, national data may be released for some Member States before their counterpart for the euro area becomes available.

Reliability

It is particularly important for the reliability of euro area data that harmonised statistical concepts are used across Member States. For national statistics, many aspects influence data reliability, such as adequate coverage and estimation methods that ensure an accurate description of the underlying economic phenomenon. For instance, the coverage of goods and services included in the HICP has been extended since the introduction of the HICP in 1997 in order better to reflect the composition of consumers’ purchases.

Large and frequent revisions to initial and subsequent releases undermine reliability. Revisions of first releases are mainly due to new or more complete information, but other factors, such as the introduction of conceptual improvements, seasonal adjustments or adjustments within an accounting framework, are also potential reasons for revisions. Depending on the indicator, different magnitudes of revisions may be considered acceptable.

For the euro area, HICP data are normally not revised and revisions to M3 data tend to be small. Since mid-1998, when euro area national accounts were first released, revisions to quarter-on-quarter growth rates of real GDP have tended to be more substantial. The difference between the highest and the lowest estimate of quarter-on-quarter growth in a given quarter has averaged 0.2 percentage point, with usually larger revisions in terms of the components of GDP. Revisions have generally been largest between Eurostat's first and second releases, as data available at the time of the first release have usually covered around 75% of the euro area. As, by the time of the second release, more information is available from national statistical institutes, revisions to further releases have been smaller on average. Member States are currently working towards an earlier release of national accounts, which should improve the coverage of the first estimates for the euro area released by Eurostat, and therefore their reliability.

the article entitled "Potential output growth and output gaps: concept, uses and estimates" in the October 2000 issue of the ECB Monthly Bulletin.

In order to interpret the state of the economy and its implications for future price stability, it is essential that central banks examine the available data and the indicators to identify the nature and persistence of the particular shocks that are driving observed economic developments. Whether shocks occur on the demand or supply side of the economy, whether they originate from domestic or foreign sources, and whether they are judged to be transitory or long-lasting will all have a bearing on the assessment of the state of the economy and the appropriate monetary policy response. While some shocks, such as unexpected changes in oil prices, are directly observed, others, like changes to preferences and technology, are not.

A prominent example of the latter relates to the possible emergence of a "New Economy". Such developments may change the economy's productive capacity either permanently or for a sustained period, but are intrinsically difficult to identify on the basis of historical information, thereby adding considerably to the uncertainties surrounding monetary policy-making.

Uncertainty about the structure of the economy

In addition to, and intimately linked with, the uncertainty about the state of the economy, central banks also have limited knowledge about the structure and functioning of the economy. A good understanding of how economic shocks are propagated over time and how monetary policies are transmitted to future price developments allows the central bank to take appropriate policy decisions to counteract possible threats to price stability in a forward-looking manner.

In the face of a lasting shock to oil prices, for example, it is important for monetary policy to understand how this shock will affect the economy. On the supply side, a lasting increase in oil prices will lead over time to increases in raw materials prices, intermediate input prices and producer prices along the chain of production, and thereby to increases in costs and a reduction in profitability. As regards the demand side, an increase in oil prices will have a direct effect on consumer prices, which stems from the increase in overall energy prices, as well as an indirect effect, which arises from the pass-through of producer to consumer prices. Moreover, an oil price increase, through its impact on the terms of trade, will also reduce available aggregate income. It is important to quantify the individual effects arising from the initial shock to oil prices since they jointly influence the risks to price stability over the medium term.

Uncertainty about the structure of the economy arises from two sources. First, there is fundamental uncertainty about which models provide suitable descriptions of the structural relationships in the economy. While various models have helped to deepen understanding of the economy, none has yet provided a fully satisfactory, unified and uncontroversial description of the transmission process. This reflects not only the complexity of the various transmission channels within modern market economies, but also the fact that there is no consensus among economists about how these economies work. Since each model per se constitutes a simplification which abstracts from relevant aspects of reality, central banks always face the problem of deciding which model or class of models is most suitable to use given the prevailing economic circumstances. As a result, central banks cannot afford to rely on a single model of the economy, but need to have available a number of alternative modelling tools.

For example, among the many structural relationships that determine the transmission of monetary policy, knowledge of the relationship between inflation and its determinants remains limited, although considerable research has been undertaken. There is a widespread consensus that inflation is a monetary phenomenon in the long run. At the same time, there is a multiplicity of different approaches to modelling the inflation process at short and medium-term horizons. Two main modelling traditions (or “paradigms”) can be distinguished. One approach assigns an important role to monetary developments in determining future inflation. In other models, such as Phillips curve models, excess demand in goods and labour markets is the main driving force behind changes in prices and wages.

Second, even if there were a consensus on a suitable model of the economy, considerable uncertainty would remain regarding the strength of the structural relationships within that particular model. This form of uncertainty relates to the parameters of the

structural relationships that need to be estimated. Inevitably, available parameter estimates are always affected by data imperfections and by the particular econometric techniques that are employed for estimation. An even more fundamental problem is that parameters may vary over time as a result of structural change in the economy. These sources of parameter uncertainty hinder economic analysis insofar as they make an assessment of relationships between economic variables more difficult.

Uncertainty about parameters confronts all central banks, but seems particularly relevant for empirical models of the euro area since their estimation has to rely on historical back data which stem from the period prior to the formation of Economic and Monetary Union (EMU), when the member countries experienced different monetary policy regimes within different institutional settings. Moreover, to the extent that models are estimated for the euro area as a whole using data which are aggregated across member countries, conducting empirical analysis into structural relationships may also be subject to aggregation problems. Such problems relate to the methods being used for aggregating data for the member countries, which may, in some cases, not be sufficiently harmonised, as well as to the aggregation of structural relationships themselves, which may differ across countries and thereby result in complex, possibly non-linear relationships at the euro area level.

Strategic uncertainty

Another form of uncertainty facing central banks is sometimes referred to as strategic uncertainty. This form of uncertainty relates to the interaction between private agents and policy-makers and, in particular, to the role of expectations, which may crucially influence the transmission of monetary policy. It is important to realise that the central bank is confronted with some degree of uncertainty about the reaction of economic agents and financial markets to its own policy decisions

and announcements. Conversely, economic agents may be unsure about the motivations, actions and intentions of central banks.

In general, the task of monetary policy-making will tend to be facilitated if strategic uncertainty is reduced in both directions, i.e. if economic agents as well as central banks exhibit stable, reliable and broadly predictable patterns of behaviour. A clear definition of the overriding policy objective and the announcement of a strategy to guide and explain policy choices are key instruments to reduce strategic uncertainty and to enhance credibility on the part of the central bank.

A key concern for central banks has therefore always been to maintain credibility with respect to their ability and commitment to achieve their policy goals. Credibility tends to induce a virtuous circle. If economic agents can confidently rely on the central bank to keep prices stable over the medium term, then they will themselves be more likely to exhibit behaviour that is more stable, more oriented to long-term relationships and more conducive to the maintenance of price stability.

3 Some lessons from economic research

This section presents a review of some of the main arguments that have been made in the economic literature regarding the implications of different forms of uncertainty for monetary policy-making.

Earlier views

The implications of the existence of uncertainty for the optimal setting of monetary policy instruments have been recognised in economic literature for at least half a century. Already in the late 1940s and early 1950s it was recognised that reliable information about the long and variable lags in the transmission of monetary policy is typically not available. This led a number of academic economists to warn strongly against

In particular, if inflation expectations on the part of the public, social partners and financial markets remain firmly anchored at levels consistent with price stability in the face of temporary shocks to price developments, monetary policy tends to be more effective in maintaining price stability over the medium term. Moreover, if the behaviour of central banks is well anticipated by the markets, financial market prices may move in a direction supportive of the maintenance of price stability in a self-correcting manner and may thus actively reduce the need for strong movements in central bank policy instruments.

Thus, in the face of considerable uncertainty about the economy it is important that central banks do not themselves become a source of additional uncertainty in this regard. This supports the case for a clear, steady, consistent and reliable focus on the overriding objective of price stability over the medium term and cautions against overly ambitious – and potentially destabilising – attempts at fine-tuning economic developments at shorter horizons.

the implementation of policies that aim at fine-tuning economic activity. It was argued that these policies may be counterproductive if the limitations in the knowledge of the monetary transmission mechanism are not taken into account. They favoured a “non-activist” approach to monetary policy-making that places less emphasis on stabilising short-term economic developments and relies on monetary growth as a guide to policy-making with a medium-term orientation.

Despite existing scepticism about the usefulness of activist policies in the presence of long and variable lags, academic research in the 1950s and 1960s relied rather confidently on the knowledge of the monetary transmission process available at that time. One important finding of this research is that

the prescriptions for setting a particular policy instrument do not depend on unforeseen shocks if they affect the economy in particularly simple ways. Different implications arise, however, if uncertainty enters the economic structure in more complex (and more realistic) ways. For example, uncertainty about key parameters describing the transmission of monetary policy provides a rationale for an “attenuated” approach to monetary policy-making in the sense of reacting less vigorously to incoming information than would be optimal if such uncertainty did not exist. This result, which is known as “Brainard’s conservatism principle”, has been used as one explanation of the commonly observed central bankers’ practice of moving interest rates in a gradualist fashion. However, it has been known from the outset that this principle is not universally robust, but rather depends on the relationships between all the uncertain parameters of the economic structure.

More recent views: data, parameter and model uncertainty

Recently, academic interest in optimal monetary policy-making under uncertainty has revived. The associated literature has focused extensively on two of the three broader forms of uncertainty classified above, namely data uncertainty on the one hand and parameter and model uncertainty on the other. References to the literature and an illustration are provided in an annex to this article.

Data uncertainty

The relevance of data uncertainty arising from measurement error in key macroeconomic variables provides backing for the earlier cases of an attenuated and non-activist approach to policy-making. Recent research has shown that central banks should moderate the responsiveness of the policy instrument to initial data releases when these

data are expected to be subject to measurement error. The reason is that, when a measurement error occurs, a strong policy response to mismeasured data will induce unnecessary fluctuations in the interest rate, resulting in unintended movements in output and inflation. In addition, the adverse effects arising from imperfect data should be mitigated by using the whole set of available information to cross-check the imperfect data against all other relevant sources of information and gauge the extent to which the data may be subject to measurement error. The weight given to the individual information variables will depend on how precisely those variables are measured themselves.

In recent studies, considerable attention has been focused on the uncertainty regarding one particular economic variable, namely potential output. This is understandable, given that potential output (particularly the relationship between actual and potential output, i.e. the output gap) is often considered to be an important variable in determining the strength of inflationary pressures. The adverse effects of errors in estimating potential output can be more long-lasting and greater than those arising from the mismeasurement of other data. This is because estimates of potential output – a variable that can never be directly observed – are typically subject to very large revisions, even many years later.

Parameter and model uncertainty

As already mentioned above, Brainard’s conservatism principle is not universally robust, but depends on the exact form of parameter uncertainty. More recent literature has emphasised circumstances in which parameter uncertainty should lead a policy-maker to vary the policy instrument more than would be optimal in the absence of such uncertainty. Recent research, for example, has shown that uncertainty about the persistence of the inflation process can lead the policy-maker to adjust interest rates more

vigorously, since the policy-maker can reduce uncertainty about the future development of inflation this way. Similarly, when such uncertainty arises from imperfect credibility, the policy-maker may be well-advised to act more decisively.

Policy-making under parameter uncertainty is typically studied by relying on probabilistic knowledge of a well-defined range of alternative parameter values and employing the well-known laws from probability theory. However, uncertainty about model parameters or, more generally, about model structures can be so complex that this approach is very difficult to justify. A number

of studies have therefore started expressing model uncertainty in the form of a variety of alternative models, which can be considered by the policy-maker to represent alternative, possibly rival descriptions of the actual economic structure. In this context, the problem can be cast in terms of ensuring “robustness” of monetary policies across models, in the sense of being capable of delivering good policy outcomes under alternative structures. This approach has considerable intuitive appeal since central banks normally avail themselves of a suite of alternative quantitative models of the economy as opposed to relying on a single all-encompassing one.

4 Implications for the ECB’s monetary policy strategy

The key findings of research concerning the appropriate conduct of monetary policy in an uncertain environment are threefold. First, under a broad set of circumstances, the central bank is well advised to pursue attenuated and non-activist policies directed at the medium term when data or key features of the monetary policy transmission process are subject to uncertainty. The degree of attenuation is, in general, related to the extent and nature of the uncertainty.

Second, central bankers and academics seem to agree on the desirability of robustness of monetary policy in the presence of data and model uncertainty. This suggests that central banks should not, in general, rely exclusively on any particular individual indicator or model in isolation (be it a particular monetary aggregate, a measure of the output gap or a particular model-based inflation forecast). Instead, central banks need to cross-check information from different sources against the full set of available information. Robustness can also be taken to mean adopting policies capable of delivering reasonably good outcomes under a range of alternative plausible models of economic structures, instead of only focusing on an optimal outcome in a single dominant model.

Third, central banks have always stressed the importance of credibility for monetary policy. Credibility with respect to a well-understood objective helps to provide a clear and reliable anchor for expectations and can thus be seen as reducing strategic uncertainty in the economy.

The awareness of the presence and the implications of various forms of uncertainty is a major factor behind the design of the ECB’s monetary policy strategy. As explained in many earlier publications, the ECB has provided a clear quantitative definition of its objective of price stability, namely “a year-on-year increase in the HICP for the euro area of below 2%” which is to be maintained over the medium term. This quantitative definition provides an anchor for market expectations and a yardstick against which the ECB’s performance can be assessed and the ECB can be held accountable.

To achieve its objective of price stability, the ECB organises its analysis in two distinct, but complementary categories of analytical approaches, which are referred to as the two pillars of the strategy. The two-pillar structure provides the framework of analysis and the set of tools for achieving the objective of price stability. Their organisation

reflects two broad classes of modelling approaches (or paradigms) of the transmission mechanism in the absence of consensus on a single unified “true” model of the economy. Drawing on two distinct pillars helps to induce a diversified and robust approach to monetary policy-making, which involves extensive cross-checking of information across different analytical approaches.

The first pillar encompasses a set of analyses and models with primary focus on the monetary origin of inflation. They all share a common feature, namely that monetary and credit aggregates or, more generally, monetary developments play a central role in the determination of price developments over the medium term. This approach is founded on the long-term relationship between money and prices, which characterises virtually all models of monetary economies and which has been extensively illustrated in empirical studies.

The second pillar encompasses a variety of analyses and models that emphasise the interplay between predominantly non-monetary factors in the determination of inflation. Some of these factors, such as changes in oil and commodity prices, affect price developments in the shorter term. These developments are nevertheless relevant for monetary policy, since their effects may become entrenched and may, therefore, jeopardise prospects for price stability in the medium term. Other indicators, such as shortages in the labour market, which tend to result in upward pressure on labour costs, may also signal a threat to price stability in the medium term. The biannual macroeconomic projections prepared by Eurosystem staff (and published for the first time in the December 2000 issue of the ECB Monthly Bulletin) are a part of the analysis conducted under the second pillar.

The three key messages from research, outlined above, are all reflected in the design of the strategy. First, by putting emphasis on

the medium term as the time frame within which price stability is to be attained, the strategy implicitly leads to a lower weight being attached to short-run developments in indicators that are more likely to be noisy and subject to statistical uncertainty and data revisions. More generally, each indicator, under both pillars, needs to be looked at in conjunction with its record of reliability, and the uncertainty surrounding such indicators must be taken into account in their interpretation. In particular, this also applies to the staff economic projections as one form of analysis conducted under the second pillar. Presenting such projections in the form of ranges for the outcomes of economic variables – where the ranges are determined on the basis of past errors in such projections – is one way of conveying this uncertainty.

Second, the examination of monetary and economic developments under the first and second pillars provides a robust framework that allows for the cross-checking of relevant information across different modelling approaches. The strategy avoids reliance on any single indicator, model or forecast which is likely to be highly sensitive to uncertainty about the data or the structure of the economy. Thus, the strategy recognises that central banks – and economists in general – do not have full knowledge of any single “true” model and cannot afford to rely on a single model without the risk of making major policy errors. The strategy is also consistent with findings in the literature, which suggest, other things being equal, that policy should be based to a lesser extent on unobservable and less reliable indicators like the output gap, compared with those that can be observed more directly and measured more accurately, such as many monetary and financial variables.

Third, the quantitative definition of price stability is a clear and visible expression of the ECB’s commitment to achieving its primary policy objective over the medium term. This public commitment should enhance credibility and reduce uncertainty

about medium-term price developments. The medium-term and forward-looking orientation of the ECB's strategy takes account of central banks' limited knowledge of the long and variable lags in the

transmission mechanism. It also acknowledges that monetary policy cannot – and should not attempt to – control price developments at shorter horizons.

5 Concluding remarks

This article has identified and examined three broad categories of uncertainty relevant for monetary policy-making that all central banks in the world are facing. In this sense, the situation of the ECB is by no means unique. In the euro area, however, these uncertainties may be heightened by the implications of the regime shift associated with the formation of EMU and reflect the specific features of the euro area. This creates additional challenges for the monetary policy of the ECB. First, when assessing the prevailing economic conditions, the ECB has to focus on aggregate euro area-wide data, where availability and quality are in some areas still limited. Second, when taking monetary policy decisions, the ECB is confronted with a lack of knowledge about the structure of the euro area economy, which itself is likely to change in the new institutional setting of EMU. Third, the ECB as a new institution has to be particularly transparent and predictable to prevent monetary policy itself becoming a source of uncertainty.

The main features of the ECB's strategy – the quantitative definition of price stability, its medium-term orientation and its two-pillar structure – reflect an honest recognition of limited knowledge of the economy and uncertainty about “long and variable lags” in the transmission of monetary policy and the importance of credibility. These issues have been stressed by central banks and academics for a long time. Recent work on the implications of data, model and parameter uncertainty supports, on the whole, a robust and diversified approach to monetary policy-making, like that adopted by the ECB. In

particular, the two-pillar strategy of the ECB, with first a prominent role for money and second an analysis of a wide range of other economic and financial indicators, provides a robust framework for a broadly based assessment of risks to price stability. This strategy is well equipped to deal with the various forms of uncertainty that all central banks face and also meets the particular challenges arising in the euro area. The inevitable data uncertainty associated with the estimation and measurement of key macroeconomic variables supports the ECB's medium-term orientation and its rejection of fine-tuning economic developments. At the same time, the limited availability and reliability of data in some areas of economic statistics make clear the need for further improvements to the euro area statistical framework. Particular effort is currently being devoted to this aim.

With respect to uncertainty about the structure of the euro area economy, the two pillars of the ECB's strategy provide a diversified approach to analysing the large amount of data used in the decision-making process. This diversified approach explicitly accounts for the use of a variety of alternative models suitable for analysing the propagation of shocks and the transmission of monetary policy. Considering classes of models (or paradigms) which differ in some fundamental way, rather than relying on a single approach or indicator, reduces the risk of policy errors. The ECB's strategy thereby facilitates the adoption of a robust monetary policy that is capable of delivering good policy outcomes under all main sources of uncertainty.

Annex: Monetary policy-making under uncertainty: more recent results

The more recent results on monetary policy-making under uncertainty emerged from a number of studies that analysed the performance of monetary policy when economic data are subject to mismeasurement and when there is uncertainty about the appropriate specification of economic models.

The case for attenuation and non-activism

When economic data are subject to measurement error, recent studies provide two basic prescriptions.² First, the direct response of monetary policy to initial data releases should be attenuated, and, second,

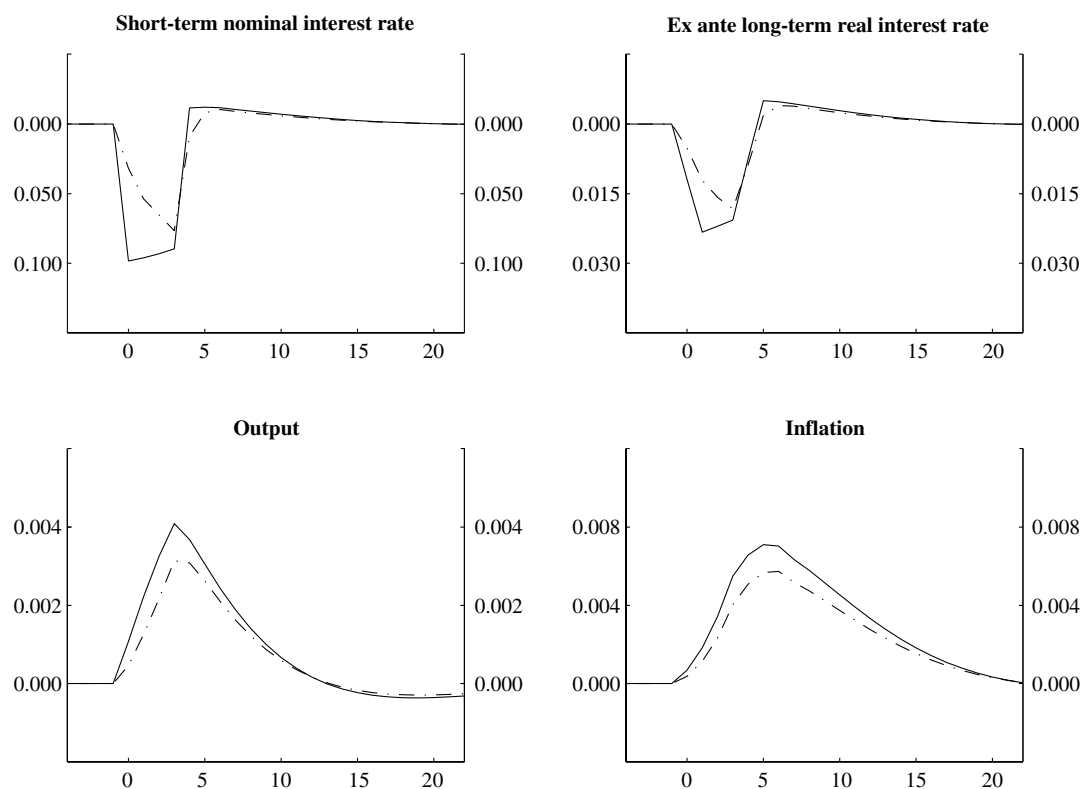
policy-makers should make efficient use of the whole set of available information by cross-checking imperfectly measured data against all other relevant sources of information and gauging the extent to which the initial data are subject to mismeasurement.

The chart below provides a numerical example where both prescriptions are intimately related. The example illustrates the consequences of a measurement error in

² See Athanasios Orphanides (1998), "Monetary policy evaluation with noisy information", Finance and Economics Discussion Series, 1998-50, Board of Governors of the Federal Reserve System, and Lars E. O. Svensson and Michael Woodford (2000), "Indicator variables for optimal policy", ECB Working Paper No. 12.

Chart

Responses to a persistent measurement error in output



Note: The simulations are based on the relative real wage contracting specification, which is referred to as the RW specification in ECB Working Paper No. 30. Short-term nominal and ex ante long-term real interest rates are annual rates, given as percentages. Output is the log difference from the baseline, as a percentage. Inflation is the log change in the output deflator over four quarters, as a percentage.

output data within a small macroeconomic model for the euro area.³ The size of the measurement error is minus 0.2 percentage point of quarterly output and it lasts for four quarters. Within the model, monetary policy is assumed to maintain price stability by following a simple rule that links the short-term nominal interest rate to developments in inflation and deviations of observed output from potential. Changes in the short-term nominal interest rate affect aggregate demand through their impact on the ex ante long-term real interest rate.

The left panel in the top row of the chart shows the policy-maker's misguided moves in the short-term nominal interest rate resulting from the measurement error in observed output. The right panel in the top row and the two panels in the bottom row depict the resulting developments in the long-term real interest rate, output and inflation respectively. The solid line refers to the case where the policy-maker reacts directly to the observed output data. The dash-dotted line corresponds to the case where the policy-maker is conscious of prospective revisions to the observed data and forms an efficient estimate of output using all information at his disposal and then reacts to this efficient estimate rather than to observed output.

It is apparent that the policy-maker's direct response to observed output induces unnecessary fluctuations in the interest rates, resulting in unintended movements in output and inflation. By contrast, when the policy-maker responds to his efficient output estimate, interest rates fluctuate less and policy performs better in terms of maintaining price stability. This is because the efficient output estimate is based on current and past observations on all estimation-relevant variables, the relative weights of which depend on how precise these variables are. As a result, the policy-maker attaches only a low weight to the imperfect output data and only gradually adapts his output estimate to incoming new information. A direct response to observed output data would have to be more attenuated in order to shelter the

economy from the adverse effects of possible measurement error to the same degree.

Given that estimates of potential output are never observed and are often revised years later, the adverse effects that can arise from a misperception of potential output can be significantly greater. The relevance of this problem has been pointed out in a recent study for the United States.⁴ This study shows that estimates of potential output that were available in real time to policy-makers in the 1970s may have significantly overstated the US economy's productive capacity at that time compared with revised estimates that became available much later on. Simulations of activist stabilisation policies based on these misperceived real-time estimates have been proposed as one possible explanation for the persistent rise in inflation observed in the 1970s. This finding can be interpreted as lending further support to rejecting activist monetary policies that are conditioned on intrinsically unreliable variables such as potential output.

The case for robustness

There are two approaches to studying monetary policy-making under model uncertainty which both emphasise the importance of robustness. The first seeks to design an optimal policy that is robust in the sense of sheltering the economy from the worst possible outcomes if the policy-maker's model is subject to misspecification. The second centres on robustness in the sense that a policy is capable of delivering similar outcomes in a variety of alternative models.

The first approach assumes that the policy-maker's problem is so complex that it cannot be formalised by specifying an a priori probability distribution over a range of alternative models. In this case the policy-

³ See Günter Coenen and Volker Wieland (2000), "A small estimated euro area model with rational expectations and nominal rigidities", ECB Working Paper No. 30.

⁴ See Athanasios Orphanides (2000), "The quest for prosperity without inflation", ECB Working Paper No. 15.

maker's problem is subject to so-called "Knightian" uncertainty. From such a perspective, model uncertainty relates to the existence of a range of unspecified alternatives surrounding a particular reference model that is considered an approximation to the true but unknown model of the economy. Two types of uncertainties can be distinguished within this setting: unstructured model uncertainty, which is manifest in arbitrarily serially correlated shocks that may result from omitted-variable misspecification, and structured model uncertainty, which arises when particular parameters are identified as the source of misspecification.⁵ One interesting finding from these studies is that a more aggressive policy may be called for when the policy-maker is compelled to set his policy instrument cautiously by ensuring a minimum level of performance under the worst possible conditions.

The second approach focuses on the robustness of monetary policies across a variety of alternative models of the economy. Following this approach, one such study has recently evaluated the robustness of monetary policies across four macroeconomic models of the US economy by taking the policies that perform well in one model and measuring their performance in each of the other models.⁶ The results of this study provide support for the robustness of policies that link the nominal interest rate to current outcomes of

inflation and economic activity but also account for sufficient gradual adjustment of the nominal interest rate. Such policies perform well compared with others that rely on forecasts of future inflation as opposed to current information. This result shows that a model-based inflation forecast always depends in a very complex fashion on the specific structure of the underlying model. A monetary policy that is mechanically based on a forecast obtained from a particular model may therefore result in bad outcomes if this forecast is used in any other model. This provides an additional reason why one should not rely on a single model-based forecast for monetary policy purposes; rather, any such forecast needs to be cross-checked with forecasts obtained from alternative models and information acquired using different techniques and forms of analysis.

- 5 See Lars P. Hansen and Thomas J. Sargent (2000), "Robust control and filtering of forward-looking models", manuscript, University of Chicago and Stanford University; Alexei Onatski and James H. Stock (2000), "Robust monetary policy under model uncertainty in a small model of the U.S. economy", NBER Working Paper No. 7490; and Robert J. Tetlow and Peter von zur Muehlen (2000), "Robust monetary policy with misspecified models: does model uncertainty always call for attenuated policy?", Finance and Economics Discussion Series, 2000-28, Board of Governors of the Federal Reserve System.
- 6 See Andrew Levin, Volker Wieland and John C. Williams (1999), "The performance of forecast-based monetary policy rules under model uncertainty", paper presented at the ECB/CFS conference on "Monetary policy-making under uncertainty", December 1999 (see the ECB's website at <http://www.ecb.int>).

The ECB's relations with international organisations and fora

The purpose of this article is to describe the relations that the ECB has developed so far with international organisations (e.g. the IMF, the OECD and the BIS) and fora (e.g. the G7, the G10 and the G20). From an institutional perspective and with regard to issues of relevance to Economic and Monetary Union (EMU), the ECB represents the European Community at the international level together with the ECOFIN Council, in line with the distribution of competences and other rules laid down in the Treaty establishing the European Community (Treaty). Depending on respective competences and specific arrangements, the national central banks (NCBs) of the euro area and the European Commission also participate in international meetings. The ECB takes part in international co-operation whenever the Eurosystem's tasks are involved. The ECB's presence at the meetings of international organisations and fora has so far been ensured by following a pragmatic approach – i.e. one that minimises the adaptation of the rules and/or practices governing these organisations and fora – and is, therefore, likely to evolve over time. From a policy perspective, the ECB's main contribution to international co-operation consists in the exchange of information and views with non-euro area policy-makers. The ECB is also involved in the surveillance by independent organisations, such as the IMF and the OECD, of the economic developments and policies of the euro area, as well as in the definition of best practices designed to improve the efficiency and transparency of public governance. These co-operation activities do not impinge on the independence of the ECB and are without prejudice to its primary objective, which is to maintain price stability.

I Introduction

Central banks have traditionally been involved in international economic, monetary and financial co-operation. This has taken place through their participation in international organisations and fora either of an intergovernmental nature (e.g. the International Monetary Fund (IMF) and informal fora like the Group of Seven (G7)) or based on central bank co-operation (e.g. the Bank for International Settlements (BIS) and the Governors of the Group of Ten). The establishment of the ECB made it necessary to devise arrangements that permit its involvement in international co-operation, both from an institutional and from a policy perspective.

Devising such arrangements has been and remains a unique task for three main reasons. First, the existing array of international organisations and fora was designed to promote co-operation among sovereign states that have full competence for the conduct of their economic, monetary and financial policies. The increase in membership of international organisations and fora during the post-war period could easily be accommodated within the prevailing institutional settings. By contrast, the decision

by the euro area countries to transfer their monetary sovereignty to the ECB, as a supranational institution, posed some highly novel questions in the present institutional framework for international relations. Second, individual euro area countries remain responsible for the economic policies other than monetary and exchange rate policies, even though co-ordination mechanisms have been strengthened at the European Community level (e.g. in the areas of fiscal and structural policy). This means that the involvement of the ECB, the European Community and individual EU Member States in the process of international co-operation varies depending on the mandates of the relevant international organisations and fora. Third, not only the ECB, but also the other components of the Eurosystem, namely the NCBs, take part to varying degrees in international organisations and fora, depending on the participation in the latter of their respective countries. Therefore, achieving a consistent representation of the Eurosystem presented unique challenges.

The purpose of this article is to describe the current arrangements for the involvement of the ECB in international co-operation. This

article complements two other contributions on the external relations of the ECB, namely the articles in the February and October 2000 issues of the ECB Monthly Bulletin, which

focused on ECB relations with EU accession countries and ECB relations with institutions and bodies of the European Community.

2 Institutional setting and policy content of the ECB's international relations

Institutional setting of the ECB's international relations

The ECB's involvement in international co-operation is based on rules provided for by 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). These rules are supplemented by the principles included in the Presidency Conclusions adopted by the European Council at its meetings in Luxembourg in December 1997 and in Vienna in December 1998 ("Conclusions of the European Council"). This set of provisions, as listed in the box at the end of this article, is reviewed below.

The Treaty confers upon the ECB and the ECOFIN Council well-defined responsibilities in the fields of international co-operation and representation of the European Community at the international level with regard to issues of relevance to Economic and Monetary Union (EMU). The relevant provisions are laid down in Article III of the Treaty. Until now, Article III has only been used to conclude agreements between the European Community and certain non-EU countries on monetary and exchange rate matters (Article III (3)).¹ The other relevant provisions, including those pertaining to decisions on the position and the representation of the European Community at the international level, have not been used thus far. Current arrangements for the international representation of the Community are based on the principles adopted by the European Council at its meetings in December 1997 and December 1998. In line with the December 1997 Conclusions of the European Council, the

ECB and the ECOFIN Council "will fulfil their tasks in representing the Community at the international level in an efficient manner and in compliance with the distribution of powers laid down in the Treaty".

For its part, the Statute of the ESCB stipulates how the Eurosystem shall be represented at the international level. In this respect, it is for the Governing Council of the ECB to take the relevant decisions (Articles 6 (1) and 12 (5)). The ECB and, subject to the approval of the Governing Council, the NCBs are entitled to participate in international monetary institutions. The ECB, which is represented externally by either the President or his nominee, is in a position to act at the international level, since it has legal personality. The pragmatic solutions devised thus far to allow for the participation of the ECB and the NCBs in international organisations and fora are described in Section 3 of this article.

The ECB is involved in international co-operation where the tasks entrusted to the Eurosystem are concerned. However, the precise nature of such involvement hinges on the types of tasks concerned and may range from the exclusive representation of policy positions of the European Community to the formulation of the ECB's own positions alongside those of other policy-makers in the Community. Five cases are reviewed below.

First, whenever international co-operation concerns the single monetary policy, the ECB

¹ This is the case for the three Council Decisions concerning monetary relations with the Principality of Monaco, the Republic of San Marino and Vatican City, as well as the two Council Decisions on exchange rate matters relating to the Cape Verde escudo and the CFA franc and Comorian franc.

is the sole institution entitled to represent policy positions of the European Community, since the single monetary policy is an exclusive competence of the ECB's decision-making bodies (i.e. the Governing Council and the Executive Board).

Second, with regard to the overall framework pertaining to the exchange rate of the euro, the Treaty provides for close interaction between the ECB and the ECOFIN Council, as laid down in Article 111 (1) to (3). When applying these provisions, the voting rights of the Member States which have not yet adopted the euro are suspended. Moreover, the Eurogroup regularly reviews exchange rate developments in line with its shared responsibilities for the single currency. The Eurogroup is an informal body composed of the finance ministers of euro area Member States; the European Commission and, upon invitation, the ECB participate in Eurogroup meetings. The responsibility shared by the ECB and the Eurogroup for issues related to the euro exchange rate concerns consultation with third parties – for example at the G7 level – and communication policy. This implies participation in G7 meetings of both the President of the ECB and the President of the Eurogroup when matters related to the exchange rate of the euro are discussed. By contrast, the ECB is solely responsible for decisions on foreign exchange operations.

Third, in the area of payment systems the ECB may formulate positions at the international level on issues related to the Eurosystem's responsibility for promoting the smooth and efficient operation of payment and settlement systems. In formulating such positions, the ECB takes into account whether the functioning of payment systems may affect the implementation of the single monetary policy, systemic stability and the establishment of a level playing-field between participants and cross-border payments both within the EU and with other countries. The euro area NCBs, which participate in international organisations and fora alongside the ECB, may also express views reflecting their own responsibility and experience in

managing and overseeing domestic payment and settlement systems.

Fourth, the Statute of the ESCB imposes a general obligation on the ECB, in undertaking the tasks of the Eurosystem, to co-operate in statistical matters with international organisations. This provision, which takes into account the fact that statistical work is carried out within a global context, allows the ECB to formulate positions along with other competent Community bodies (e.g. Eurostat).

Fifth, in the area of prudential supervision and financial stability the ECB may participate in the relevant international meetings and state its positions alongside those of the national authorities that have competence in this field (e.g. NCBs and national supervisory agencies). In doing so, the ECB adds a euro area perspective to the discussions.

Policy content of the ECB's international relations

The ECB's involvement in international co-operation consists mainly in the mutual exchange of information and views with other policy-makers within multilateral organisations and fora. In this context, the peer review of the economic developments and policies in major economic areas is particularly important, as it enhances the ECB's ability to analyse the impact of external developments on the economy of the euro area. Given its voluntary and non-binding nature, this form of co-operation activity does not impinge on the ECB's independence.

Exchanges of information and views are complemented by surveillance carried out by independent organisations such as the IMF and the Organisation for Economic Co-operation and Development (OECD). These organisations regularly monitor and assess economic developments in and the policies of their member countries. Whenever the single monetary policy of the euro area is under review, the ECB is the

sole counterpart in discussions with these organisations. International surveillance adds to the transparency of the ECB as the assessments of euro area economic policies are made available to the public.

The ECB also participates, within its areas of competence, in the efforts of the international community to develop common understandings on a number of best practices and rules designed to improve the efficiency and transparency of policy-making. Best practices, which are to be implemented in each individual country on a voluntary basis, are usually laid down in core principles, standards and codes. The identification of best practices encourages emulation and transparency among policy-makers, thus making the notion of good public governance a central component of international co-operation.

It should be stressed that the ECB is not involved in ex ante international

co-ordination of its monetary policy with the policies carried out by non-euro area countries. This could easily become incompatible with its mandate – which is to maintain price stability in the euro area – and its status of independence. Attempts to co-ordinate ex ante would not only blur the specific responsibilities of individual policy-makers, but also reduce their accountability. Similar considerations apply to exchange rate policy co-ordination between large economic areas. In line with this view, the European Council stressed at its meeting in Luxembourg in December 1997 that the exchange rate of the euro is not a target to be set independently, but the outcome of the economic fundamentals of the euro area relative to those of other economies. Following this line of reasoning, the European Council concluded that the ECOFIN Council might formulate “general orientations” for the exchange rate policy of the euro area (Article 111 (2) of the Treaty) only in exceptional circumstances.

3 The international relations of the ECB

The European Community’s institutional setting for economic and monetary policies in general, and the provisions governing the international relations of the ECB in particular, have, of course, no direct impact on the statutes and/or internal rules governing international organisations and fora. Over the past two years some adjustments have been made to the rules and procedures on which international relations are based, since the previous framework was not tailored to the involvement of a monetary union as large as the euro area. Until now such adjustments have largely been based on pragmatism. This is in line with the Conclusions of the European Council in Vienna in December 1998, according to which “a pragmatic approach might be the most successful which could minimise the adaptation of current rules and practices provided, of course, that such an approach

resulted in an outcome which recognised properly the role of the euro”.

The following is a review of current practice in co-operation between the ECB and international organisations and fora. The information provided in this section is supplemented by the table at the end of this article, which outlines the main features of these organisations and fora.

The International Monetary Fund

The Articles of Agreement of the International Monetary Fund entrust it with the task of promoting, inter alia, international monetary co-operation, exchange rate stability, international trade and economic growth. The scope of its mandate places the IMF at the centre of the international

monetary and financial system. In view of the importance of member countries' economic policies to the stability of the global economic system, surveillance lies at the heart of the IMF's activities. Surveillance consists in monitoring and assessing economic and financial developments and policies of member countries in the context of consultations with member countries under Article IV of the IMF Articles of Agreement (Article IV consultations). Surveillance also comprises an assessment of the global implications of national policies in an increasingly integrated world economic and financial system (multilateral surveillance).

Given the respective mandates of the IMF and the ECB, it was considered essential for the ECB to be represented at the IMF on those issues which fall within the ECB's fields of competence. The decision by the IMF Executive Board on 21 December 1998 to grant observer status to the ECB provided a pragmatic solution that did not require a change in the IMF's Articles of Agreement, which restrict membership to countries. This arrangement extends a standing invitation to the ECB to participate as an observer in all IMF Executive Board meetings dealing with issues of direct relevance to the ECB. In addition, the ECB Observer may be invited on an ad hoc basis to IMF Executive Board meetings dealing with issues recognised by the IMF and the ECB to be of mutual interest. Moreover, the President of the ECB is invited to attend, as an observer, meetings of the International Monetary and Financial Committee (IMFC, formerly the Interim Committee). The IMFC meets twice a year in the context of the Spring and Annual Meetings of the IMF to advise and report to the Board of Governors on the supervision of the international monetary and financial system. It also provides policy guidance to the work of the IMF Executive Board.

The standing invitation to the ECB to attend IMF Executive Board meetings as an observer relates to the following agenda items:

- Article IV consultations on the monetary and exchange rate policies of the euro area;
- Article IV consultations with individual euro area Member States;
- the role of the euro in the international monetary system; and
- multilateral surveillance, i.e. biannual discussion of the World Economic Outlook and the International Capital Markets Report and regular discussions on world economic and market developments.

In all these discussions of the IMF Executive Board, representatives of the euro area member countries respect the allocation of competences provided for by the Treaty. In practical terms this means, first, that insofar as the monetary policy of the euro area is concerned the ECB Observer presents the policy positions of the European Community, and, second, that with regard to exchange rate matters, the Executive Director representing the Eurogroup Presidency and the ECB Observer both present the Community position, reflecting the regular exchange of views which takes place at the euro area level, e.g. at meetings of the Eurogroup.

Since the introduction of the euro, Article IV consultations with euro area member countries have been split into two parts which are distinct in terms of scope and timing. One part of the Article IV process concerns monetary and exchange rate issues of the euro area. The second part deals with individual euro area countries and their economic policies other than monetary and exchange rate policies (e.g. fiscal or structural policies). This two-pronged approach reflects the adaptation of IMF procedures which was made necessary by the new division of competences within the euro area.

As for the first part, i.e. monetary and exchange rate issues of the euro area, an IMF delegation visits the ECB twice a year to discuss recent developments and relevant policy matters. In this context, the IMF mission also holds discussions on economic

developments and policies (e.g. fiscal and structural policies) in the euro area as a whole, which are of relevance for monetary policy and exchange rate developments, with European Community bodies which have a co-ordinating role for these national policies (e.g. in the framework of the Broad Economic Policy Guidelines and the Stability and Growth Pact) such as the European Commission, the Economic and Financial Committee and the Eurogroup. At the Executive Board meeting dealing with the IMF staff report, the ECB Observer presents the position of the Eurosystem, while the representative of the country holding the EU Presidency conveys the position of the Eurogroup. In the second part of the Article IV process, which concerns the economic policies of individual member countries, the IMF continues to visit the individual countries to meet the respective policy-makers at the national level.

Given the implications that global economic and financial developments might have for the assessment of risks to price stability in the euro area, the ECB Observer participates in IMF Executive Board meetings which deal with multilateral surveillance. It should be added that in the preparation of the IMF's International Capital Markets Report an IMF team visits the ECB to discuss financial market issues.

Apart from the standing invitation, the ECB Observer may be invited to attend on an ad hoc basis for agenda items which both the ECB and the IMF consider to be of mutual interest for the performance of their respective mandates. It has now become common practice for the ECB Observer to be invited to attend Article IV discussions concerning EU Member States which have not yet adopted the euro, given that the ECB is involved in monetary policy co-ordination procedures with the NCBs of these Member States. Another example of ad hoc participation was the last quinquennial review by the IMF Executive Board of the valuation of the Special Drawing Rights

(SDRs), which resulted in a change from a country-based to a currency-based approach in order to take fully into account the introduction of the euro.

The ECB is also involved in certain IMF initiatives to strengthen the international financial architecture whenever these concern the areas of competence of the ECB. This was the case for the Code on Good Practices on Transparency in Monetary and Financial Policies, which contains broad principles for the transparency and accountability of authorities in the field of monetary policy and related central bank tasks, such as payment systems and supervision. The ECB and the national central banks of the euro area have actively contributed, together with the BIS and a representative group of central banks and experts, to the design of the Code and the preparation of the Supporting Document. Similarly, the ECB is involved in the current process at the IMF of developing guidelines on the management of foreign exchange reserves. These guidelines will also be aimed at reducing the vulnerability of emerging market countries to financial crises.

In this context, it has been agreed that the IMF will prepare a "Report on the observance of standards and codes" (ROSC) dealing with the ECB's monetary and payment systems policies in the euro area. Such ROSCs are currently being prepared by the IMF and some member countries as part of broader efforts by the international community to foster the implementation of internationally agreed standards and codes. These reports assess the observance by countries of these standards and codes in order to identify potential weaknesses that may contribute to economic and financial vulnerability. Several countries, among them some euro area countries, have committed themselves to undergo this exercise in order to "lead by example". The ROSC of the ECB will complement reports prepared by individual euro area countries which do not deal with policies within the ECB's fields of competence.

The ECB has developed working relationships with the IMF in other areas. In particular, the ECB actively participates in the application and development of international statistical standards, such as the IMF's Balance of Payments Manual (5th edition), within the framework of the System of National Accounts 1993. Working relationships have also been developed in the framework of the Special Data Dissemination Standard (SDDS), which was established in 1996 to ensure the provision of timely, reliable and comprehensive data by member countries to the public and to the IMF for surveillance purposes.

The Organisation for Economic Co-operation and Development

The OECD is an intergovernmental organisation which currently comprises 29 countries. It provides a forum for its members to consult each other, compare experiences and co-operate in order to achieve the highest possible sustainable growth and to improve economic and social well-being in line with the principles of a market economy. In pursuing these tasks, the OECD covers all areas of public policy, including monetary and other economic policies. The ECB takes part in any OECD activities which concern the tasks of the Eurosystem.

As in the case of the IMF, OECD membership is restricted to countries. However, the European Community is permanently represented at and takes part in the work of the OECD in accordance with Article 13 of the OECD Convention and the related Supplementary Protocol No. 1. Accordingly, since 1999 the ECB has participated – as part of the delegation of the European Community alongside the European Commission – in all OECD meetings in which it has an interest. The ECB and the Commission express their own views within their respective fields of competence. The OECD Committees and Working Parties in which the ECB participates include the following:

- Economic and Development Review Committee;
- Economic Policy Committee and its working parties; and
- Financial Markets Committee.

The Economic and Development Review Committee (EDRC) was established in 1961 with primary responsibility for conducting, on a regular basis, reviews of the economic situation and policies of each OECD member country. Such reviews lead to the publication, under the direct responsibility of the EDRC, of economic surveys which include a number of policy recommendations. Member countries may then take these policy recommendations into account on the basis of the principle of self-assessment.

While the EDRC held informal seminars on EMU in 1999 and 2000, a formal EDRC review of the euro area will be undertaken for the first time in 2001. In line with IMF practice, the review of the euro area will mainly focus on monetary policy and exchange rate issues and will cover macroeconomic (mainly fiscal) and structural policies only insofar as they have an impact on the euro area as a whole. Consequently, the review will complement the reviews of individual euro area countries without replacing them. As part of the preparation of the 2001 review, an OECD delegation visited the ECB in autumn 2000 in order to assess both the single monetary and exchange rate policies and the economic situation in the euro area.

The Economic Policy Committee (EPC) focuses on the global economic situation, with particular emphasis on the implications of developments in three major OECD regions (the United States, the euro area and Japan). By examining a wide range of issues related both to economic outlooks and to policy requirements in the OECD area, the EPC provides OECD members with a comprehensive assessment. The EPC is supported by a number of Working Parties. Working Party No. 3 (WP3), in particular, monitors and assesses major macroeconomic developments (e.g. exchange

rate developments, imbalances in the external and/or budget positions, systemic financial risks). Working Party No. 1 (WPI) focuses on economic issues and policies of a more structural nature (e.g. the links between policies and long-term growth, the criteria for the surveillance of public expenditure, the role of automatic stabilisers). The Short-Term Economic Prospects (STEP) Working Group assists the EPC in formulating economic projections.

Finally, the ECB's involvement in OECD activities also includes participation in the Financial Markets Committee (FMC), which examines structural developments in OECD financial markets.

Informal fora for finance ministers and central bank governors

G7 finance ministers and central bank governors

As part of the broader framework of co-operation within the G7, finance ministers and central bank governors have met regularly to discuss key international economic and financial issues. Their meetings are mainly concerned with economic and financial developments and prospects in their respective countries, exchange rate issues and the global economy. In addition, they address issues of common interest related to international monetary and financial policy. These informal exchanges of views may help the participants to achieve a greater understanding of the different issues involved, which may also be of use in the discussion and decision-making process of international organisations such as the IMF, the World Bank or the OECD. As such, it may provide guidance for or give political impetus to the work of these organisations. The main results of the discussions are regularly summarised in joint statements following the meetings.

Up to the launch of Stage Three of EMU, participation in the meetings of G7 finance ministers and central bank governors was

restricted to the respective national authorities of the G7 countries. With the transfer of core competences related to monetary and exchange rate policy from the national to the Community level, adequate arrangements needed to be devised to take into account this new allocation of competences within the euro area. As part of this adaptation of existing practices, it was agreed that both the President of the ECB and the President of the Eurogroup should participate in those parts of the meetings that deal with macroeconomic surveillance and exchange rate issues. Although the three central bank governors of the euro area G7 countries (France, Germany and Italy) do not participate in this part of the meetings, they do take part when the G7 discusses other issues, e.g. the international financial architecture and debt initiatives in favour of highly indebted poor countries.

As far as the monetary policy of the euro area is concerned, the President of the ECB presents the views of the Eurosystem. The President of the Eurogroup participates in the discussions on other economic developments and policies in the euro area. Given the shared responsibility of the ECB and the Eurogroup for exchange rate matters, the views presented at G7 meetings reflect prior consultations within the euro area.

G7 consultations on exchange rate matters may also lead to co-operation in this area, as exemplified by the concerted intervention carried out on 22 September 2000 and by the G7 statement published on 23 September 2000 after the meeting of G7 ministers and governors in Prague.

G10 ministers and governors

Closely linked to the activities of the IMF is the work of the G10 ministers and governors, the origin of which dates back to the creation of the General Arrangements to Borrow (GAB) in 1962. Since GAB resources complement the IMF's ordinary resources, issues discussed at meetings of G10 ministers

and governors are closely related to IMF policy matters. In recent years, their main focus has been on the prevention and management of international financial crises, including encouraging the involvement of the private sector, and on consolidation in the financial sector. The ECB participates as an observer in the biannual meetings of ministers and governors, which are organised in the context of the Spring and Annual Meetings of the IMF. The meetings are complemented by quarterly meetings at the deputy level, which the ECB also attends as an observer.

G20 ministers and governors

In their statement of 25 September 1999, G7 finance ministers and central bank governors announced the creation of the Group of 20 (G20). This new informal forum of finance ministers and central bank governors was set up to involve key emerging market countries in the dialogue on international economic and financial policy issues. It aims to facilitate an open exchange of views on those matters and thus promote consensus-building on issues discussed by the relevant decision-making bodies, such as the IMF or the World Bank.

The ECB and the EU Presidency are members of the G20. Both participated in the two meetings of G20 ministers and governors which have taken place thus far (December 1999 and October 2000) as well as in the preparatory meetings at the deputy level. The participation of both the ECB and the EU Presidency makes it possible to bring a euro area-wide perspective to the issues under consideration. The contributions to the G20 discussion by the ECB and/or the EU Presidency are co-ordinated, to the extent appropriate, in line with the allocation of competences provided for by the Treaty.

The G20 has addressed several issues, ranging from means to reduce the vulnerability of countries to financial crises to the opportunities and challenges posed by globalisation. In respect of the former, the

G20 keeps under review the adoption by emerging market economies of exchange rate regimes that are consistent with their specific macroeconomic and financial conditions. Likewise, the importance of prudent liability management is still being considered. In addition, the G20 has started a dialogue with private sector representatives on the adequate involvement of private creditors in crisis prevention and resolution. Finally, the G20 has taken an active stance with regard to the implementation of international standards and codes by committing its members to lead by example in undertaking ROSCs and "Financial Sector Assessment Programs".

Financial Stability Forum

The Financial Stability Forum (FSF) was set up in February 1999 by the G7 finance ministers and central bank governors. Its main objectives are to assess vulnerabilities affecting the international financial system and to identify action to promote international financial stability through enhanced information exchange and international co-operation in financial supervision and surveillance. Support for the FSF is provided by a secretariat located at the BIS. A member of the Executive Board of the ECB attended the early FSF meetings as an observer and has attended FSF meetings as a regular member since June 2000 in his capacity as Chairman of the Committee on Payment and Settlement Systems.

The FSF has published concrete recommendations on highly leveraged institutions (HLIs), on volatile capital flows, and on offshore financial centres (OFCs) and has urged national authorities and international financial institutions to take the necessary steps for their implementation. It has also reviewed developments in the insurance industry relevant to financial stability and is encouraging further work in this area. In the context of ongoing work to foster the implementation of international standards and codes, the FSF has identified

12 key standards and codes most relevant to sound and well-functioning financial systems. The FSF is currently working on the development of international guidance on deposit insurance schemes and is analysing the implications of electronic finance for supervision, regulation and market functioning.

The Bank for International Settlements and central bank fora

A major objective of the BIS is to promote the co-operation of central banks, as laid down in Article 3 of the Statute of the BIS. The ECB takes part in all BIS-based co-operation activities, including associated statistical work. In particular, the President of the ECB participates in the meetings of the Governors of the Group of Ten (G10 governors), which usually take place at the BIS headquarters on a bimonthly basis. This forum discusses key international economic, monetary and financial issues (e.g. economic trends both in industrial countries and in emerging market economies, potential threats to global financial stability and longer-term monetary and financial developments). Meetings are increasingly being opened to the central banks of those emerging market economies which are of systemic importance. The G10 governors also act as a hub for a number of permanent committees and ad hoc working parties. Four permanent committees in which the ECB takes part are of particular relevance:

- the Basel Committee on Banking Supervision;
- the Committee on Payment and Settlement Systems;
- the Committee on the Global Financial System; and
- the Gold and Foreign Exchange Committee.

The ECB has observer status at the meetings of the Basel Committee on Banking Supervision (BCBS). The BCBS, which is a permanent forum for co-operation between the G10 countries, is an internationally

recognised standard setter for banking regulation, supervision and best practices. The BCBS is currently revising the regulatory framework for the capital adequacy of banks (Basel Accord). The ECB contributes to this process by providing comments as it did on the occasion of a first consultative paper released in 1999. Given the importance of the work carried out by the BCBS for the activities of the ECB and the Eurosystem in the field of prudential supervision and financial stability, the ECB participates in some of the BCBS Working Groups, such as the Electronic Banking Group, the Capital Group, the Research Task Force and the Risk Management Group. The last three of these are currently involved in the preparation of the new capital framework.

The ECB is member of the Committee on Payment and Settlement Systems (CPSS), which has been chaired by a member of the Executive Board of the ECB since June 2000. The CPSS is at the forefront of efforts to promote efficient and robust payment and settlement arrangements. This is to be achieved by fostering an awareness of risks, by developing minimum standards or best practices and by providing a forum for co-operation among central banks in the field of oversight. Co-operation with other groups including the International Organisation of Securities Commissions (IOSCO) and other G10 committees takes place regularly in order to deal with issues of common concern. In recent years, the CPSS has also developed relationships with other central banks, particularly those of emerging market economies, in order to extend its work outside of the G10.

The ECB is also a member of the Committee on the Global Financial System (CGFS). The activities of the CGFS are designed to identify and assess potential sources of stress in the global financial environment, to understand the functioning of financial markets and to promote their efficiency and stability. The CGFS also contributes to the transparency of financial markets by designing, producing and publishing financial statistics with the

support of the BIS. In recent years, the CGFS has also been encouraging participation by non-G10 central banks.

Finally, the ECB is a member of the Gold and Foreign Exchange Committee (GFEC), a group of senior central bank representatives which regularly reviews developments in financial markets, focusing in particular on foreign exchange markets.

In November 1999 the Board of Directors of the BIS invited the ECB to become a member

of the BIS by means of a share subscription, which took place the following month. The ECB's membership of the BIS required an amendment to the Statute of the BIS. The definition of "central bank" contained in Article 56 of the Statute of the BIS was changed so as also to encompass the ECB. As a full BIS member, the ECB has voting and representation rights at the Annual General Meetings of the BIS.

For the box and table referred to in this article, please see the following pages.

Box

Selected Articles from 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), and excerpts from the Conclusions of the European Council

N.B.: The provisions of the Treaty and the Statute of the ESCB refer to the “Community” and the “ESCB”, which also comprise those EU Member States – and their national central banks – which have not yet adopted the euro. However, the Treaty (Article 122 (3)), the Statute of the ESCB (Article 43 (1)) and the relevant provisions of the Protocols on the United Kingdom and Denmark stipulate that the provisions pertaining to Economic and Monetary Union (EMU) do not apply to the Member States which have not yet adopted the euro. As a result, this article de facto refers to the notions of the “euro area” and the “Eurosystem” even when it uses, in accordance with Community language, the terms “Community” and the “ESCB”.

Selected articles from the Treaty

Article 111 (3) (on the conclusion by the Community with one or more States or international organisations of possible agreements on monetary or foreign exchange regime matters)

111 (3) (...) where agreements concerning monetary or foreign exchange regime matters need to be negotiated by the Community with one or more States or international organisations, the Council, acting by a qualified majority¹ on a recommendation from the Commission and after consulting the ECB, shall decide the arrangements for the negotiation and for the conclusion of such agreements. These arrangements shall ensure that the Community expresses a single position. The Commission shall be fully associated with the negotiations. Agreements concluded in accordance with this paragraph shall be binding on the institutions of the Community, on the ECB and on Member States.

Article 111 (4) (on the position to be taken at the international level and external representation with regard to issues of particular relevance to EMU)

111 (4) (...) the Council shall, on a proposal from the Commission and after consulting the ECB, acting by a qualified majority¹ decide on the position of the Community at international level as regards issues of particular relevance to economic and monetary union and, acting unanimously, decide its representation² in compliance with the allocation of powers laid down in Articles 99 and 105.³

¹ *In Article 122 (5) of the Treaty, qualified majority is defined as two-thirds of the votes of the representatives of the Member States which adopted the euro, weighted in accordance with Article 205 (2). This means that, in this case, the voting rights of those Member States of the Community which have not yet adopted the euro are suspended, so that the Council’s decisions correspond to the decisions of the euro area Member States.*

² *In Article 122 (5) of the Treaty, unanimity is defined as the unanimity of the Member States which have adopted the euro. In accordance with the Treaty of Nice approved on 12 December 2000 by the Intergovernmental Conference on institutional reform, decisions on representation shall also fall under qualified majority voting. The Treaty of Nice will enter into force after its ratification by the EU Member States.*

³ *Article 99 provides for the allocation of powers among EU Member States, the ECOFIN Council, the European Commission and the European Council with regard to the economic policies of the Member States. Article 105 defines the tasks of the European System of Central Banks.*

Selected articles from the Statute of the ESCB

Articles 3, 4 and 5 (1) (on the tasks entrusted to the ESCB and the ECB, which define the scope for involvement of the ECB in international co-operation)

Article 3 (on the tasks of the ESCB)

3.1. In accordance with Article 105 (2) of this Treaty, the basic tasks to be carried out through the ESCB shall be:

- to define and implement the monetary policy of the Community;
- to conduct foreign-exchange operations consistent with the provisions of Article 111 of this Treaty;
- to hold and manage the official foreign reserves of the Member States;
- to promote the smooth operation of payment systems.

(...)

3.3. In accordance with Article 105 (5) of this Treaty, the ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system.

Article 4 (on advisory functions)

In accordance with Article 105 (4) of this Treaty:

- (a) the ECB shall be consulted:
 - on any proposed Community act in its fields of competence;
 - by national authorities regarding any draft legislative provision in its fields of competence, but within the limits and under the conditions set out by the Council in accordance with the procedure laid down in Article 42;
- (b) the ECB may submit opinions to the appropriate Community institutions or bodies or to national authorities on matters in its fields of competence.

Article 5 (1) (on the collection of statistical information)

5.1. In order to undertake the tasks of the ESCB, the ECB, assisted by the national central banks, shall collect the necessary statistical information either from the competent national authorities or directly from economic agents. For these purposes it shall co-operate with the Community institutions or bodies and with the competent authorities of the Member States or third countries and with international organisations.

(...)

Article 6 (1) (2) (on the involvement of the Eurosystem in international co-operation)

6.1. In the field of international cooperation involving the tasks entrusted to the ESCB, the ECB¹ shall decide how the ESCB² shall be represented.

6.2. The ECB¹ and, subject to its approval, the national central banks² may participate in international monetary institutions.

¹ As laid down in Article 12 (5) of the Statute of the ESCB, the ECB Governing Council shall take the decisions referred to in Article 6.

² As laid down in Article 43 (1) of the Statute of the ESCB, Article 6 shall not confer any rights or impose any obligations on the national central banks of the EU Member State which have not adopted the euro.

Article 13 (2) (on the external representation of the ECB)

13.2. (...) the President or his nominee shall represent the ECB externally.

Article 23 (on the external operations)

The ECB and national central banks may:

- establish relations with central banks and financial institutions in other countries and, where appropriate, with international organizations;

(...)

Excerpts from the Presidency Conclusions of the European Council at the meeting in Luxembourg on 12 and 13 December 1997

(...)

45. As regards the implementation of the provisions on exchange policy, it is understood that general exchange policy guidelines vis-à-vis one or more non-Community currencies will be formulated only in exceptional circumstances in the light of the principles and policies defined in the Treaty.

46. The Council and the European Central Bank will fulfil their tasks in representing the Community at international level in an efficient manner and in compliance with the distribution of powers laid down in the Treaty. The Commission will be associated with external representation insofar as necessary to enable it to fulfil the role assigned to it by the Treaty.

(...)

Annex 1 to the Presidency Conclusions, “Resolution of the European Council on economic policy co-ordination in Stage 3 of EMU and on Treaty Articles 109 and 109 (b)” [renumbered as Articles 111 and 113].

(...)

8. (...) It is important to make full use of the Treaty provisions to ensure an exchange of information and views between the Council and the ECB on the exchange rate of the euro. While in general exchange rates should be seen as the outcome of all other economic policies, the Council may, in exceptional circumstances, for example in the case of a clear misalignment, formulate general orientations for exchange-rate policy in relation to non-EC currencies in accordance with Article 109 (2) [renumbered as Article 111 (2)] of the Treaty. These general orientations should always respect the independence of the ESCB and be consistent with the primary objective of the ESCB to maintain price stability.

9. The Council should decide on the position of the Community at international level as regards issues of particular relevance to economic and monetary union, in accordance with Article 109 (4) [renumbered as Article 111 (4)]. These positions will be relevant both to bilateral relations between the EU and individual third countries and to proceedings in international organisations or informal international groupings. The scope of this provision is necessarily limited as only euro area Member States vote under Article 109 [renumbered as Article 111].

10. The Council and the European Central Bank will carry out their tasks in representing the Community at international level in an efficient manner and in compliance with the allocation of powers laid down in the Treaty. On elements of economic policy other than monetary and exchange-rate policy, the Member States should continue to present their policies outside the Community framework, while taking full account of the Community interest. The Commission will be involved in external representation to the extent required to enable it to perform the role assigned to it by the Treaty.

Representation in international organisations should take account of those organisations’ rules. With particular regard to the Community’s relations with the International Monetary Fund, they should be predicated upon the provision in that Fund’s Articles of Agreement that only countries can be members of that institution. The Member States, in their capacities as members of the IMF, should help to establish pragmatic arrangements which would facilitate the conduct of IMF surveillance and the presentation of Community positions, including the views of the ESCB, in IMF fora.

(...)

Excerpts from the Presidency Conclusions of the European Council at the meeting in Vienna on 11 and 12 December 1998

(ii) Europe as a Global Player

Speaking with one Voice

14. The introduction of the euro will be a major event for the international monetary system. It is imperative that the Community should play its full role in international monetary and economic policy co-operation within fora like the G7 and the International Monetary Fund. (...) The ECB, as the Community body competent for monetary policy, should be granted an observer status at the IMF board. The views of the European Community/EMU on other issues of particular relevance to the EMU would be presented at the IMF board by the relevant member of the Executive Director's office of the Member State holding the euro Presidency, assisted by a representative of the Commission. The European Council invites the Council to act on the basis of a Commission proposal incorporating this agreement.

15. The coherence and effectiveness of the Community require that it shall be able to speak with one voice on issues of particular relevance to economic and monetary union. The European Council encourages the Commission, the Council and the Member States to take the necessary action to ensure a timely and effective preparation of common positions and common understandings which can be presented to third parties in international fora.

(...)

Annex 2 to the Presidency Conclusions, "Report to the European Council on the state of preparation for Stage 3 of EMU, in particular the external representation of the Community"

(...)

3. The external representation in Stage Three of EMU will imply changes in the current organisation of international fora. Therefore, third countries and institutions will need to be persuaded to accept the solutions proposed by the European Union. The Council considers that a pragmatic approach might be the most successful which could minimise the adaptation of current rules and practices provided, of course, that such an approach resulted in an outcome which recognised properly the role of the euro.

4. It follows from the Treaty that a distinction has to be made between the representation:

- of the Community at international level as regards issues of particular relevance to economic and monetary union (Article 109 (4) [renumbered as Article 111 (4)]; and
- on matters which do not belong to the Community competence, but on which it may be appropriate for Member States to express common understandings.

5. As regards the first indent of paragraph 4 – the representation of the Community at international level as regards issues of particular relevance to EMU – the Council believes that, while trying to reach early solutions pragmatically with international partners, these solutions should be further developed over time adhering to the following principles:

- the Community must speak with one voice;
- the Community shall be represented at the Council/ministerial level and at the central banking level; and
- the Commission "will be involved in the Community external representation to the extent required to enable it to perform the role assigned to it by the Treaty".

As regards the second indent – matters which do not belong to Community competence – the Council considered it useful to develop pragmatic solutions for the external representation. (...)

Table

Main international organisations and fora involved in economic policy co-operation

Organisation or forum	Established in	Objectives (only those in the field of international co-operation are listed)	Membership or representation	Organisation and other main characteristics
International Monetary Fund (IMF)	1944	<ul style="list-style-type: none"> • To promote international monetary co-operation through a permanent institution which provides the machinery for consultation and collaboration. • To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income. • To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation. • To give confidence to members by making the general resources of the Fund temporarily available to them under adequate safeguards, thus providing them with the opportunity to correct maladjustments in their balance of payments without resorting to measures destructive to national or international prosperity. <p>(Excerpt from the Articles of Agreement, Article I, Purposes)</p>	<p>182 Member States.</p> <p>On 21 December 1998, the IMF Executive Board granted observer status to the ECB.</p>	<p>The IMF decision-making bodies are:</p> <ul style="list-style-type: none"> • The Board of Governors, which meets once a year. Each member country appoints one governor and one alternate, usually its minister of finance and the governor of the central bank. • The International Monetary and Financial Committee (IMFC), which replaced the Interim Committee (IC) in 1999. The IMFC advises and reports to the Board of Governors on issues related to the international monetary and financial system. • The Executive Board, which is responsible for day-to-day business of the IMF. The Boards' chairperson is the Managing Director of the IMF, while the 24 Executive Directors represent specific countries or groups of countries.
Organisation for Economic Co-operation and Development (OECD)	1961	<ul style="list-style-type: none"> • To enable member countries to co-operate with each other so as to achieve the highest sustainable growth and to improve economic and social well-being. • To compare experiences in different countries, in order to find solutions that can be applied within each national context. • To offer advice and make recommendations to member countries, in order to help them to define their policies. • In certain areas (e.g. movements of capital), to arbitrate the negotiation of multilateral arrangements and establish codes to be implemented on a voluntary basis. 	<p>29 Member States:</p> <ul style="list-style-type: none"> • Since 1961: Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States; • Other members: Japan (1964); Finland (1969); Australia (1971); New Zealand (1973); Mexico (1994); the Czech Republic (1995); Hungary, Korea and Poland (1996). <p>The ECB participates in the work of the relevant OECD Committees and Working Groups. In this context, the ECB acts as a separate member of the European Community delegation alongside the Commission.</p>	<ul style="list-style-type: none"> • The OECD's activities cover all areas of government policy (multidisciplinary approach), mainly through the work of around 200 committees. • The supreme authority of the OECD is the Council, which meets at the level of ministers once a year. The Council decides on the OECD budget, which is financed by member countries in accordance with the weight of their economies. The OECD Secretary General chairs the Council meetings and manages the OECD Secretariat.

Organisation or forum	Established in	Objectives (only those in the field of international co-operation are listed)	Membership or representation	Organisation and other main characteristics
G7 ministers and governors	1985	<ul style="list-style-type: none"> To be a forum for the informal exchange of views on macroeconomic and exchange rate developments and on issues related to economic and financial policies. The latter are often linked to discussions held in international institutions. Consensus reached among G7 members may provide political guidance to the process of international economic policy co-operation. 	<p>Finance ministers and central bank governors of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.</p> <p>The ECB President and the President of the Eurogroup represent the euro area when macroeconomic policy and exchange rate issues are discussed.</p>	<ul style="list-style-type: none"> The work of G7 finance ministers and central bank governors forms part of the broader political G7/G8 (including Russia) forum of Heads of State or Government, which started in 1975 in Rambouillet with six members: France, the United States, the United Kingdom, Germany, Japan and Italy; Canada joined in 1976. The G7/G8 Heads of State or Government have established a “network” of ministerial groupings in different areas (e.g. foreign affairs, environmental issues and employment). G7 finance ministers, which were established in 1986, form part of this framework. As an informal forum, the G7/G8 has no permanent secretariat. The chair rotates every year. The G7 country holding the chair provides secretarial support for the meetings. G7 finance ministers may meet without central bank involvement, e.g. in order to prepare their contribution to G7/G8 summits of Heads of State or Government.
G10 ministers and governors	1963	<ul style="list-style-type: none"> To make resources available to the IMF under the General Arrangements to Borrow (GAB). The GAB were set up in 1962, when ten IMF Member States (together with Switzerland, not then an IMF member) agreed to make resources available to the IMF beyond their quotas. To provide a forum for discussion of international monetary questions, which are often linked to issues of relevance to the IMF. 	<p>Finance ministers and central bank governors of 11 countries: Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.</p> <p>The ECB President attends the meetings with observer status.</p>	<ul style="list-style-type: none"> The BIS, the IMF and the OECD provide secretarial support for the preparation of meetings. Meetings take place twice a year, in the context of the Spring and the Annual Meetings of the IMF and the World Bank. Four meetings at the deputy level prepare the discussions of finance ministers and central bank governors. Ad hoc working groups may be established to study special topics.
G20 ministers and governors	1999	<ul style="list-style-type: none"> To enable informal dialogue to take place among industrialised countries and emerging market economies of systemic importance on key economic and financial policy issues. 	<p>Finance ministers and central bank governors of 19 countries (G7 countries plus Argentina, Australia, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey), as well as the President of the ECB and the President of the Eurogroup, who represent the European Community. The President of the World Bank, the Managing Director of the IMF and the Chairmen of the IMFC and the Development Committee are also G20 members.</p>	<ul style="list-style-type: none"> As an informal forum, and like the G7, the G20 has no permanent secretariat. The chair, which is held by Canada for the first two years, provides support for the preparation of the meetings. Meetings of finance ministers and central bank governors are held once a year. Their deputies meet twice a year to prepare these meetings.

Table (cont'd)

Organisation or forum	Established in	Objectives (only those in the field of international co-operation are listed)	Membership or representation	Organisation and other main characteristics
Financial Stability Forum (FSF)	1999	<ul style="list-style-type: none"> To assess vulnerabilities affecting the international financial system. To identify and oversee action needed to address vulnerabilities. To improve co-ordination and the exchange of information among the various authorities responsible for financial stability. 	<ul style="list-style-type: none"> G7 countries' national authorities responsible for financial stability (namely ministers of finance, central banks and supervisory agencies). Several organisations and fora (IMF, World Bank, BIS, OECD, Basel Committee on Banking Supervision (BCBS), International Organisation of Securities Commissions (IOSCO), International Association of Insurance Supervisors (IAIS), CGFS and CPSS). Since 15 September 1999, four non-G7 countries: the Netherlands, Singapore, Australia and Hong Kong SAR. <p>The ECB participates in the FSF meetings.</p>	<ul style="list-style-type: none"> The role of the FSF ranges from political guidance for identifying and addressing sources of financial vulnerability to the promotion of standards and codes. The FSF is a forum for enhanced international inter-agency co-operation.
Bank for International Settlements (BIS)	1930	<ul style="list-style-type: none"> To promote co-operation among central banks. To this end, the BIS provides secretarial support to the meetings of G10 governors and the related central bank committees described hereinafter. To provide technical assistance to the central banks of emerging market and transition economies. 	<p>50 central banks are BIS shareholders, i.e. they have rights of representation and voting rights at the BIS Annual General Meeting:</p> <ul style="list-style-type: none"> Until 1996, the central banks of: <ul style="list-style-type: none"> G10 countries (see G10 ministers and governors), Australia, Austria, Bulgaria, the Czech Republic, Denmark, Estonia, Finland, Greece, Hungary, Iceland, Ireland, Latvia, Lithuania, Norway, Poland, Portugal, Romania, Slovakia, South Africa, Spain and Turkey; Bosnia and Herzegovina, Croatia, Macedonia and Slovenia, which have subscribed BIS shares pending a comprehensive settlement of all outstanding questions in connection with the legal status of the suspended Yugoslav subscription of BIS capital. Since 1996/97, the central banks of Brazil, China, Hong Kong SAR, India, Korea, Mexico, Russia, Saudi Arabia and Singapore. Since 1999, the ECB and the central banks of Argentina, Indonesia, Malaysia and Thailand. 	<ul style="list-style-type: none"> The BIS is owned and controlled by central banks. It has a legal status as a limited company with an issued share capital. The BIS has three administrative bodies: <ul style="list-style-type: none"> the General Meeting; the Board of Directors, the members of which are appointed only by the central banks of G10 countries. Out of 17 members of the Board of Directors, 9 are appointed by those Eurosystem national central banks which are members of the G10; the Management, headed by a General Manager.
G10 governors	1963	<ul style="list-style-type: none"> To act as the main central banking forum for the discussion of international monetary issues. 	Central bank governors of the G10 countries including the President of the ECB.	

Organisation or forum	Established in	Objectives (only those in the field of international co-operation are listed)	Membership or representation	Organisation and other main characteristics
Basel Committee on Banking Supervision (BCBS)	1974	<ul style="list-style-type: none"> To make rules for banks, mainly by means of principles, standards (e.g. on capital adequacy), recommendations and sound practices. To encourage the implementation on a voluntary basis of internationally agreed rules through the adaptation of banking regulation at the national level. 	<p>G10 countries (see G10 ministers and governors). Both central banks and supervisory agencies participate in the Committee.</p> <p>The ECB participates in the meetings of the BCBS with observer status.</p>	<ul style="list-style-type: none"> Contacts with non-G10 countries are ensured through a network of regional committees. In this context, the BCBS also provides training programmes, which facilitate an exchange of ideas and principles, as well as a process of "mutual training" for supervisors worldwide. The BCBS can count on significant resources and on a strong secretariat, which usually drafts the relevant papers. The BCBS relies to a large extent on Working Groups for the conduct of more technical work.
Committee on Payment and Settlement Systems (CPSS)	1990 (The two predecessor Committees date back to 1980 and 1989.)	<ul style="list-style-type: none"> To set standards in order to reduce risks in payment and settlement systems. To this end, the CPSS monitors and analyses developments in domestic payment, settlement and clearing systems, as well as in cross-border and multi-currency settlement schemes. To co-ordinate the oversight functions assumed by G10 central banks with regard to payment systems. 	Central banks of the G10 countries (see G10 ministers and governors), Hong Kong SAR and Singapore, as well as the ECB.	<ul style="list-style-type: none"> The CPSS is increasingly extending its work outside the G10 area. Non-G10 central banks are more and more frequently associated with initiatives of the CPSS and of its sub-groups. The CPSS also co-operates with other standard setters, and maintains contacts with the most important payment system providers and industry associations. A secretariat co-ordinates the CPSS work and drafts the relevant papers. A significant contribution is provided by the participating central banks, also through Working Groups.
Committee on the Global Financial System (CGFS)	1999 (The predecessor Committee was established in 1980.)	<ul style="list-style-type: none"> To identify and assess potential sources of stress in the global financial environment. To further the understanding of the functioning of financial markets and systems. To promote the development of efficient and stable financial markets and systems. To increase the transparency of financial markets and systems through the design, production and publication of statistics through the support of the BIS. 	G10 central banks and the ECB.	<ul style="list-style-type: none"> The central banks of systematically significant economies can be involved on an ad hoc basis. A secretariat co-ordinates the CGFS work and drafts the relevant papers. A significant contribution is provided by the participating central banks, also through Working Groups.
Gold and Foreign Exchange Committee (GFEC)	1962	<ul style="list-style-type: none"> To analyse ongoing developments in the world's financial markets, with particular emphasis on foreign exchange and gold markets. 	G10 central banks and the ECB.	<ul style="list-style-type: none"> The central banks of systematically significant economies can be involved on an ad hoc basis. A secretariat co-ordinates the GFEC work and drafts the relevant papers.



Euro area statistics



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

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

For analytical purposes, data for the euro area plus Greece up to end-2000 are shown in the additional table starting on page 65* (for details, see the general notes).

Conventions used in the tables

"-"	Data do not exist.
"."	Data are not yet available.
"..."	nil or negligible
"billion"	10 ⁹
(p)	provisional
s.a.	seasonally adjusted

Euro area overview table

Summary table of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates

	M1 ¹⁾	M2 ¹⁾	M3 ¹⁾		MFI loans to euro area residents excluding MFIs and general government ¹⁾	Securities issued by non-financial and non-monetary financial corporations ¹⁾	3-month interest rate (EURIBOR, % per annum, period averages) ⁷⁾	10-year government bond yield (% per annum, period averages) ⁸⁾
	1	2	3	3-month moving average (centred) ⁴⁾				
1999	12.3	6.8	5.6	-	10.0	30.8	2.96	4.66
2000	.	.	.	-	.	.	4.40	5.44
1999 Q4	12.0	6.5	5.9	-	10.0	37.2	3.43	5.32
2000 Q1	10.0	4.8	5.9	-	9.3	23.3	3.55	5.61
Q2	9.5	4.9	6.2	-	10.1	20.3	4.27	5.43
Q3	6.9	4.0	5.4	-	9.4	18.4	4.74	5.44
Q4	.	.	.	-	.	.	5.02	5.28
2000 July	6.9	3.7	5.2	5.4	9.1	18.1	4.58	5.45
Aug.	7.1	4.2	5.6	5.4	9.5	19.5	4.78	5.40
Sep.	6.3	4.1	5.3	5.4	9.9	17.7	4.85	5.47
Oct.	5.8	3.7	5.2	5.1	9.7	19.0	5.04	5.42
Nov.	5.0	3.7	4.9	.	9.2	.	5.09	5.34
Dec.	.	.	.	.	.	.	4.93	5.07

2. Price and real economy developments

	HICP	Industrial producer prices	Hourly labour costs (whole economy)	Real GDP	Industrial production (excluding construction)	Capacity utilisation in manufacturing (percentages)	Employment (whole economy)	Unemployment (% of labour force)
	9	10	11	12	13	14	15	16
1999	1.1	-0.4	2.2	2.5	1.9	81.8	1.7	10.0
2000	.	.	.	.	.	83.8	.	.
1999 Q4	1.5	2.1	2.4	3.3	4.2	81.9	1.7	9.6
2000 Q1	2.0	4.3	3.6	3.5	4.8	83.0	1.9	9.4
Q2	2.1	5.2	3.7	3.7	6.0	83.7	2.2	9.1
Q3	2.5	5.8	.	3.4	5.8	83.9	.	9.0
Q4	.	.	.	.	.	84.7	.	.
2000 July	2.4	5.6	-	-	5.3	-	-	9.0
Aug.	2.3	5.6	-	-	6.6	-	-	9.0
Sep.	2.8	6.2	-	-	5.8	-	-	8.9
Oct.	2.7	6.5	-	-	3.8	-	-	8.8
Nov.	2.9	.	-	-	.	-	-	8.8
Dec.	.	.	-	-	.	-	-	.

3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net flows)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: broad group (1999 Q1 = 100)		US dollar/euro exchange rate
	Current and capital accounts	Of which goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
					17			18
1999	7.7	83.4	-120.6	-41.7	372.3	96.6	95.8	1.066
2000	.	.	.	.	.	88.2	86.2	0.924
1999 Q4	-0.7	20.9	-46.6	-2.7	372.3	94.2	92.6	1.038
2000 Q1	-5.0	9.3	148.0	-192.6	385.4	91.1	89.5	0.986
Q2	-4.3	14.7	-18.2	51.9	385.8	88.4	86.6	0.933
Q3	-4.7	17.6	-91.3	13.2	408.1	87.3	85.3	0.905
Q4	.	.	.	.	.	85.9	83.6	0.868
2000 July	-1.7	8.4	-11.3	-5.9	391.4	89.4	87.6	0.940
Aug.	-2.2	4.6	-45.7	15.3	402.6	87.0	85.1	0.904
Sep.	-0.8	4.5	-34.3	3.9	408.1	85.3	83.3	0.872
Oct.	0.0	8.2	-15.7	-1.7	416.2	84.4	82.2	0.855
Nov.	.	.	.	.	400.1	85.1	82.8	0.856
Dec.	.	.	.	.	.	88.1	85.7	0.897

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

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

1) Monthly growth rates refer to the end of the period, whereas quarterly and annual growth rates are calculated as period averages.

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
2000 28 July	120,911	264,105	16,676	3,776	226,277	170,999	54,911	0
4 Aug.	120,911	263,524	16,329	3,708	218,337	163,001	54,911	0
11	120,911	262,539	15,693	4,065	211,125	156,002	54,911	0
18	120,911	264,354	15,066	4,442	220,131	165,002	54,911	0
25	120,911	263,684	15,254	4,214	222,715	166,999	54,911	0
1 Sep.	120,911	263,927	15,735	4,392	231,172	180,999	49,999	0
8	120,911	265,579	14,347	4,094	226,322	176,001	49,999	0
15	120,911	264,117	15,566	4,211	221,510	171,002	49,999	0
22	120,911	262,962	14,775	3,904	219,766	167,000	49,999	0
29	124,948	281,673	16,566	4,017	230,305	185,002	44,998	0
6 Oct.	124,948	283,395	16,403	3,949	225,352	180,000	44,998	0
13	124,948	283,318	15,993	4,154	220,315	175,001	44,998	0
20	124,947	283,352	15,003	3,896	214,625	168,998	44,998	0
27	124,947	282,393	14,219	3,651	228,509	182,998	45,001	0
3 Nov.	124,947	281,110	15,515	3,553	225,430	180,003	45,001	0
10	124,947	276,420	15,423	3,518	230,418	185,000	45,001	0
17	124,947	272,580	16,032	3,535	230,467	185,000	45,001	0
24	124,947	271,963	16,321	4,000	243,319	197,998	45,001	0
1 Dec.	124,947	271,907	16,655	3,514	245,234	200,000	45,000	0
8	124,947	273,559	16,393	3,564	265,329	220,000	45,000	0
15	124,947	272,796	16,345	3,760	264,536	218,999	45,000	0
22	124,947	273,521	15,403	3,447	259,304	212,000	45,000	0

2. Liabilities

	Banknotes in circulation	Liabilities to financial sector counterparties in the euro area in euro	Current accounts (covering the minimum reserve 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
2000 28 July	358,533	113,458	113,406	49	0	0	3	6,265
4 Aug.	362,200	115,833	115,797	34	0	0	2	6,265
11	361,546	106,584	106,343	240	0	0	1	6,265
18	357,961	116,105	115,983	122	0	0	0	6,265
25	353,848	106,518	106,487	29	0	0	2	6,265
1 Sep.	355,876	119,054	119,021	27	0	0	6	6,265
8	357,489	113,148	112,951	197	0	0	0	6,265
15	355,314	110,780	110,689	91	0	0	0	6,265
22	352,633	114,194	112,587	1,607	0	0	0	6,265
29	354,797	115,333	114,892	441	0	0	0	4,574
6 Oct.	357,485	116,723	116,645	67	0	0	11	4,574
13	355,766	112,074	111,962	110	0	0	2	4,574
20	352,508	116,184	115,944	238	0	0	2	4,574
27	352,108	121,748	121,687	61	0	0	0	4,574
3 Nov.	355,687	116,263	116,209	54	0	0	0	3,784
10	354,127	114,790	114,706	84	0	0	0	3,784
17	351,946	111,494	111,366	128	0	0	0	3,784
24	350,140	113,697	113,581	116	0	0	0	3,784
1 Dec.	356,421	125,647	125,539	108	0	0	0	3,784
8	363,755	116,443	116,335	108	0	0	0	3,784
15	364,276	117,935	117,842	93	0	0	0	3,784
22	373,063	115,681	114,353	1,328	0	0	0	3,784

Source: ECB.

								Total	
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			
9	10	11	12	13	14	15	16		
0	1	25	341	25,435	58,986	84,559	800,725	2000 28 July	
0	62	24	339	25,382	58,986	84,909	792,086	4 Aug.	
0	48	17	147	25,487	58,986	84,972	783,778	11	
0	5	65	148	25,539	58,986	84,860	794,289	18	
0	614	45	146	25,474	58,986	85,730	796,968	25	
0	17	16	141	25,271	58,986	82,024	802,418	1 Sep.	
0	68	114	140	25,400	58,986	82,127	797,766	8	
0	166	90	253	25,324	58,986	82,158	792,783	15	
0	2,392	118	257	25,594	58,994	81,604	788,510	22	
0	29	141	135	25,623	58,867	84,311	826,310	29	
0	182	47	125	25,678	58,867	83,029	821,621	6 Oct.	
0	101	23	192	25,497	58,867	83,230	816,322	13	
0	297	27	305	25,639	58,867	83,467	809,796	20	
0	7	48	455	25,826	58,867	83,674	822,086	27	
0	15	44	367	25,869	58,762	86,095	821,281	3 Nov.	
0	18	34	365	26,069	58,762	86,361	821,918	10	
0	186	17	263	25,941	58,762	86,692	818,956	17	
0	12	45	263	26,033	58,762	87,758	833,103	24	
0	39	77	118	26,077	58,762	87,488	834,584	1 Dec.	
0	89	77	163	25,936	58,772	87,468	855,968	8	
0	272	83	182	25,685	58,664	87,650	854,381	15	
0	1,957	94	253	25,840	58,263	87,885	848,610	22	

								Total	
Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves		
9	10	11	12	13	14	15	16	17	
60,120	7,296	814	11,784	6,691	59,738	120,895	55,131	800,725	2000 28 July
45,761	7,149	840	11,199	6,691	60,121	120,895	55,132	792,086	4 Aug.
48,055	7,299	841	10,108	6,691	60,361	120,895	55,133	783,778	11
50,689	7,549	800	10,821	6,691	61,380	120,895	55,133	794,289	18
65,464	8,120	800	10,727	6,691	62,506	120,895	55,134	796,968	25
60,743	7,427	827	11,057	6,691	58,448	120,895	55,135	802,418	1 Sep.
60,261	7,195	827	11,493	6,691	58,366	120,895	55,136	797,766	8
58,973	7,460	827	11,244	6,692	59,196	120,895	55,137	792,783	15
54,225	7,187	854	11,541	6,692	58,886	120,895	55,138	788,510	22
58,097	9,167	927	11,667	7,077	65,376	144,156	55,139	826,310	29
48,795	9,072	912	13,173	7,077	64,521	144,152	55,137	821,621	6 Oct.
49,355	9,502	900	13,277	7,077	64,507	144,152	55,138	816,322	13
41,782	9,429	896	12,734	7,077	65,320	144,152	55,140	809,796	20
49,420	9,291	866	11,838	7,077	65,870	144,152	55,142	822,086	27
51,113	9,501	864	12,216	7,077	65,481	144,152	55,143	821,281	3 Nov.
54,257	9,888	864	11,988	7,077	65,846	144,152	55,145	821,918	10
56,484	10,870	865	9,998	7,077	67,139	144,152	55,147	818,956	17
67,442	11,394	860	10,335	7,077	69,071	144,152	55,151	833,103	24
51,678	10,733	861	10,701	7,077	68,376	144,152	55,154	834,584	1 Dec.
73,400	10,656	860	12,169	7,077	68,515	144,152	55,157	855,968	8
68,122	10,813	856	12,401	7,077	69,807	144,152	55,157	854,381	15
54,035	11,139	855	12,728	7,077	70,939	144,152	55,157	848,610	22

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

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

Source: ECB.

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

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

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
			Fixed rate	Minimum bid rate	Marginal rate	Weighted average rate	
	1	2	3	4	5	6	7
2000 28 June ²⁾	201,612	99,000	-	4.25	4.29	4.32	14
5 July	171,848	58,000	-	4.25	4.29	4.30	14
12	192,977	99,000	-	4.25	4.29	4.30	14
19	160,519	53,000	-	4.25	4.29	4.30	14
26	211,485	118,000	-	4.25	4.30	4.31	14
2 Aug.	172,252	45,000	-	4.25	4.31	4.31	14
9	199,922	111,000	-	4.25	4.30	4.31	14
16	173,995	54,000	-	4.25	4.35	4.37	14
23	218,102	113,000	-	4.25	4.47	4.50	14
30	149,939	68,000	-	4.25	4.68	4.71	14
6 Sep.	190,506	108,000	-	4.50	4.55	4.57	14
13	158,302	63,000	-	4.50	4.58	4.59	14
20	168,230	104,000	-	4.50	4.56	4.58	14
27	159,098	81,000	-	4.50	4.65	4.68	14
4 Oct.	174,302	99,000	-	4.50	4.67	4.68	14
11	128,731	76,000	-	4.75	4.76	4.78	14
18	107,602	93,000	-	4.75	4.75	4.76	14
25	159,063	90,000	-	4.75	4.80	4.82	14
1 Nov.	150,445	90,000	-	4.75	4.84	4.85	14
8	147,173	95,000	-	4.75	4.83	4.84	14
15	130,251	90,000	-	4.75	4.78	4.80	14
22	148,887	108,000	-	4.75	4.80	4.82	14
29	147,060	92,000	-	4.75	4.82	4.83	14
6 Dec.	129,916	128,000	-	4.75	4.75	4.79	14
13	116,112	91,000	-	4.75	4.76	4.78	14
20	152,151	121,000	-	4.75	4.80	4.86	14
27	118,217	102,000	-	4.75	4.79	4.84	14
2001 3 Jan.	136,434	101,000	-	4.75	4.76	4.78	14

Source: ECB.

- 1) The amounts shown may differ slightly from those in Table 1.1, columns 6 to 8, due to operations allotted but not settled.
- 2) See footnote 3 to Table 1.2. The marginal rate refers to the lowest rate at which funds were allotted.

2. Longer-term refinancing operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		Running for (...) days
			Fixed rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6
1999 14 Jan.	79,846	15,000	-	3.13	-	42
14	39,343	15,000	-	3.10	-	70
14	46,152	15,000	-	3.08	-	105
25 Feb.	77,300	15,000	-	3.04	-	91
25 Mar.	53,659	15,000	-	2.96	2.97	98
29 Apr.	66,911	15,000	-	2.53	2.54	91
27 May	72,294	15,000	-	2.53	2.54	91
1 July	76,284	15,000	-	2.63	2.64	91
29	64,973	15,000	-	2.65	2.66	91
26 Aug.	52,416	15,000	-	2.65	2.66	91
30 Sep.	41,443	15,000	-	2.66	2.67	84
28 Oct.	74,430	25,000	-	3.19	3.42	91
25 Nov.	74,988	25,000	-	3.18	3.27	98
23 Dec.	91,088	25,000	-	3.26	3.29	98
2000 27 Jan.	87,052	20,000	-	3.28	3.30	91
2 Mar.	72,960	20,000	-	3.60	3.61	91
30	74,929	20,000	-	3.78	3.80	91
27 Apr.	64,094	20,000	-	4.00	4.01	91
1 June	64,317	20,000	-	4.40	4.42	91
29	41,833	20,000	-	4.49	4.52	91
27 July	40,799	15,000	-	4.59	4.60	91
31 Aug.	35,417	15,000	-	4.84	4.87	91
28 Sep.	34,043	15,000	-	4.84	4.86	92
26 Oct.	43,085	15,000	-	5.06	5.07	91
30 Nov.	31,999	15,000	-	5.03	5.05	91
29 Dec.	15,869	15,000	-	4.75	4.81	90

3. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		Running for (...) days	
				Fixed rate	Marginal rate ³⁾	Weighted average rate		
		1	2	3	4	5	6	7
2000 5 Jan.	Collection of fixed-term deposits	14,420	14,420	-	3.00	3.00	7	
21 June	Reverse transaction	18,845	7,000	-	4.26	4.28	1	

3) See footnote 2.

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

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Money market paper	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6	7
1999 Nov.	9,295.2	5,079.6	135.9	202.9	1,193.3	562.6	2,121.0
Dec.	9,187.4	5,123.4	113.5	169.3	1,204.9	503.5	2,072.8
2000 Jan.	9,265.7	5,164.6	108.0	156.8	1,210.3	547.9	2,078.2
Feb.	9,338.9	5,189.6	114.5	164.5	1,220.7	553.1	2,096.4
Mar.	9,490.8	5,306.7	117.1	174.9	1,231.3	543.8	2,116.9
Apr.	9,629.4	5,411.5	116.7	174.7	1,243.2	537.5	2,145.9
May	9,641.5	5,390.3	118.4	188.4	1,241.3	541.4	2,161.7
June	9,539.4	5,316.9	120.4	184.7	1,250.6	506.7	2,160.1
July	9,590.1	5,348.0	119.8	192.3	1,258.0	489.9	2,182.2
Aug.	9,686.5	5,393.8	122.9	197.1	1,269.0	502.5	2,201.3
Sep.	9,773.3	5,465.7	123.6	193.6	1,270.2	502.1	2,218.2
Oct.	9,931.2	5,531.9	127.6	201.1	1,283.2	534.2	2,253.2
Nov. ^(p) 3)	10,077.3	5,657.2	129.8	199.8	1,282.2	560.6	2,247.9

Source: ECB.

- 1) Liabilities vis-à-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks, are excluded from the reserve base. If a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years and of money market paper held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. This percentage was 10% for calculating the reserve base until November 1999, and 30% thereafter.
- 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.
- 3) Includes the reserve base of credit institutions in Greece (EUR 134.4 billion, of which EUR 107.4 billion qualify for the 2% coefficient). On a transitional basis, credit institutions located in participating Member States could choose to deduct from their own reserve base liabilities to credit institutions in Greece. Starting from the reserve base as at end-January 2001 the standard treatment applies.

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

Maintenance period ending in:	Required reserves ²⁾	Actual reserves ³⁾	Excess reserves ⁴⁾	Deficiencies ⁵⁾	Interest rate on minimum reserves ⁶⁾
	1	2	3	4	5
2000 Jan.	107.7	108.5	0.8	0.0	3.00
Feb.	107.5	107.9	0.4	0.0	3.12
Mar.	108.0	108.4	0.5	0.0	3.27
Apr.	108.7	109.5	0.8	0.0	3.50
May	111.3	111.8	0.5	0.0	3.67
June	113.4	113.9	0.5	0.0	3.90
July	113.3	114.0	0.7	0.0	4.28
Aug.	111.8	112.3	0.5	0.0	4.32
Sep.	112.6	113.1	0.5	0.0	4.57
Oct.	113.7	114.2	0.5	0.0	4.69
Nov.	115.1	115.5	0.4	0.0	4.81
Dec.	116.6	117.2	0.6	0.0	4.78
2001 Jan. ^(p) 7)	118.5	-	-	-	-

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 which 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 which have not fulfilled the reserve requirement.
- 6) This rate equals the average, over the maintenance period, of the ECB's rate (weighted by the number of calendar days) on the Eurosystem's main refinancing operations (see Table 1.3).
- 7) Owing to the adoption of the euro by Greece on 1 January 2001, the reserve requirement is an average, weighted by the number of calendar days, of the reserve requirements for the Euro 11 from 24 to 31 December 2000 and the reserve requirements for the Euro 12 from 1 to 23 January 2001 (i.e. 8/31 * EUR 117.0 billion + 23/31 * EUR 119.1 billion).

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

Maintenance period ending in:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts ⁴⁾	Base money ⁵⁾
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations ²⁾	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) ³⁾		
	Eurosystem's net assets in gold and foreign currency ¹⁾	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations ²⁾							
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Oct.	349.7	143.0	45.0	0.3	0.0	0.6	0.0	342.5	45.4	45.9	103.5	446.7
Nov.	351.8	140.5	53.7	0.3	0.0	0.4	0.0	343.1	51.5	47.3	104.2	447.6
Dec.	351.7	150.4	65.0	0.3	0.0	1.0	0.0	354.3	59.0	47.5	105.6	460.8
2000 Jan.	362.3	138.5	75.0	1.9	0.0	0.5	3.3	363.0	41.0	61.2	108.7	472.3
Feb.	367.8	130.9	70.5	0.1	0.0	0.2	0.0	347.6	49.2	64.2	108.1	455.9
Mar.	369.2	136.1	66.2	0.2	0.0	0.3	0.0	347.6	51.7	63.5	108.6	456.4
Apr.	377.1	136.7	61.0	0.2	0.0	0.9	0.0	349.7	45.6	69.1	109.7	460.3
May	378.8	142.6	60.0	0.4	0.0	2.3	0.0	353.8	41.9	71.8	112.0	468.2
June	378.1	140.9	59.9	0.3	0.2	0.8	0.0	354.1	38.3	72.1	114.2	469.1
July	380.8	157.9	59.9	0.4	0.0	0.5	0.0	357.0	50.4	76.8	114.2	471.7
Aug.	382.0	163.1	55.4	0.1	0.0	0.3	0.0	359.2	48.8	80.0	112.4	471.9
Sep.	381.6	173.1	51.1	0.3	0.0	0.2	0.0	354.8	56.6	81.2	113.3	468.3
Oct.	396.3	176.5	45.7	0.5	0.0	0.2	0.0	354.5	47.4	102.5	114.4	469.1
Nov.	398.6	183.7	45.0	0.2	0.0	0.2	0.0	352.7	49.8	109.2	115.7	468.6
Dec.	394.4	210.4	45.0	0.4	0.0	0.2	0.0	360.4	61.1	111.1	117.4	478.0

Source: ECB.

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

2 Monetary developments in the euro area

Table 2.1

Aggregated balance sheet of the Eurosystem ¹⁾

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

1. Assets

	Loans to euro area residents		MFIs ²⁾	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by euro area residents			External assets ²⁾	Fixed assets	Re-maining assets	Total
	1	2				3	4	5	6	7	8					9	10	11	12	13	14	15
1997	237.2	215.5	21.1	0.6	114.0	0.7	111.8	1.5	2.9	0.5	2.4	324.1	7.0	51.6	736.7
1998 Q4	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 Q1	608.5	587.9	20.4	0.2	94.0	1.5	91.9	0.6	8.1	4.0	4.1	427.3	9.3	52.5	1,199.9
Q2	788.8	768.3	20.4	0.2	92.4	1.5	90.0	0.9	8.7	4.4	4.3	498.6	9.7	47.4	1,445.6
Q3	456.9	436.3	20.4	0.2	92.4	1.4	89.9	1.1	8.7	4.3	4.4	427.9	9.8	48.2	1,044.0
1999 Nov.	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	56.3	1,086.4
Dec.	444.6	424.3	19.7	0.5	89.1	1.9	86.1	1.1	14.1	4.3	9.8	400.6	9.9	56.2	1,014.5
2000 Jan.	465.0	444.6	19.8	0.6	90.3	1.7	87.6	1.0	14.2	4.4	9.8	424.3	9.9	52.4	1,056.1
Feb.	382.2	361.8	19.8	0.6	93.2	1.8	90.4	1.0	14.2	4.3	9.8	417.5	9.8	52.5	969.3
Mar.	443.4	424.5	18.4	0.5	96.2	2.4	92.7	1.1	14.4	4.3	10.1	439.1	9.8	49.0	1,051.9
Apr.	471.4	452.5	18.4	0.5	96.7	2.6	93.0	1.1	14.4	4.3	10.1	438.0	9.9	51.4	1,081.8
May	469.2	450.3	18.4	0.5	97.1	2.7	93.2	1.2	14.4	4.4	10.1	441.9	10.0	51.9	1,084.5
June	580.7	561.8	18.4	0.5	97.4	2.6	93.6	1.2	14.7	4.4	10.4	454.8	10.0	51.8	1,209.4
July	501.4	482.6	18.4	0.5	98.2	2.5	94.5	1.2	14.7	4.4	10.3	449.7	10.1	51.6	1,125.7
Aug.	482.5	463.7	18.4	0.5	98.5	2.8	94.4	1.3	14.7	4.4	10.3	435.4	10.2	52.4	1,093.5
Sep.	493.1	474.4	18.2	0.5	98.5	2.9	94.6	1.0	14.6	4.4	10.2	459.1	10.2	54.4	1,129.8
Oct.	478.8	460.1	18.2	0.5	98.7	2.6	94.9	1.2	15.0	4.4	10.7	454.7	10.5	53.9	1,111.7
Nov. ^(p)	431.5	412.8	18.2	0.5	98.8	2.6	94.9	1.4	15.4	4.4	11.1	402.7	10.3	54.3	1,013.0

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs ²⁾			Money market paper	Debt securities issued	Capital and reserves	External liabilities ²⁾	Remaining liabilities	Total
			3	4	5							6	7	8	9	10	11
1997	354.9	147.0	91.9	51.7	3.4	13.4	14.8	106.0	33.4	67.2	736.7
1998 Q4	359.1	152.0	94.2	54.4	3.5	8.5	5.3	97.1	18.6	57.4	698.0
1999 Q1	348.6	549.5	486.6	54.4	8.5	4.9	5.3	138.0	97.9	55.8	1,199.9
Q2	356.1	724.3	672.3	43.1	8.9	4.9	5.3	140.7	171.4	43.0	1,445.6
Q3	359.7	390.5	332.9	50.1	7.6	3.3	5.3	146.3	88.8	50.1	1,044.0
1999 Nov.	363.2	443.0	368.3	64.1	10.6	3.3	4.6	150.3	69.5	52.4	1,086.4
Dec.	393.3	341.5	279.3	53.4	8.8	3.3	4.6	175.1	49.8	46.8	1,014.5
2000 Jan.	366.2	388.9	333.4	47.0	8.4	3.3	4.6	175.7	72.6	44.8	1,056.1
Feb.	363.8	311.7	246.7	56.7	8.4	3.3	4.6	175.1	64.4	46.4	969.3
Mar.	366.2	372.1	319.8	43.1	9.1	1.7	4.6	186.9	75.1	45.4	1,051.9
Apr.	372.7	394.2	340.4	43.4	10.3	1.7	4.6	189.7	75.2	43.8	1,081.8
May	371.8	390.7	345.1	34.1	11.5	1.7	4.6	188.7	82.4	44.7	1,084.5
June	374.3	497.9	432.8	52.6	12.5	1.7	4.6	193.8	92.0	45.0	1,209.4
July	377.7	414.9	354.7	49.7	10.5	1.7	4.6	196.6	84.6	45.6	1,125.7
Aug.	373.2	401.0	336.1	53.8	11.2	1.7	4.6	200.1	66.6	46.3	1,093.5
Sep.	373.5	404.2	346.1	45.6	12.5	0.0	4.6	222.1	75.0	50.6	1,129.8
Oct.	372.6	388.1	323.3	51.1	13.7	0.0	4.6	226.3	69.5	50.6	1,111.7
Nov. ^(p)	372.2	334.6	265.6	54.9	14.0	0.0	3.8	222.5	29.3	50.6	1,013.0

Source: ECB.

- 1) The ECB was established on 1 June 1998. The data shown for the Eurosystem relate to the ECB (as from June 1998) and the national central banks of Member States in the euro area.
- 2) Since the end of November 2000, balances arising from the TARGET system are netted by novation on a daily basis. This implies that the bilateral positions of each NCB vis-à-vis the ECB and other NCBs have been replaced by a single net bilateral position vis-à-vis the ECB. For the TARGET gross end-month positions in 1999 and in 2000 (January to October), see the corresponding footnote in the February 2000 and December 2000 issues of the ECB Monthly Bulletin.

Table 2.3

Consolidated balance sheet of the euro area MFIs, including the Eurosystem ¹⁾

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

1. Assets: levels outstanding

	Assets						External assets ³⁾	Fixed assets	Remaining assets	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					
	1	2	3	4	5	6	7	8	9	10	11
1999 Apr.	6,009.5	830.0	5,179.5	1,421.9	1,219.5	202.4	359.9	2,058.4	255.9	864.0	10,969.7
May	6,042.1	830.2	5,211.9	1,445.0	1,236.2	208.7	372.9	2,009.2	257.1	850.0	10,976.3
June	6,142.3	836.9	5,305.5	1,429.1	1,216.0	213.2	364.1	2,144.6	259.7	880.9	11,220.7
July	6,169.0	828.8	5,340.2	1,420.8	1,204.2	216.6	361.6	2,081.9	264.4	863.2	11,160.9
Aug.	6,160.1	824.8	5,335.3	1,433.3	1,208.5	224.8	360.4	2,055.8	265.2	844.5	11,119.3
Sep.	6,204.8	829.8	5,374.9	1,442.9	1,224.5	218.4	356.4	2,081.2	268.7	828.4	11,182.4
Oct.	6,260.4	839.1	5,421.3	1,452.8	1,236.5	216.2	357.7	2,118.7	271.0	872.6	11,333.1
Nov.	6,338.0	852.1	5,486.0	1,458.5	1,234.4	224.1	372.2	2,174.8	275.3	921.5	11,540.3
Dec.	6,364.3	846.6	5,517.7	1,435.3	1,207.7	227.6	393.3	2,102.8	291.1	929.8	11,516.6
2000 Jan.	6,402.4	839.3	5,563.1	1,447.2	1,218.7	228.5	396.9	2,148.0	292.4	954.4	11,641.3
Feb.	6,431.8	834.7	5,597.1	1,462.1	1,227.5	234.6	411.4	2,185.9	291.9	971.3	11,754.3
Mar.	6,506.2	838.2	5,668.0	1,446.2	1,217.5	228.7	449.3	2,243.4	297.3	992.8	11,935.1
Apr.	6,568.9	840.8	5,728.1	1,432.2	1,195.4	236.8	462.4	2,342.4	298.8	1,033.0	12,137.6
May	6,591.0	834.4	5,756.6	1,428.2	1,184.3	243.9	476.5	2,330.3	298.7	1,033.6	12,158.4
June	6,657.8	834.1	5,823.7	1,407.3	1,163.3	244.0	441.1	2,323.3	280.8	1,037.4	12,147.7
July	6,683.9	832.2	5,851.7	1,389.3	1,137.3	252.0	446.7	2,347.4	282.8	1,084.6	12,234.8
Aug.	6,691.8	820.6	5,871.3	1,381.7	1,125.4	256.3	446.8	2,393.8	285.3	1,123.4	12,322.9
Sep.	6,764.3	813.6	5,950.8	1,384.3	1,125.3	259.1	449.2	2,430.7	286.6	1,071.0	12,386.2
Oct.	6,811.6	815.5	5,996.2	1,380.7	1,113.9	266.8	449.2	2,482.7	289.0	1,139.9	12,553.2
Nov. ^(p)	6,853.7	824.0	6,029.8	1,375.8	1,108.8	267.0	457.3	2,447.6	305.8	1,091.0	12,531.2

2. Liabilities: levels outstanding

	Liabilities													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 ³⁾	Re-remaining liabilities	Excess of inter-MFI liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999 Apr.	319.8	115.8	4,883.7	1,411.1	1,986.9	1,314.0	171.7	387.7	1,453.1	778.0	1,731.0	1,300.1	0.4	10,969.7
May	321.5	120.7	4,904.6	1,442.8	1,974.7	1,314.7	172.4	389.3	1,463.5	782.6	1,720.7	1,257.8	15.5	10,976.3
June	324.0	125.0	4,935.3	1,488.5	1,961.2	1,319.1	166.4	391.7	1,472.1	793.3	1,837.9	1,328.7	12.6	11,220.7
July	332.0	134.9	4,938.7	1,474.7	1,979.1	1,321.3	163.7	383.5	1,476.5	797.9	1,770.4	1,313.2	13.7	11,160.9
Aug.	326.5	137.8	4,916.7	1,445.7	1,988.1	1,320.2	162.6	396.8	1,484.5	796.6	1,776.9	1,282.4	1.0	11,119.3
Sep.	327.4	133.2	4,928.8	1,474.4	1,976.7	1,317.1	160.6	403.6	1,504.9	807.1	1,777.3	1,283.7	16.2	11,182.4
Oct.	329.7	135.0	4,945.1	1,476.9	1,996.7	1,314.0	157.5	410.5	1,518.2	816.3	1,847.6	1,309.1	21.7	11,333.1
Nov.	330.2	146.0	4,984.1	1,511.7	2,005.0	1,308.7	158.6	428.9	1,529.3	821.4	1,909.0	1,373.1	18.3	11,540.3
Dec.	350.0	142.0	5,049.8	1,541.1	2,037.4	1,327.1	144.2	425.2	1,539.8	869.1	1,824.5	1,301.9	14.3	11,516.6
2000 Jan.	333.0	133.6	5,075.1	1,570.1	2,023.0	1,327.1	154.9	430.1	1,538.7	886.4	1,909.6	1,341.3	-6.5	11,641.3
Feb.	331.2	144.4	5,079.6	1,563.0	2,040.3	1,316.9	159.4	449.1	1,553.7	890.3	1,939.1	1,359.4	7.6	11,754.3
Mar.	334.6	130.1	5,103.0	1,571.8	2,047.1	1,307.0	177.1	461.7	1,556.6	906.3	2,066.3	1,392.0	-15.5	11,935.1
Apr.	337.8	131.6	5,141.6	1,607.4	2,055.3	1,299.4	179.5	510.4	1,576.3	916.2	2,143.6	1,413.5	-33.3	12,137.6
May	337.6	113.9	5,138.8	1,592.1	2,074.6	1,291.3	180.8	517.1	1,578.0	917.4	2,148.8	1,426.2	-19.3	12,158.4
June	341.2	146.0	5,128.3	1,603.0	2,072.0	1,285.9	167.3	517.9	1,587.3	918.9	2,048.7	1,442.1	17.5	12,147.7
July	343.1	134.6	5,132.9	1,599.3	2,082.3	1,279.3	172.0	530.4	1,585.7	934.7	2,083.0	1,477.3	13.0	12,234.8
Aug.	338.0	140.4	5,130.2	1,572.4	2,113.8	1,274.6	169.4	544.1	1,606.1	940.8	2,125.6	1,502.0	-4.4	12,322.9
Sep.	339.0	159.0	5,142.9	1,586.5	2,117.4	1,267.0	172.0	536.4	1,613.6	968.1	2,179.2	1,456.3	-8.3	12,386.2
Oct.	336.7	172.5	5,153.5	1,587.8	2,133.7	1,258.3	173.7	541.9	1,639.7	975.1	2,240.6	1,499.2	-6.1	12,553.2
Nov. ^(p)	336.8	168.6	5,171.7	1,606.0	2,139.4	1,252.4	174.0	539.5	1,637.8	982.5	2,214.4	1,495.1	-15.2	12,531.2

Source: ECB.

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

2) 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.

3. Assets: flows ²⁾

	Loans to euro area residents		Other euro area residents	Holdings of securities other than shares issued by euro area residents		Other euro area residents	Holdings of shares/ other equity issued by other euro area residents	External assets ³⁾	Fixed assets	Remaining assets	Total
	General government			General government							
	1	2	3	4	5	6	7	8	9	10	11
1999 May	31.6	0.1	31.5	21.1	14.7	6.4	11.8	-60.3	1.1	-14.0	-8.7
June	101.3	6.6	94.8	-13.1	-17.6	4.5	-9.0	126.2	2.4	30.4	238.3
July	29.5	-8.0	37.5	-13.6	-16.7	3.1	-3.3	-35.3	4.7	-17.7	-35.7
Aug.	-9.9	-4.1	-5.8	17.8	9.8	7.9	-0.1	-43.9	0.8	-18.8	-54.1
Sep.	46.2	5.1	41.1	16.8	24.1	-7.3	-5.4	19.9	3.5	-9.3	71.7
Oct.	54.2	9.1	45.1	19.6	22.3	-2.7	1.2	20.9	2.2	44.3	142.5
Nov.	74.0	12.7	61.2	11.6	4.1	7.5	9.0	20.9	4.3	48.9	168.7
Dec.	29.9	-5.7	35.6	-28.5	-31.7	3.2	15.8	-77.5	16.0	5.2	-39.1
2000 Jan.	33.8	-7.5	41.3	15.1	13.9	1.2	3.3	22.9	1.4	24.6	101.2
Feb.	30.1	-4.6	34.7	15.3	9.1	6.2	12.8	32.8	-0.5	16.8	107.2
Mar.	71.5	4.4	67.1	-13.6	-6.9	-6.8	36.2	30.9	5.4	22.2	152.7
Apr.	55.6	2.3	53.3	-16.3	-21.3	5.0	12.1	12.7	1.5	33.3	98.8
May	21.0	-6.2	27.2	-0.4	-7.9	7.4	12.9	11.0	-0.1	0.5	45.0
June	60.2	-0.5	60.7	-17.0	-18.0	1.0	-35.8	7.4	-17.6	4.2	1.5
July	21.9	-1.4	23.3	-19.2	-26.7	7.5	4.7	-6.0	2.0	46.9	50.2
Aug.	8.3	-8.4	16.7	-5.8	-9.4	3.6	0.4	4.3	2.5	38.6	48.4
Sep.	59.1	-7.2	66.3	1.7	-2.9	4.6	2.5	13.5	1.3	-53.1	24.9
Oct.	40.2	1.6	38.6	-5.1	-13.9	8.8	-1.3	8.2	2.4	68.9	113.3
Nov. ^(p)	49.2	8.8	40.4	-1.6	-1.9	0.2	5.6	-1.1	16.7	-49.1	19.6

4. Liabilities: flows ²⁾

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Other				Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities ³⁾	Re-remaining liabilities	Excess of inter-MFI liabilities	Total
				Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999 May	1.7	4.9	19.6	31.2	-13.0	0.6	0.8	1.3	9.0	5.2	-19.3	-46.3	15.1	-8.7
June	2.4	4.2	29.3	45.2	-14.3	4.5	-6.0	1.4	7.4	13.9	109.4	74.4	-4.2	238.3
July	8.0	10.0	6.6	-12.6	19.7	2.2	-2.7	-7.8	7.3	5.0	-45.6	-19.7	0.5	-35.7
Aug.	-5.5	2.9	-24.2	-29.8	7.8	-1.1	-1.1	13.1	4.7	0.8	-4.9	-28.9	-12.1	-54.1
Sep.	0.9	-4.7	13.0	29.2	-11.1	-3.1	-2.0	6.5	21.8	5.8	4.2	8.9	15.2	71.7
Oct.	2.3	1.8	13.9	1.7	18.6	-3.2	-3.2	6.4	10.9	7.7	54.8	39.4	5.5	142.5
Nov.	0.5	11.0	34.5	33.1	5.7	-5.3	1.1	17.8	6.3	4.1	32.4	65.5	-3.3	168.7
Dec.	19.5	-4.0	65.7	29.4	32.3	18.5	-14.4	-14.7	10.7	31.2	-87.8	-59.6	0.0	-39.1
2000 Jan.	-16.9	-8.4	22.9	28.1	-15.7	-0.2	10.7	0.8	-3.0	18.7	67.8	42.8	-23.5	101.2
Feb.	-1.8	10.8	4.1	-7.2	17.0	-10.2	4.5	19.0	14.8	5.2	25.1	16.1	14.1	107.2
Mar.	3.5	-14.4	20.2	7.5	5.1	-9.9	17.6	12.0	1.3	14.5	106.5	32.0	-23.0	152.7
Apr.	3.3	1.5	33.0	33.4	4.9	-7.7	2.3	2.3	14.6	9.4	35.2	14.7	-15.1	98.8
May	-0.2	-17.7	0.1	-11.9	19.9	-9.2	1.4	9.8	5.6	2.9	26.2	12.1	6.2	45.0
June	3.6	32.1	-7.4	12.2	-0.8	-5.3	-13.5	-3.7	15.7	-4.8	-78.6	18.9	25.5	1.5
July	1.9	-11.3	1.0	-5.1	7.4	-6.0	4.7	12.0	-7.4	15.1	7.7	38.4	-7.1	50.2
Aug.	-5.1	5.8	-7.1	-28.8	29.2	-4.8	-2.7	12.6	12.1	7.0	5.5	33.0	-15.4	48.4
Sep.	1.0	18.6	5.9	12.1	-1.2	-7.6	2.6	-8.0	3.6	20.6	39.1	-50.8	-5.1	24.9
Oct.	-2.2	13.5	5.2	-0.6	13.0	-8.8	1.7	4.4	17.8	6.0	21.1	45.3	2.3	113.3
Nov. ^(p)	0.1	-4.0	22.8	20.0	8.4	-5.9	0.3	-2.1	4.6	8.1	6.4	-5.9	-10.4	19.6

Table 2.4

Monetary aggregates ¹⁾ and counterparts

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

1. Levels outstanding at the end of the period

	M1								M2		Repurchase agreements	Money market fund shares/units and money market paper	Debt securities up to 2 years
	Currency in circulation		Overnight deposits		Total	Index Dec. 98=100 ²⁾	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index Dec. 98=100 ²⁾			
	1	2	3	4										5	6	7	8
1999 Apr.	319.8	1,481.4	1,801.2	101.29	874.3	1,255.1	3,930.7	100.59	171.7	387.7	52.8		
May	321.5	1,510.6	1,832.2	103.01	864.5	1,259.9	3,956.5	101.23	172.4	389.3	57.6		
June	324.0	1,551.2	1,875.1	105.40	841.5	1,265.7	3,982.4	101.86	166.4	391.7	59.2		
July	332.0	1,543.6	1,875.6	105.48	854.3	1,270.4	4,000.3	102.38	163.7	383.5	61.7		
Aug.	326.5	1,513.6	1,840.1	103.44	857.3	1,270.3	3,967.7	101.50	162.6	396.8	63.0		
Sep.	327.4	1,537.5	1,864.9	104.87	843.8	1,267.3	3,976.1	101.74	160.6	403.6	75.5		
Oct.	329.7	1,542.0	1,871.7	105.20	858.6	1,265.5	3,995.7	102.15	157.5	410.5	74.0		
Nov.	330.2	1,575.9	1,906.1	107.04	857.9	1,260.4	4,024.4	102.79	158.6	428.9	75.6		
Dec.	350.0	1,609.4	1,959.3	110.01	878.5	1,282.9	4,120.8	105.24	144.2	425.2	88.4		
2000 Jan.	333.0	1,637.7	1,970.7	110.60	862.0	1,283.8	4,116.5	105.09	154.9	430.1	86.6		
Feb.	331.2	1,629.2	1,960.4	110.01	876.8	1,272.5	4,109.6	104.95	159.4	449.1	90.1		
Mar.	334.6	1,637.5	1,972.2	110.60	885.0	1,262.1	4,119.3	105.13	177.1	461.7	89.9		
Apr.	337.8	1,675.6	2,013.4	112.80	893.0	1,254.6	4,161.1	106.08	179.5	510.4	89.0		
May	337.6	1,657.0	1,994.5	111.93	910.7	1,246.1	4,151.4	105.92	180.8	517.1	86.7		
June	341.2	1,668.5	2,009.7	112.85	909.4	1,238.8	4,157.9	106.16	167.3	517.9	86.2		
July	343.1	1,666.5	2,009.6	112.77	919.4	1,231.1	4,160.1	106.15	172.0	530.4	75.9		
Aug.	338.0	1,637.8	1,975.8	110.76	948.5	1,225.0	4,149.3	105.78	169.4	544.1	80.3		
Sep.	339.0	1,652.1	1,991.1	111.51	951.4	1,214.7	4,157.2	105.90	172.0	536.4	81.6		
Oct.	336.7	1,652.8	1,989.6	111.31	966.8	1,205.6	4,161.9	105.91	173.7	541.9	89.4		
Nov. ^(p)	336.8	1,671.1	2,008.0	112.45	979.2	1,196.8	4,184.0	106.57	174.0	539.5	98.5		

2. Flows ⁴⁾

	M1								M2		Repurchase agreements	Money market fund shares/units and money market paper	Debt securities up to 2 years
	Currency in circulation		Overnight deposits		Total	Annual percentage change ⁴⁾	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual percentage change ⁴⁾			
	1	2	3	4										5	6	7	8
1999 May	1.7	28.8	30.5	12.1	-10.3	4.7	24.9	6.5	0.8	1.3	4.5		
June	2.4	40.0	42.5	11.5	-23.6	5.8	24.7	6.3	-6.0	1.4	1.4		
July	8.0	-6.5	1.6	14.1	14.1	4.8	20.5	7.7	-2.7	-7.8	2.9		
Aug.	-5.5	-30.8	-36.3	12.8	2.0	-0.1	-34.3	7.0	-1.1	13.1	1.0		
Sep.	0.9	24.5	25.4	12.8	-13.3	-3.0	9.1	6.9	-2.0	6.5	0.8		
Oct.	2.3	3.6	5.9	13.0	12.2	-1.9	16.1	7.0	-3.2	6.4	-1.9		
Nov.	0.5	32.2	32.8	11.8	-2.5	-5.2	25.1	6.4	1.1	17.8	0.7		
Dec.	19.5	33.4	52.9	10.0	20.6	22.6	96.1	5.2	-14.4	-14.7	13.1		
2000 Jan.	-16.9	27.4	10.4	9.3	-17.4	0.8	-6.2	4.1	10.7	0.8	-2.1		
Feb.	-1.8	-8.7	-10.5	10.7	16.3	-11.3	-5.5	5.2	4.5	19.0	3.5		
Mar.	3.5	7.0	10.5	10.0	7.1	-10.5	7.0	5.0	17.6	12.0	-1.0		
Apr.	3.3	36.0	39.3	11.4	5.7	-7.6	37.4	5.5	2.3	2.3	-0.1		
May	-0.2	-15.3	-15.5	8.7	18.9	-9.6	-6.2	4.6	1.4	9.8	-1.7		
June	3.6	12.8	16.4	7.1	0.3	-7.3	9.4	4.2	-13.5	-3.7	1.9		
July	1.9	-3.3	-1.4	6.9	8.2	-7.4	-0.6	3.7	4.7	12.0	-10.8		
Aug.	-5.1	-30.6	-35.7	7.1	27.5	-6.2	-14.4	4.2	-2.7	12.6	3.3		
Sep.	1.0	12.3	13.3	6.3	1.8	-10.4	4.7	4.1	2.6	-8.0	0.9		
Oct.	-2.2	-1.2	-3.5	5.8	13.1	-9.2	0.4	3.7	1.7	4.4	7.2		
Nov. ^(p)	0.1	20.1	20.2	5.0	14.4	-8.7	25.9	3.7	0.3	-2.1	10.1		

Source: ECB.

- 1) Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.
- 2) 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 4. The percentage change in the index between any two dates corresponds to the change in the aggregate excluding such reclassifications, etc.

M3			Main counterparts of M3										
Total	Index, Dec. 98=100 ²⁾		Longer-term MFI liabilities				Credit ³⁾				Net external assets		
			Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Index Dec. 98=100 ²⁾			
12	13	14	15	16	17	18	19	20	21	22	23		
4,542.9	101.67		1,113.6	118.7	1,400.3	778.0	2,049.5	5,741.9	5,179.5	102.75	327.4	1999 Apr.	
4,575.8	102.37		1,111.2	115.1	1,405.9	782.6	2,066.4	5,793.5	5,211.9	103.37	288.6	May	
4,599.7	102.85		1,120.7	114.2	1,412.9	793.3	2,052.8	5,882.7	5,305.5	105.25	306.6	June	
4,609.1	103.14		1,125.4	111.9	1,414.9	797.9	2,032.9	5,918.4	5,340.2	105.99	311.5	July	
4,590.1	102.66		1,131.5	111.0	1,421.5	796.6	2,033.3	5,920.5	5,335.3	105.88	278.9	Aug.	
4,615.8	102.98		1,133.6	111.2	1,429.5	807.1	2,054.4	5,949.7	5,374.9	106.70	303.9	Sep.	
4,637.7	103.37		1,138.6	110.6	1,444.2	816.3	2,075.6	5,995.2	5,421.3	107.59	271.1	Oct.	
4,687.5	104.37		1,147.6	110.6	1,453.7	821.4	2,086.4	6,082.3	5,486.0	108.81	265.8	Nov.	
4,778.5	106.15		1,159.3	112.8	1,451.5	869.1	2,054.3	6,138.6	5,517.7	109.51	278.3	Dec.	
4,788.1	106.22		1,161.4	111.8	1,452.2	886.4	2,058.0	6,188.4	5,563.1	110.33	238.4	2000 Jan.	
4,808.3	106.70		1,164.0	112.8	1,463.6	890.3	2,062.2	6,243.1	5,597.1	111.02	246.8	Feb.	
4,848.0	107.49		1,162.5	113.6	1,466.7	906.3	2,055.7	6,346.0	5,668.0	112.35	177.1	Mar.	
4,939.9	108.42		1,162.7	113.2	1,487.4	916.2	2,036.2	6,427.2	5,728.1	113.41	198.8	Apr.	
4,935.9	108.49		1,164.3	114.4	1,491.4	917.4	2,018.7	6,477.0	5,756.6	113.95	181.6	May	
4,929.2	108.36		1,163.1	115.9	1,501.1	918.9	1,997.4	6,508.8	5,823.7	115.15	274.6	June	
4,938.5	108.48		1,163.4	117.0	1,509.8	934.7	1,969.5	6,550.5	5,851.7	115.61	264.4	July	
4,943.1	108.45		1,165.7	118.6	1,525.8	940.8	1,946.0	6,574.3	5,871.3	115.94	268.2	Aug.	
4,947.3	108.45		1,166.4	120.8	1,532.0	968.1	1,938.8	6,659.0	5,950.8	117.25	251.5	Sep.	
4,966.9	108.75		1,167.3	121.6	1,550.3	975.1	1,929.4	6,712.2	5,996.2	118.01	242.1	Oct.	
4,996.0	109.50		1,160.4	124.2	1,539.3	982.5	1,932.8	6,754.1	6,029.8	118.80	233.2	Nov. ^(p)	

M3			Main counterparts of M3										
Total	Annual percentage change ⁴⁾	3-month moving average (centred)	Longer-term MFI liabilities				Credit ³⁾				Net external assets		
			Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Annual percentage change ⁴⁾			
12	13	14	15	16	17	18	19	20	21	22	23		
31.5	5.5	5.4	-2.7	-3.6	4.5	5.2	14.8	49.7	31.5	9.9	-41.0	1999 May	
21.5	5.5	5.6	9.3	-1.0	6.0	13.9	-11.0	90.3	94.8	10.4	16.8	June	
12.8	5.9	5.7	5.3	-2.3	4.4	5.0	-24.7	37.3	37.5	10.2	10.2	July	
-21.3	5.7	5.9	5.8	-0.9	3.7	0.8	5.8	2.0	-5.8	10.0	-39.0	Aug.	
14.4	6.0	5.8	2.2	0.2	21.0	5.8	29.2	28.5	41.1	9.9	15.6	Sep.	
17.4	5.7	5.9	6.2	-0.6	12.8	7.7	31.4	43.6	45.1	10.0	-33.9	Oct.	
44.7	6.1	6.0	8.2	0.1	5.5	4.1	16.8	77.8	61.2	10.2	-11.4	Nov.	
80.1	6.2	5.8	11.7	2.1	-2.5	31.2	-37.4	54.6	35.6	9.5	10.4	Dec.	
3.2	5.2	5.8	1.7	-0.9	-0.9	18.7	6.4	45.8	41.3	8.7	-44.9	2000 Jan.	
21.5	6.1	6.0	0.8	1.0	11.2	5.2	4.4	53.7	34.7	9.4	7.7	Feb.	
35.7	6.5	6.4	-2.0	0.8	2.3	14.5	-2.4	96.6	67.1	9.8	-75.6	Mar.	
41.8	6.6	6.4	-0.8	-0.4	14.7	9.4	-19.0	70.4	53.3	10.4	-22.5	Apr.	
3.2	6.0	6.0	1.0	1.2	7.4	2.9	-14.1	47.6	27.2	10.2	-15.2	May	
-5.8	5.4	5.5	-1.1	1.5	13.8	-4.8	-18.5	26.0	60.7	9.4	86.0	June	
5.3	5.2	5.4	-0.9	1.4	3.4	15.1	-28.1	35.5	23.3	9.1	-13.7	July	
-1.3	5.6	5.4	1.6	1.7	8.9	7.0	-17.8	20.8	16.7	9.5	-1.2	Aug.	
0.2	5.3	5.4	-3.0	2.2	2.7	20.6	-10.1	73.3	66.3	9.9	-25.5	Sep.	
13.6	5.2	5.1	-0.1	0.8	10.6	6.0	-12.3	46.1	38.6	9.7	-13.0	Oct.	
34.3	4.9	-	-6.0	2.6	-5.5	8.1	6.9	46.2	40.4	9.2	-7.5	Nov. ^(p)	

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

4) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions. For the calculation of growth rates, see the technical notes.

Table 2.4 (cont'd)
Monetary aggregates ¹⁾ and counterparts
(EUR billions and percentage changes, unless otherwise indicated)
3. Seasonally adjusted levels

	M3										Loans to other euro area residents (excluding government)	
	M2				Marketable instruments ⁴⁾				Total	Index ²⁾	Total	Index ²⁾
	M1		Other short-term deposits ³⁾		Total	Index ²⁾	Total	Index ²⁾	Total	Index ²⁾		
	Total	Index ²⁾	Total	Index ²⁾								
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Apr.	1,810.0	101.79	2,122.3	99.67	3,932.2	100.63	602.1	107.38	4,534.3	101.48	5,187.3	102.90
May	1,829.3	102.85	2,124.0	99.72	3,953.3	101.14	605.9	107.97	4,559.2	102.00	5,227.3	103.68
June	1,846.1	103.76	2,118.1	99.42	3,964.2	101.40	614.0	109.19	4,578.2	102.37	5,284.7	104.84
July	1,871.3	105.24	2,130.5	100.07	4,001.8	102.42	608.6	108.39	4,610.4	103.17	5,318.9	105.57
Aug.	1,873.0	105.30	2,131.4	100.06	4,004.4	102.44	615.7	109.55	4,620.1	103.33	5,355.0	106.27
Sep.	1,883.8	105.93	2,131.1	100.06	4,014.8	102.73	637.9	111.37	4,652.7	103.81	5,389.1	106.98
Oct.	1,893.7	106.44	2,139.3	100.32	4,033.0	103.10	646.5	112.72	4,679.5	104.30	5,434.7	107.86
Nov.	1,906.2	107.04	2,141.5	100.33	4,047.7	103.38	662.2	115.19	4,709.9	104.87	5,489.6	108.88
Dec.	1,907.4	107.10	2,140.3	100.27	4,047.7	103.38	685.0	117.22	4,732.7	105.13	5,481.2	108.79
2000 Jan.	1,949.3	109.39	2,123.9	99.46	4,073.1	103.98	690.5	117.38	4,763.6	105.68	5,556.5	110.20
Feb.	1,974.4	110.80	2,133.0	99.96	4,107.5	104.89	696.3	118.34	4,803.7	106.60	5,607.5	111.23
Mar.	1,989.0	111.54	2,138.8	100.17	4,127.8	105.34	721.7	122.44	4,849.5	107.53	5,669.2	112.37
Apr.	2,005.6	112.36	2,144.0	100.30	4,149.6	105.79	765.5	122.26	4,915.1	107.88	5,736.9	113.58
May	1,999.3	112.20	2,152.6	100.70	4,151.9	105.93	767.5	123.16	4,919.4	108.13	5,774.5	114.30
June	1,984.3	111.42	2,156.4	100.96	4,140.7	105.72	766.7	122.70	4,907.3	107.88	5,799.9	114.68
July	1,998.3	112.14	2,162.9	101.20	4,161.2	106.17	779.0	124.49	4,940.2	108.52	5,825.7	115.10
Aug.	2,016.4	113.04	2,175.3	101.70	4,191.7	106.86	785.0	125.10	4,976.8	109.19	5,893.5	116.38
Sep.	2,011.8	112.67	2,182.5	101.98	4,194.4	106.84	787.6	125.38	4,982.0	109.21	5,979.3	117.57
Oct.	2,014.6	112.72	2,190.8	102.25	4,205.4	107.01	810.7	128.79	5,016.1	109.83	6,011.0	118.30
Nov. ⁵⁾	2,015.0	112.84	2,198.6	102.71	4,213.7	107.32	810.4	128.95	5,024.1	110.12	6,032.3	118.86

4. Seasonally adjusted flows ⁵⁾

	M3										Loans to other euro area residents (excluding government)	
	M2				Marketable instruments ⁴⁾				Total	Change on previous month (%)	Total	Change on previous month (%)
	M1		Other short-term deposits ³⁾		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	11	12	
1999 Apr.	10.8	0.6	3.7	0.2	14.5	0.4	11.0	1.9	25.5	0.6	27.5	0.5
May	18.9	1.0	1.1	0.1	20.0	0.5	3.3	0.6	23.3	0.5	39.1	0.8
June	16.3	0.9	-6.5	-0.3	9.8	0.2	6.8	1.1	16.7	0.4	58.6	1.1
July	26.3	1.4	13.8	0.7	40.1	1.0	-4.5	-0.7	35.6	0.8	36.9	0.7
Aug.	1.0	0.1	-0.1	0.0	0.9	0.0	6.5	1.1	7.4	0.2	35.2	0.7
Sep.	11.3	0.6	-0.1	0.0	11.1	0.3	10.2	1.7	21.3	0.5	35.6	0.7
Oct.	9.0	0.5	5.6	0.3	14.6	0.4	7.7	1.2	22.3	0.5	44.2	0.8
Nov.	10.8	0.6	0.2	0.0	11.0	0.3	14.2	2.2	25.2	0.5	51.5	0.9
Dec.	1.0	0.1	-1.1	-0.1	-0.2	0.0	11.7	1.8	11.5	0.2	-4.4	-0.1
2000 Jan.	40.9	2.1	-17.4	-0.8	23.5	0.6	0.9	0.1	24.4	0.5	71.1	1.3
Feb.	25.1	1.3	10.6	0.5	35.7	0.9	5.7	0.8	41.4	0.9	51.6	0.9
Mar.	13.2	0.7	4.5	0.2	17.7	0.4	24.1	3.5	41.8	0.9	58.0	1.0
Apr.	14.6	0.7	2.8	0.1	17.4	0.4	-1.1	-0.1	16.3	0.3	60.9	1.1
May	-2.9	-0.1	8.7	0.4	5.8	0.1	5.6	0.7	11.4	0.2	36.2	0.6
June	-13.8	-0.7	5.5	0.3	-8.3	-0.2	-2.8	-0.4	-11.1	-0.2	19.2	0.3
July	12.7	0.6	5.0	0.2	17.7	0.4	11.2	1.5	28.9	0.6	21.1	0.4
Aug.	16.1	0.8	10.7	0.5	26.8	0.6	3.8	0.5	30.6	0.6	65.0	1.1
Sep.	-6.6	-0.3	6.0	0.3	-0.6	0.0	1.8	0.2	1.2	0.0	60.5	1.0
Oct.	0.8	0.0	5.9	0.3	6.7	0.2	21.4	2.7	28.1	0.6	36.8	0.6
Nov. ⁵⁾	2.3	0.1	9.8	0.4	12.1	0.3	1.0	0.1	13.1	0.3	28.2	0.5

Source: ECB.

1) See page 16*, footnote 1.

2) See page 16*, footnote 2. For the calculation of growth rates, see the technical notes.

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 17*, footnote 4.

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

	Non-financial corporations ^{2) 3)}				Households ^{2) 3)}	Consumer credit ⁴⁾			Lending for house purchase ⁴⁾			Other lending			Non-profit institutions serving households ²⁾			
	1	Up to 1 year	Over 1 and up to 5 years	Over 5 years		6	Up to 1 year	Over 1 and up to 5 years	Over 5 years	9	Up to 1 year	Over 1 and up to 5 years	Over 5 years	12		Up to 1 year	Over 1 and up to 5 years	Over 5 years ³⁾
		2	3	4			7	8	10		11	13	14			15		
1998 Q4	2,286.8	813.3	316.2	1,157.3	2,479.6	84.6	128.4	199.8	28.2	42.0	1,419.6	114.3	82.0	380.7	36.9			
1999 Q1	2,259.9	817.1	338.4	1,104.3	2,527.8	86.0	149.0	188.4	15.4	66.9	1,464.0	135.0	98.0	325.1	35.8			
Q2	2,330.0	842.4	351.3	1,136.4	2,594.4	84.1	154.4	194.0	18.7	63.7	1,513.7	138.3	98.4	329.1	35.7			
Q3	2,346.2	829.9	362.3	1,154.1	2,653.3	85.6	157.2	196.5	19.5	64.3	1,561.7	135.7	96.1	336.8	36.2			
Q4	2,418.5	856.2	372.2	1,190.1	2,718.1	88.1	156.3	195.5	19.9	60.4	1,619.2	141.4	98.4	338.9	37.4			
2000 Q1	2,495.7	899.9	392.2	1,203.6	2,761.3	88.4	160.2	199.6	20.2	58.8	1,650.2	140.8	100.3	342.8	39.1			
Q2	2,552.2	916.2	405.3	1,230.6	2,815.6	93.3	161.5	201.6	21.2	60.6	1,689.7	144.6	102.0	340.9	37.6			
Q3 ³⁾	2,628.2	943.0	423.7	1,261.5	2,870.9	96.8	165.0	207.3	22.6	63.1	1,726.5	142.9	101.6	345.1	37.6			

2. Loans to non-monetary financial corporations

	Non-monetary financial intermediaries except insurance corporations and pension funds ²⁾				Insurance corporations and pension funds ²⁾			
	16	Up to 1 year	Over 1 and up to 5 years	Over 5 years	20	Up to 1 year	Over 1 and up to 5 years	Over 5 years
		17	18	19		21	22	23
1998 Q4	264.0	158.0	52.9	53.0	27.8	19.0	2.5	6.3
1999 Q1	298.7	183.4	54.8	60.5	35.9	27.0	3.0	5.9
Q2	304.9	192.2	51.7	61.0	40.2	28.7	2.7	8.8
Q3	297.4	181.1	53.3	62.9	41.7	32.9	2.8	6.0
Q4	313.4	190.5	54.6	68.3	29.2	20.6	2.7	5.9
2000 Q1	333.8	206.6	55.8	71.4	37.0	25.6	4.0	7.4
Q2	378.8	244.7	60.3	73.8	38.6	29.0	3.8	5.8
Q3 ³⁾	380.6	244.7	64.3	71.6	33.0	25.5	2.8	4.7

3. Loans to government

	General government ²⁾										
	24	Central government ⁵⁾	Other general government								Social security funds
			State government			Local government					
			26	Up to 1 year	Over 1 and up to 5 years	Over 5 years	30	Up to 1 year	Over 1 and up to 5 years	Over 5 years	
	25	27	28	29		31	32	33	34		
1998 Q4	841.7	201.6	291.2	11.4	13.5	266.3	334.9	18.9	10.9	305.2	14.0
1999 Q1	837.2	220.7	276.7	12.1	20.9	243.7	327.4	19.4	12.5	295.5	12.4
Q2	836.9	212.1	279.2	11.5	20.5	247.1	328.2	19.9	10.9	297.4	17.3
Q3	829.8	206.2	278.4	10.1	21.3	247.0	328.4	19.8	10.4	298.2	16.8
Q4	847.2	199.8	292.9	15.0	25.1	252.7	338.9	20.5	11.6	306.8	15.6
2000 Q1	838.7	193.9	291.9	13.2	27.4	251.3	337.0	21.2	10.8	305.1	15.9
Q2	834.6	187.1	290.0	9.9	28.1	252.1	337.8	21.5	11.4	304.9	19.7
Q3 ³⁾	813.6	172.8	288.4	8.9	27.2	252.4	334.9	21.1	11.1	302.8	17.4

Source: ECB.

- 1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.
- 2) Corresponding ESA 95 sector codes: non-financial corporations, S11; households, S14; non-profit institutions serving households, S15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S123 (including financial auxiliaries, S124); insurance corporations and pension funds, S125; general government, S13.
- 3) As a result of the implementation of a new reporting scheme in January 1999, data prior to the first quarter of 1999 are not directly comparable with those referring to later periods.
- 4) The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area.
- 5) A maturity breakdown is not available for loans to central government.

Table 2.6
Outstanding deposits held with MFIs, by counterpart and instrument ¹⁾
(EUR billions (not seasonally adjusted; end of period))
1. Deposits held by non-financial sectors other than government

	Non-financial corporations ^{2) 3)}					Households ^{2) 3)}				
	1	Overnight 2	With agreed maturity 3	Redeemable at notice 4	Repos 5	6	Overnight 7	With agreed maturity 8	Redeemable at notice 9	Repos 10
1998 Q4	743.2	435.6	252.4	25.6	29.5	3,313.1	794.1	1,116.4	1,355.0	47.7
1999 Q1	726.1	393.2	285.9	23.5	23.5	3,222.6	797.3	1,110.7	1,275.1	39.5
Q2	738.9	425.7	263.6	25.8	23.8	3,236.2	840.2	1,082.5	1,280.8	32.7
Q3	743.3	427.3	268.4	25.4	22.1	3,232.1	843.5	1,075.9	1,278.7	33.9
Q4	768.2	443.6	279.3	23.8	21.5	3,299.3	870.1	1,098.7	1,291.1	39.4
2000 Q1	783.7	438.2	290.1	24.3	31.1	3,289.1	884.8	1,092.1	1,269.8	42.4
Q2	813.6	457.0	305.7	24.0	26.9	3,278.6	886.4	1,096.2	1,249.4	46.6
Q3 ^(p)	845.2	463.9	330.7	24.3	26.3	3,272.0	876.9	1,113.0	1,230.4	51.7

2. Deposits held by non-monetary financial corporations

	Non-monetary financial intermediaries except insurance corporations and pension funds ^{2) 3)}					Insurance corporations and pension funds ²⁾				
	1	Overnight 2	With agreed maturity 3	Redeemable at notice 4	Repos 5	6	Overnight 7	With agreed maturity 8	Redeemable at notice 9	Repos 10
1998 Q4	259.2	79.1	83.4	9.3	87.3	410.9	28.6	367.5	4.6	10.2
1999 Q1	375.5	127.4	141.9	4.7	101.5	424.9	32.0	379.1	3.0	10.8
Q2	401.5	134.4	165.0	4.7	97.4	429.6	36.2	379.5	3.3	10.7
Q3	390.1	122.0	172.4	5.2	90.4	435.2	31.8	388.6	3.3	11.5
Q4	397.8	142.6	181.2	4.7	69.3	446.3	32.0	399.2	3.3	11.9
2000 Q1	433.7	161.6	179.4	5.6	87.2	457.3	35.1	405.9	3.2	13.1
Q2	423.8	163.8	177.9	5.3	76.8	459.1	34.3	409.7	3.5	11.6
Q3 ^(p)	417.3	152.0	184.1	5.1	76.2	462.4	34.3	411.9	3.7	12.5

3. Deposits held by government

	General government ²⁾																
	1	Other general government															
		Central government 2	State government					Local government					Social security funds				
			Overnight 3	With agreed maturity 4	Redeem- able at notice 5	Repos 6	Overnight 8	With agreed maturity 9	Redeem- able at notice 10	Repos 11	Overnight 13	With agreed maturity 14	Redeem- able at notice 15	Repos 16	17		
1998 Q4	299.4	149.7	53.7	10.1	43.5	0.1	0.1	52.8	25.7	22.3	3.5	1.2	43.1	12.9	28.3	1.1	0.8
1999 Q1	253.8	133.4	25.6	7.4	17.9	0.1	0.2	52.9	24.1	23.9	3.2	1.7	41.9	14.3	25.6	1.0	1.0
Q2	254.5	125.0	27.3	8.1	18.9	0.2	0.1	54.4	26.1	24.1	3.4	0.7	47.9	18.2	27.6	1.1	1.0
Q3	262.0	133.2	27.8	8.7	18.7	0.1	0.2	54.4	24.5	25.4	3.3	1.1	46.6	17.1	27.2	0.9	1.5
Q4	280.7	142.0	31.6	10.2	21.1	0.1	0.2	59.0	27.1	27.2	3.4	1.2	48.1	16.0	30.6	0.7	0.7
2000 Q1	269.7	130.1	28.7	8.3	20.2	0.1	0.1	58.3	25.7	27.5	3.3	1.8	52.6	18.7	31.9	0.7	1.4
Q2	299.7	146.0	32.2	10.5	21.5	0.1	0.1	62.4	28.6	28.4	3.1	2.3	59.2	23.0	32.7	0.5	3.0
Q3 ^(p)	310.6	159.0	30.9	10.0	20.7	0.1	0.1	63.0	27.1	30.4	2.9	2.6	57.7	21.9	32.7	0.5	2.6

Source: ECB.

- 1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.
- 2) Corresponding ESA 95 sector codes: non-financial corporations, S11; households, S14; non-profit institutions serving households, S15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S123 (including financial auxiliaries, S124); insurance corporations and pension funds, S125; general government, S13.
- 3) As a result of the implementation of a new reporting scheme in January 1999, data prior to the first quarter of 1999 are not directly comparable with those referring to later periods.

Table 2.7

Main outstanding MFI claims on and liabilities to non-residents of the euro area ¹⁾

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

1. Eurosystem ²⁾

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents			
	Banks ³⁾⁴⁾		Non-banks		Banks ³⁾		Non-banks		Banks ³⁾	Other	12	Banks ³⁾		Non-banks	
	1	2	General government ³⁾	Other	5	6	General government ³⁾	Other				13	14	15	
									3	4	7				8	10	11
1998 Q4	84.4	70.0	13.1	1.2	120.8	2.3	116.2	2.3	0.6	0.1	0.5	12.8	12.1	0.4	0.4
1999 Q1	108.4	97.1	8.4	2.9	185.4	3.9	178.7	2.9	0.4	0.1	0.3	91.9	89.6	0.4	1.8
Q2	191.4	174.7	13.1	3.7	175.2	4.5	166.9	3.8	0.4	0.1	0.3	165.2	162.8	0.2	2.2
Q3	108.1	99.0	6.8	2.3	176.2	4.0	168.1	4.1	0.4	0.1	0.3	82.6	80.6	0.4	1.5
Q4	59.6	45.6	10.5	3.5	193.9	5.7	184.4	3.8	0.6	0.1	0.5	43.2	39.8	0.3	3.2
2000 Q1	92.9	81.8	8.9	2.2	199.7	4.8	189.2	5.7	0.5	0.1	0.4	68.3	66.7	0.2	1.4
Q2	101.0	87.9	10.3	2.7	205.5	4.5	197.0	4.0	0.4	0.1	0.3	85.3	82.8	0.5	2.0
Q3 ⁴⁾	83.7	72.7	8.2	2.7	221.9	5.3	211.2	5.5	1.0	0.1	0.9	67.9	64.6	1.0	2.4

2. MFIs excluding the Eurosystem

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents			
	Banks ³⁾⁴⁾		Non-banks		Banks ³⁾		Non-banks		Banks ³⁾	Other	12	Banks ³⁾		Non-banks	
	1	2	General government ³⁾	Other	5	6	General government ³⁾	Other				13	14	15	
									3	4	7				8	10	11
1998 Q4	1,253.0	890.4	70.1	292.5	272.4	64.5	89.4	118.5	55.2	21.9	33.3	1,501.9	1,139.6	39.2	323.0
1999 Q1	1,267.7	895.7	63.9	308.1	299.8	72.5	104.1	123.2	58.2	22.1	36.1	1,618.0	1,204.4	70.7	342.9
Q2	1,248.3	847.2	67.0	334.1	320.6	78.7	103.5	138.4	75.2	32.5	42.7	1,666.6	1,214.9	62.7	388.9
Q3	1,254.4	850.4	67.1	336.9	319.5	88.0	88.8	142.7	77.7	39.0	38.7	1,688.5	1,231.6	62.2	394.8
Q4	1,280.3	862.9	68.2	349.2	338.7	93.8	88.4	156.4	81.5	37.4	44.1	1,774.7	1,279.6	72.0	423.1
2000 Q1	1,333.3	889.2	70.4	373.6	369.7	108.3	98.6	162.9	99.5	46.0	53.6	1,991.2	1,442.4	71.2	477.7
Q2	1,346.2	913.3	70.5	362.4	414.3	133.8	109.1	171.4	105.8	49.6	56.2	1,956.7	1,404.6	74.3	477.8
Q3 ⁴⁾	1,406.0	935.5	71.7	398.8	441.1	146.4	109.1	185.6	122.5	55.4	67.1	2,104.2	1,490.1	80.3	533.7

3. MFIs including the Eurosystem

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents			
	Banks ³⁾⁴⁾		Non-banks		Banks ³⁾		Non-banks		Banks ³⁾	Other	12	Banks ³⁾		Non-banks	
	1	2	General government ³⁾	Other	5	6	General government ³⁾	Other				13	14	15	
									3	4	7				8	10	11
1998 Q4	1,337.4	960.4	83.3	293.7	393.2	66.8	205.6	120.8	55.8	22.0	33.8	1,514.7	1,151.7	39.6	323.4
1999 Q1	1,376.0	992.7	72.3	311.0	485.2	76.4	282.8	126.0	58.6	22.2	36.4	1,709.9	1,294.0	71.2	344.7
Q2	1,439.7	1,021.9	80.1	337.8	495.8	83.2	270.4	142.2	75.6	32.6	43.0	1,831.8	1,377.7	62.9	391.2
Q3	1,362.5	949.4	73.9	339.2	495.7	92.0	256.9	146.8	78.1	39.1	39.0	1,771.1	1,312.2	62.6	396.3
Q4	1,339.9	908.5	78.6	352.8	532.6	99.5	272.8	160.3	82.0	37.5	44.6	1,818.0	1,319.4	72.3	426.3
2000 Q1	1,426.2	971.0	79.2	375.9	569.4	113.1	287.8	168.6	100.0	46.1	54.0	2,059.5	1,509.0	71.3	479.1
Q2	1,447.1	1,001.2	80.8	365.2	619.9	138.4	306.1	175.4	106.2	49.7	56.6	2,042.0	1,487.5	74.8	479.8
Q3 ⁴⁾	1,489.7	1,008.2	79.9	401.5	663.0	151.7	320.2	191.1	123.5	55.6	68.0	2,172.1	1,554.7	81.3	536.1

Source: ECB.

1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.

2) New reporting rules as from January 1999 caused significant breaks in the first quarter of 1999.

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

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

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

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1998 Q4	3,405.4	3,024.3	41.3	339.8	237.7	27.3	50.3	24.5	5,025.5	4,878.3	19.9	127.2	91.2	13.2	13.2	9.7
1999 Q1	3,877.1	3,453.3	49.1	374.7	263.6	27.1	54.5	29.5	5,002.6	4,850.6	23.8	128.1	89.2	14.2	14.5	10.2
Q2	4,109.6	3,710.4	44.7	354.5	252.9	26.8	51.5	23.3	5,059.8	4,898.9	25.7	135.1	97.1	15.0	12.5	10.6
Q3	3,836.7	3,430.1	46.0	360.6	253.4	30.0	56.1	21.0	5,061.5	4,901.1	25.8	134.6	95.9	16.3	11.9	10.4
Q4	3,858.8	3,450.1	42.4	366.3	258.1	33.9	54.1	20.2	5,191.3	5,027.2	24.0	140.1	100.8	17.3	11.5	10.5
2000 Q1	3,924.2	3,488.8	56.3	379.0	261.9	35.0	60.2	21.9	5,232.5	5,058.8	30.1	143.7	103.9	17.2	11.9	10.7
Q2	4,047.9	3,613.2	53.2	381.6	263.9	37.8	60.2	19.6	5,274.1	5,094.9	27.5	151.7	111.8	17.0	13.2	9.8
Q3 ³⁾	3,930.1	3,471.7	56.8	401.6	280.8	39.6	60.8	20.5	5,300.4	5,111.7	28.8	159.9	120.2	17.0	12.6	10.1

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

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1998 Q4	1,151.7	455.3	123.5	572.9	438.1	56.1	52.6	26.1	366.4	154.5	33.2	178.6	131.3	22.8	12.1	12.5
1999 Q1	1,294.0	556.5	128.4	609.1	470.4	52.9	53.1	32.7	415.8	178.1	37.5	200.3	149.2	24.2	12.9	13.9
Q2	1,377.7	614.8	134.2	628.7	500.8	39.2	52.3	36.5	454.1	193.5	40.8	219.8	168.8	24.5	11.7	14.8
Q3	1,312.2	553.8	131.5	626.9	495.6	43.9	53.5	33.9	458.8	199.8	43.4	215.7	162.0	27.5	11.4	14.8
Q4	1,319.4	539.0	122.1	658.3	526.0	48.8	50.7	32.7	498.5	214.0	46.7	237.8	183.4	27.3	13.0	14.2
2000 Q1	1,509.0	598.5	157.2	753.3	589.9	64.1	64.5	34.9	550.5	237.0	54.3	259.2	198.5	32.8	12.5	15.4
Q2	1,487.5	587.9	143.0	756.6	592.1	66.2	61.1	37.2	554.5	234.4	52.0	268.1	204.5	32.3	15.8	15.5
Q3 ³⁾	1,554.7	606.0	139.1	809.6	652.1	61.9	63.5	32.2	617.4	253.1	64.9	299.3	248.4	23.5	15.0	12.4

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

	Debt securities								Money market paper							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1998 Q4	2,121.3	1,903.5	27.7	190.1	106.6	35.4	33.2	15.0	169.4	155.4	0.6	13.4	11.3	0.9	1.1	0.1
1999 Q1	2,199.3	1,967.4	26.7	205.3	119.5	35.4	35.2	15.1	185.4	169.8	0.8	14.9	12.6	0.8	1.3	0.2
Q2	2,274.3	2,026.7	32.2	215.4	125.8	35.4	37.1	17.0	188.1	170.3	1.4	16.5	13.8	1.1	1.5	0.2
Q3	2,334.6	2,079.9	33.9	220.9	127.7	38.5	37.2	17.4	207.4	187.8	1.2	18.4	13.3	2.7	2.2	0.2
Q4	2,369.3	2,108.9	35.4	225.0	128.0	42.4	36.9	17.6	245.4	220.5	1.5	23.4	17.2	3.6	2.3	0.4
2000 Q1	2,427.9	2,147.0	42.6	238.2	133.1	52.9	33.6	18.6	250.5	226.0	1.7	22.8	14.5	4.6	2.0	1.7
Q2	2,484.2	2,192.3	40.1	251.8	142.2	57.8	33.5	18.3	262.8	234.9	1.4	26.5	17.2	5.4	2.5	1.4
Q3 ³⁾	2,556.1	2,233.8	47.6	274.7	154.1	63.6	38.1	18.9	272.5	233.9	2.4	36.2	25.8	6.1	2.8	1.6

Source: ECB.

1) Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated. For further details, see the technical notes.

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

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

Assets outstanding

4. Loans to euro area residents

	MFIs								Non-MFIs							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	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 Q4	3,386.1	-	-	-	-	-	-	-	5,937.5	5,764.0	26.6	147.0	79.0	15.4	48.8	3.8
1999 Q1	3,865.3	-	-	-	-	-	-	-	5,995.4	5,798.8	20.2	176.4	99.9	18.3	53.7	4.5
Q2	4,097.0	-	-	-	-	-	-	-	6,142.3	5,931.4	21.3	189.6	109.0	19.5	57.9	3.2
Q3	3,820.5	-	-	-	-	-	-	-	6,204.7	5,984.9	23.3	196.6	106.9	23.9	61.6	4.2
Q4	3,844.5	-	-	-	-	-	-	-	6,364.3	6,132.0	22.3	210.0	114.7	28.3	62.4	4.6
2000 Q1	3,939.7	-	-	-	-	-	-	-	6,506.2	6,239.9	33.7	232.6	126.4	35.7	63.9	6.7
Q2	4,030.4	-	-	-	-	-	-	-	6,657.8	6,365.2	35.5	257.1	145.2	38.8	68.2	5.0
Q3 ³⁾	3,938.4	-	-	-	-	-	-	-	6,764.3	6,454.6	33.2	276.5	159.3	44.2	69.3	3.7

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

	Issued by MFIs								Issued by non-MFIs							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	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 Q4	722.4	680.9	17.8	23.6	15.8	3.6	1.8	2.5	1,377.9	1,341.0	10.6	26.3	14.7	8.2	2.3	1.1
1999 Q1	762.9	727.3	7.8	27.9	18.3	5.6	1.3	2.7	1,419.0	1,386.6	3.9	28.5	15.4	10.2	2.0	0.9
Q2	802.1	768.0	6.1	28.0	18.9	5.2	1.1	2.9	1,429.1	1,399.0	3.2	27.0	13.6	10.2	2.1	1.1
Q3	829.7	795.7	6.8	27.2	17.8	5.1	1.7	2.6	1,442.9	1,412.7	3.1	27.1	13.0	10.4	2.2	1.6
Q4	829.4	794.8	7.3	27.3	18.2	4.8	2.3	2.0	1,435.3	1,402.8	5.4	27.1	12.7	10.3	1.9	2.2
2000 Q1	871.2	834.2	11.8	25.3	15.9	5.4	2.4	1.6	1,446.2	1,413.8	4.5	27.9	13.1	10.2	1.5	3.1
Q2	896.9	857.6	12.7	26.6	17.6	4.8	2.5	1.6	1,407.3	1,373.7	6.0	27.6	14.4	10.3	2.1	0.9
Q3 ³⁾	942.5	897.9	10.6	34.1	24.3	5.3	2.7	1.8	1,384.3	1,350.9	3.8	29.7	16.4	11.1	1.2	0.9

6. Loans to non-residents of the euro area

	Banks ³⁾								Non-banks							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	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 Q4	960.4	371.8	74.5	514.1	374.7	74.7	26.6	38.1	373.6	147.5	26.9	199.3	172.7	8.3	13.7	4.5
1999 Q1	992.7	457.8	75.9	459.0	325.1	62.3	27.2	44.4	383.3	134.1	27.9	221.4	193.7	7.7	14.4	5.6
Q2	1,021.9	477.0	74.5	470.4	349.8	52.9	26.2	41.6	417.8	139.3	35.4	243.1	212.6	8.0	16.3	6.3
Q3	949.4	428.1	78.3	442.9	320.3	54.1	28.3	40.2	413.1	143.4	36.4	233.3	198.8	10.8	18.0	5.8
Q4	908.5	388.8	75.2	444.5	323.3	53.9	30.0	37.4	431.4	138.3	39.6	253.5	217.0	11.1	18.8	6.7
2000 Q1	971.0	426.3	90.7	454.0	322.2	58.0	33.2	40.6	455.1	145.6	40.0	269.6	229.6	13.7	20.0	6.3
Q2	1,001.2	462.8	93.3	445.2	315.0	58.9	32.4	38.8	446.0	137.9	39.8	268.3	226.8	13.8	20.8	6.8
Q3 ³⁾	1,008.2	451.3	93.9	463.1	347.3	43.9	35.4	36.4	481.5	148.0	43.1	290.4	248.0	13.9	22.0	6.4

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

	Issued by banks ³⁾								Issued by non-banks							
	All currencies	Euro ²⁾	Other EU currencies	Other currencies					All currencies	Euro ²⁾	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 Q4	66.8	19.6	5.6	41.5	28.1	4.9	0.8	7.6	321.2	48.1	31.0	242.1	182.2	35.7	4.2	19.8
1999 Q1	76.4	19.4	6.7	50.3	35.0	5.3	0.9	9.1	408.8	52.4	30.0	326.4	255.1	37.2	4.3	29.7
Q2	83.2	21.5	7.0	54.6	39.1	5.6	1.2	8.8	412.6	66.9	32.5	313.2	248.7	37.1	4.9	22.5
Q3	92.0	33.8	6.7	51.5	38.1	5.9	1.0	6.5	403.7	80.6	30.9	292.2	237.4	33.5	4.5	16.8
Q4	99.5	37.8	7.2	54.5	39.5	6.9	1.0	7.1	433.0	91.2	31.4	310.4	253.3	34.4	4.7	18.1
2000 Q1	113.1	43.3	7.0	62.8	49.0	6.6	1.4	5.8	456.4	94.4	28.5	333.4	278.8	34.3	6.1	14.2
Q2	138.4	50.0	12.3	76.0	61.8	6.3	1.6	6.3	481.5	98.4	27.9	355.2	304.7	31.8	5.0	13.7
Q3 ³⁾	151.7	50.5	16.4	84.8	71.8	6.9	2.4	3.7	511.3	119.2	34.1	358.0	314.5	30.2	4.3	9.0

3 Financial markets and interest rates in the euro area

Table 3.1

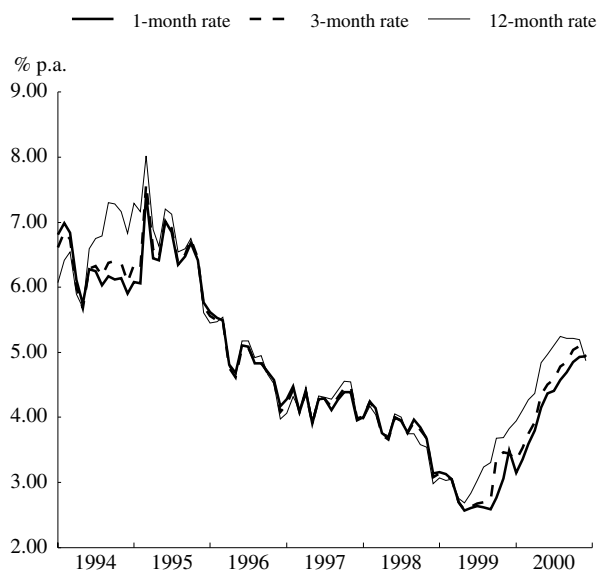
Money market interest rates ¹⁾

(percentages per annum)

	Euro area ⁴⁾					United States ⁶⁾	Japan ⁶⁾
	Overnight deposits ^{2) 3)} 1	1-month deposits ⁵⁾ 2	3-month deposits ⁵⁾ 3	6-month deposits ⁵⁾ 4	12-month deposits ⁵⁾ 5	3-month deposits ⁶⁾ 6	3-month deposits ⁷⁾ 7
1996	4.04	4.95	4.92	4.89	4.93	5.51	0.57
1997	3.98	4.23	4.24	4.25	4.28	5.76	0.62
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.06	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
1999 Dec.	3.04	3.49	3.44	3.51	3.83	6.13	0.33
2000 Jan.	3.04	3.15	3.34	3.56	3.95	6.04	0.15
Feb.	3.28	3.36	3.54	3.73	4.11	6.10	0.13
Mar.	3.51	3.59	3.75	3.94	4.27	6.20	0.14
Apr.	3.69	3.80	3.93	4.09	4.37	6.31	0.12
May	3.92	4.15	4.35	4.53	4.84	6.75	0.10
June	4.29	4.37	4.50	4.68	4.96	6.79	0.13
July	4.31	4.41	4.58	4.84	5.11	6.73	0.22
Aug.	4.42	4.57	4.78	5.01	5.25	6.69	0.32
Sep.	4.59	4.70	4.85	5.04	5.22	6.67	0.41
Oct.	4.76	4.85	5.04	5.10	5.22	6.78	0.52
Nov.	4.83	4.92	5.09	5.13	5.19	6.75	0.55
Dec.	4.83	4.94	4.93	4.91	4.87	6.54	0.62
2000 1 Dec.	4.84	5.02	5.02	5.03	5.05	6.69	0.57
8	4.83	4.97	4.96	4.93	4.91	6.57	0.63
15	4.78	4.97	4.95	4.92	4.88	6.55	0.65
22	4.85	4.90	4.88	4.84	4.76	6.45	0.64
29	5.16	4.86	4.86	4.83	4.75	6.40	0.55

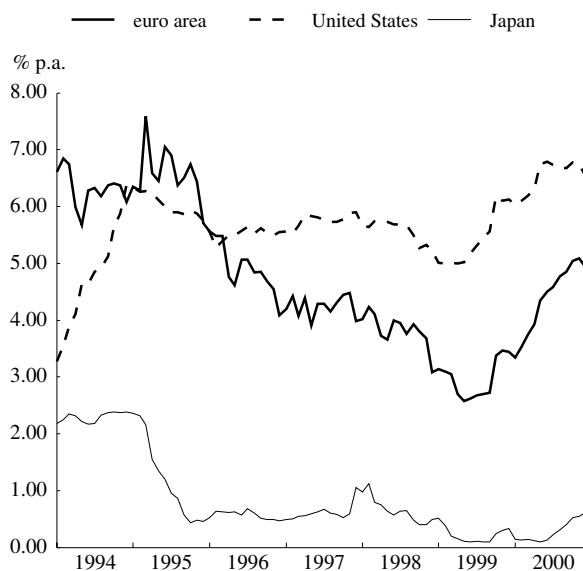
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

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

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

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

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

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

6) London interbank offered rates (LIBOR).

Table 3.2

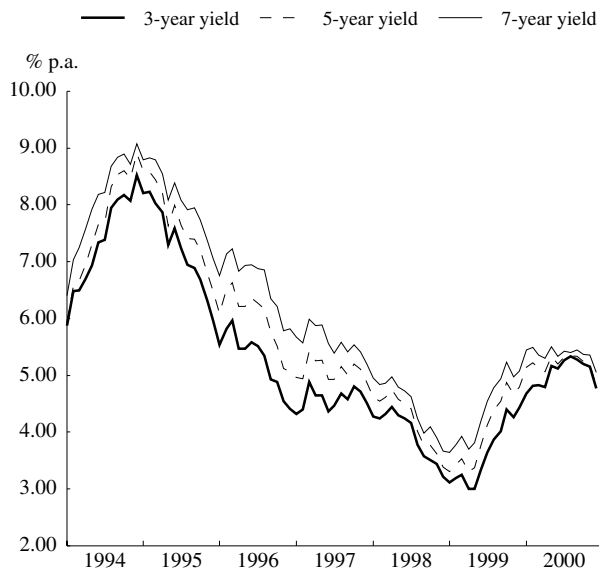
Government bond yields ¹⁾

(percentages per annum)

	Euro area ²⁾					United States	Japan
	2 years ¹	3 years ²	5 years ³	7 years ⁴	10 years ⁵	10 years ⁶	10 years ⁷
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	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
1999 Dec.	4.18	4.43	4.79	5.07	5.30	6.26	1.73
2000 Jan.	4.38	4.68	5.14	5.44	5.70	6.66	1.71
Feb.	4.55	4.82	5.23	5.49	5.66	6.52	1.83
Mar.	4.59	4.83	5.12	5.35	5.49	6.26	1.81
Apr.	4.58	4.79	5.06	5.30	5.41	6.00	1.75
May	5.00	5.16	5.34	5.51	5.52	6.42	1.71
June	5.02	5.12	5.19	5.33	5.35	6.10	1.69
July	5.19	5.27	5.32	5.43	5.45	6.04	1.72
Aug.	5.28	5.34	5.35	5.40	5.40	5.83	1.77
Sep.	5.22	5.28	5.33	5.44	5.47	5.80	1.88
Oct.	5.17	5.20	5.24	5.37	5.42	5.74	1.83
Nov.	5.12	5.15	5.19	5.35	5.34	5.72	1.75
Dec.	4.74	4.77	4.82	5.05	5.07	5.23	1.62
2000 1 Dec.	4.95	4.97	4.99	5.17	5.14	5.49	1.63
8	4.84	4.85	4.90	5.12	5.11	5.35	1.59
15	4.72	4.75	4.77	5.00	5.02	5.20	1.64
22	4.61	4.69	4.76	5.01	5.04	5.01	1.57
29	4.52	4.60	4.66	4.95	5.02	5.10	1.63

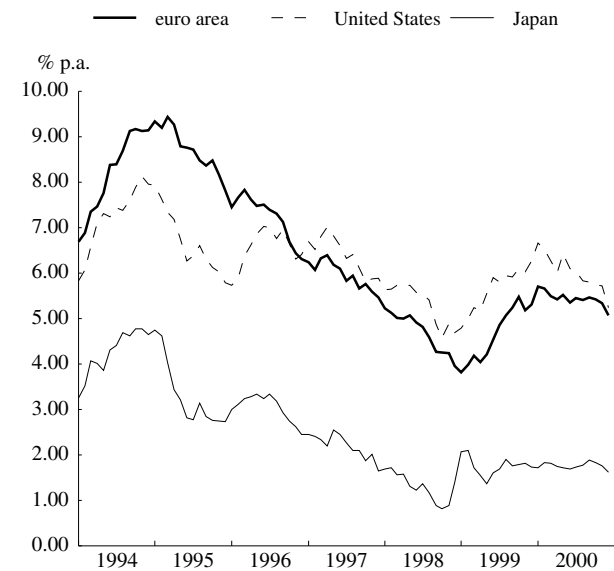
Euro area government bond yields

(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

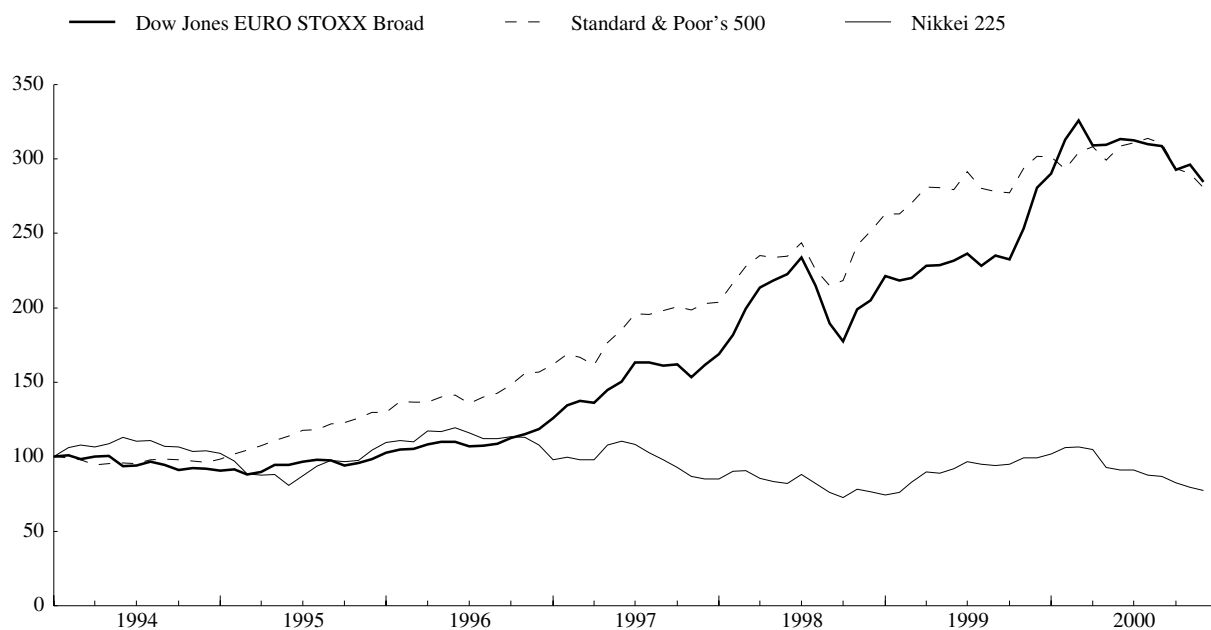
Stock market indices

(index levels, in points)¹⁾

	Dow Jones EURO STOXX indices												United States Standard & Poor's 500 13	Japan Nikkei 225 14
	Benchmark		Main economic sector indices											
	Broad 1	50 2	Basic materials 3	Consumer cyclical 4	Consumer non-cyclical 5	Energy 6	Financial 7	Industrial 8	Technology 9	Utilities 10	Telecommunications 11	Health-care 12		
1996	151.6	1,657.5	181.1	146.8	180.6	159.5	129.9	134.7	150.0	166.3	202.4	230.2	671.2	21,061.7
1997	207.6	2,319.6	233.4	191.9	231.9	227.3	184.4	168.0	227.7	205.5	324.4	301.8	873.9	18,373.4
1998	280.5	3,076.3	257.9	245.0	295.5	249.3	281.3	218.4	333.6	282.1	487.7	348.6	1,085.3	15,338.4
1999	325.8	3,787.3	279.2	262.9	327.7	286.0	295.7	285.1	470.4	306.0	718.8	392.8	1,327.8	16,829.9
2000	423.9	5,075.5	299.1	292.9	324.3	342.3	350.7	378.0	963.1	341.6	1,072.7	475.2	1,426.7	17,162.7
1999 Dec.	389.1	4,590.1	334.6	288.4	327.7	307.4	318.6	366.0	755.7	311.7	1,051.7	398.2	1,429.0	18,430.6
2000 Jan.	402.4	4,714.7	338.2	296.9	319.8	300.6	318.9	379.8	836.4	310.1	1,143.2	366.6	1,427.5	18,905.6
Feb.	433.8	5,090.6	309.3	308.1	307.6	299.7	313.6	396.4	989.4	346.4	1,423.7	371.3	1,388.4	19,700.9
Mar.	452.1	5,317.1	302.5	316.1	305.4	310.5	325.4	402.7	1,070.1	374.6	1,496.0	377.8	1,442.2	19,823.0
Apr.	428.6	5,149.1	306.8	293.7	313.3	329.1	339.0	382.2	957.4	353.9	1,236.7	411.1	1,459.7	19,517.7
May	429.4	5,174.7	304.2	294.5	322.3	353.1	340.0	388.0	1,004.4	356.4	1,135.1	435.5	1,416.7	17,222.5
June	434.7	5,274.2	274.6	294.8	326.1	349.8	350.0	385.4	1,052.1	349.7	1,149.7	456.4	1,462.0	16,969.3
July	433.8	5,227.8	283.1	297.8	328.2	345.7	360.4	384.3	1,044.6	333.9	1,083.0	502.2	1,472.1	16,961.1
Aug.	429.9	5,152.0	290.0	301.3	331.1	363.1	375.9	380.3	982.6	334.1	951.6	545.8	1,485.5	16,329.9
Sep.	428.1	5,132.9	280.3	298.7	329.5	376.4	371.4	371.8	1,015.4	335.1	910.2	553.4	1,470.6	16,170.4
Oct.	406.4	4,893.2	281.2	278.4	331.5	373.7	366.3	349.4	864.6	336.3	824.3	561.2	1,390.1	15,342.7
Nov.	410.8	4,962.5	302.9	274.9	346.0	365.0	379.7	359.6	864.7	339.6	796.2	571.6	1,373.8	14,743.5
Dec.	394.5	4,787.1	319.1	257.4	330.2	337.9	365.9	354.3	865.0	326.7	715.4	554.6	1,329.7	14,409.7
2000 1 Dec.	398.9	4,839.3	305.4	260.7	343.9	353.8	369.5	354.1	841.2	336.4	736.8	575.2	1,315.2	14,835.3
8	404.1	4,889.7	326.3	264.1	327.7	329.5	370.0	364.7	948.2	327.5	742.7	551.7	1,369.9	14,696.5
15	389.1	4,718.0	312.9	256.3	321.3	328.3	358.8	349.3	867.1	315.0	716.4	552.0	1,312.2	14,552.3
22	383.5	4,655.9	320.7	247.1	329.2	335.6	361.3	348.1	799.2	328.6	675.7	544.0	1,306.0	13,427.1
29	391.8	4,772.4	330.7	255.1	332.4	344.6	371.8	351.6	809.2	331.2	666.6	579.5	1,320.3	13,785.7

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

(base month: January 1994 = 100; monthly)



Source: Reuters.

1) Monthly and yearly values are period averages.

Table 3.4

Retail bank interest rates

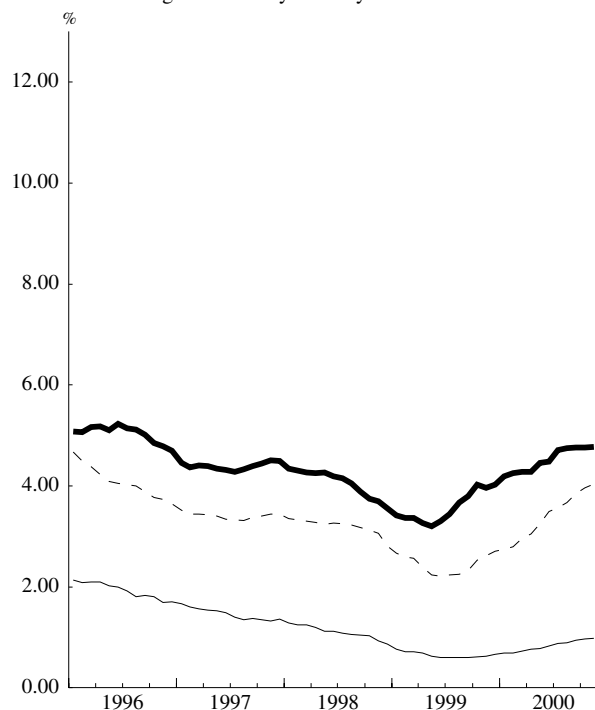
(percentages per annum; period averages)

	Deposit interest rates						Lending interest rates			
	Overnight 1	With agreed maturity			Redeemable at notice		To enterprises		To households	
		Up to 1 year 2	Up to 2 years 3	Over 2 years 4	Up to 3 months 5	Over 3 months 6	Up to 1 year 7	Over 1 year 8	Consumer lending 9	For house purchase 10
1997	1.46	3.41	3.63	4.40	2.80	3.09	7.59	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
1999	0.65	2.44	2.45	3.57	2.15	2.76	5.66	5.10	9.38	5.29
1999 Nov.	0.63	2.62	2.62	3.97	2.02	3.01	5.74	5.54	9.36	5.77
Dec.	0.67	2.70	2.71	4.02	2.04	3.05	5.82	5.51	9.38	5.80
2000 Jan.	0.69	2.74	2.74	4.19	2.05	3.18	5.92	5.74	9.51	6.03
Feb.	0.70	2.80	2.81	4.25	2.06	3.18	6.01	5.85	9.52	6.13
Mar.	0.73	2.96	2.96	4.28	2.07	3.33	6.08	5.85	9.55	6.10
Apr.	0.76	3.04	3.05	4.28	2.09	3.44	6.25	5.99	9.62	6.12
May	0.78	3.26	3.26	4.45	2.12	3.65	6.41	6.16	9.70	6.30
June	0.83	3.49	3.49	4.48	2.15	3.87	6.57	6.23	9.81	6.34
July	0.87	3.57	3.58	4.71	2.32	3.94	6.77	6.37	9.92	6.46
Aug.	0.90	3.67	3.67	4.75	2.35	4.06	6.81	6.44	9.97	6.51
Sep.	0.94	3.85	3.83	4.77	2.38	4.20	6.94	6.44	10.00	6.56
Oct.	0.97	3.96	3.95	4.76	2.40	4.14	7.16	6.60	10.11	6.57
Nov.	0.99	4.04	4.03	4.77	2.45	4.25	7.19	6.63	10.16	6.56

Deposit interest rates

(monthly)

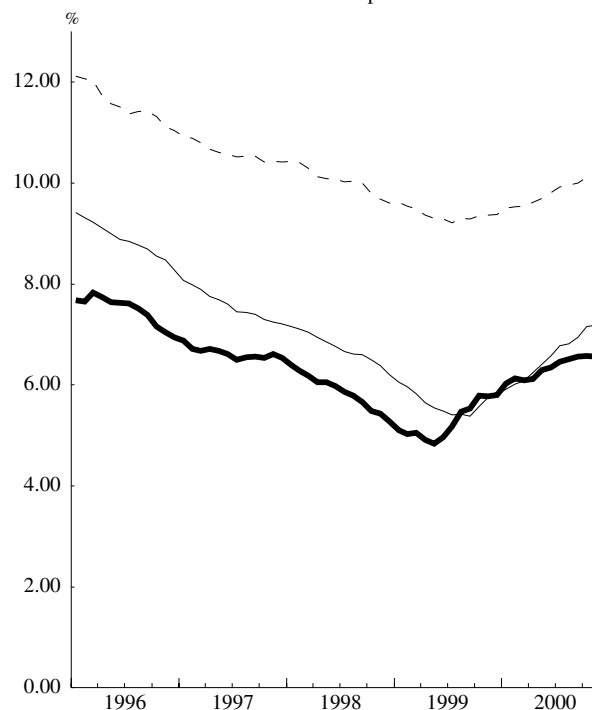
- overnight
- - - agreed maturity up to 1 year
- agreed maturity over 2 years



Lending interest rates

(monthly)

- up to 1 year to enterprises
- - - consumer lending
- to households for house purchase



Source: ECB.

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

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

	By euro area residents									
					In euro ²⁾				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
1999 Oct.	198.8	190.4	8.3	596.3	192.8	183.3	9.4	563.3	6.0	7.1
Nov.	195.6	176.9	18.7	615.6	188.1	170.0	18.1	581.2	7.5	6.8
Dec.	171.9	169.5	2.3	619.0	163.1	163.8	-0.6	580.7	8.7	5.8
2000 Jan.	251.5	266.5	-15.0	600.3	240.0	256.1	-16.1	562.9	11.4	10.4
Feb.	253.3	240.0	13.3	614.2	240.7	230.9	9.8	572.6	12.6	9.1
Mar.	270.4	249.4	21.0	634.3	258.2	240.0	18.1	591.5	12.2	9.3
Apr.	252.3	250.9	1.5	635.9	240.3	239.5	0.8	591.3	12.0	11.4
May	277.9	261.6	16.3	653.8	266.8	251.2	15.6	609.4	11.1	10.4
June	259.3	257.5	1.8	656.9	243.2	247.2	-4.0	605.7	16.2	10.4
July	286.7	281.5	5.2	664.8	269.9	265.8	4.1	610.9	16.9	15.7
Aug.	276.2	276.1	0.1	667.9	261.1	258.9	2.2	613.6	15.2	17.3
Sep.	311.7	315.1	-3.4	671.8	293.7	298.8	-5.1	611.6	18.0	16.3
Oct.	355.9	342.4	13.5	687.6	339.0	330.4	8.6	619.7	16.9	12.0

2. Long-term ¹⁾

	By euro area residents									
					In euro ²⁾				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
1999 Oct.	115.6	75.2	40.4	5,916.6	106.8	69.1	37.7	5,472.0	8.8	6.1
Nov.	103.1	78.5	24.7	5,949.2	94.3	71.5	22.8	5,494.8	8.8	7.0
Dec.	77.3	111.9	-34.6	5,921.2	70.3	97.2	-26.9	5,465.8	7.0	14.7
2000 Jan.	109.5	97.5	12.0	5,941.2	101.2	89.3	11.9	5,481.5	8.2	8.2
Feb.	121.5	69.9	51.6	5,993.1	109.3	61.7	47.5	5,529.6	12.2	8.2
Mar.	127.1	93.8	33.3	6,040.6	114.5	83.3	31.1	5,562.6	12.7	10.4
Apr.	110.8	76.3	34.6	6,086.8	101.2	66.5	34.7	5,597.1	9.6	9.8
May	124.5	84.0	40.5	6,121.8	112.0	74.5	37.5	5,638.1	12.5	9.5
June	102.7	63.5	39.3	6,158.4	89.5	52.6	36.9	5,677.3	13.3	10.9
July	123.5	75.6	47.9	6,209.9	100.5	67.9	32.6	5,706.2	23.0	7.8
Aug.	99.5	57.8	41.7	6,267.8	79.5	50.5	29.0	5,736.8	20.0	7.3
Sep.	108.8	76.0	32.8	6,301.8	89.8	66.9	23.0	5,758.8	19.0	9.1
Oct.	110.0	81.8	28.3	6,342.5	98.7	76.1	22.5	5,782.5	11.4	5.6

3. Total

	By euro area residents									
					In euro ²⁾				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
1999 Oct.	314.4	265.6	48.8	6,512.9	299.6	252.4	47.2	6,035.3	14.8	13.2
Nov.	298.7	255.3	43.4	6,564.8	282.4	241.5	40.9	6,076.0	16.3	13.8
Dec.	249.1	281.4	-32.3	6,540.1	233.4	260.9	-27.5	6,046.5	15.7	20.5
2000 Jan.	360.9	364.0	-3.1	6,541.4	341.3	345.5	-4.2	6,044.4	19.7	18.5
Feb.	374.9	309.9	64.9	6,607.3	350.0	292.7	57.3	6,102.2	24.9	17.3
Mar.	397.5	343.2	54.3	6,674.9	372.6	323.4	49.2	6,154.2	24.9	19.8
Apr.	363.2	327.1	36.0	6,722.7	341.5	305.9	35.5	6,188.3	21.7	21.2
May	402.4	345.6	56.8	6,775.6	378.8	325.7	53.1	6,247.5	23.6	19.9
June	362.1	321.0	41.1	6,815.3	332.7	299.8	32.9	6,283.1	29.4	21.2
July	410.2	357.2	53.1	6,874.8	370.4	333.7	36.7	6,317.1	39.9	23.5
Aug.	375.7	334.0	41.7	6,935.6	340.6	309.4	31.2	6,350.4	35.1	24.6
Sep.	420.5	391.1	29.4	6,973.6	383.5	365.7	17.8	6,370.5	37.0	25.4
Oct.	465.9	424.2	41.8	7,030.0	437.7	406.5	31.1	6,402.2	28.3	17.6

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

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

Securities with a longer 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.

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

currencies		By non-residents of the euro area in euro ²⁾				Total in euro ²⁾				
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	
-1.1	33.0	.	.	.	.	.	.	.	.	1999 Oct.
0.6	34.4	.	.	.	.	.	.	.	.	Nov.
3.0	38.2	21.8	20.0	1.8	34.6	565.8	537.2	28.6	615.3	Dec.
1.1	37.3	.	.	.	.	.	.	.	.	2000 Jan.
3.6	41.6	.	.	.	.	.	.	.	.	Feb.
2.9	42.8	32.6	32.0	0.6	36.8	771.6	759.2	12.4	628.3	Mar.
0.7	44.7	.	.	.	.	.	.	.	.	Apr.
0.7	44.5	.	.	.	.	.	.	.	.	May
5.8	51.2	37.5	31.0	6.5	43.2	787.8	768.9	19.0	649.0	June
1.1	53.9	.	.	.	.	.	.	.	.	July
-2.1	54.3	.	.	.	.	.	.	.	.	Aug.
1.7	60.1	38.1	39.5	-1.4	45.2	862.8	863.0	-0.2	656.8	Sep.
4.9	67.8	.	.	.	.	.	.	.	.	Oct.

currencies		By non-residents of the euro area in euro ²⁾				Total in euro ²⁾				
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	
2.7	444.7	.	.	.	.	.	.	.	.	1999 Oct.
1.8	454.3	.	.	.	.	.	.	.	.	Nov.
-7.7	455.4	48.8	21.4	27.4	593.8	320.3	259.2	61.0	6,059.6	Dec.
0.1	459.7	.	.	.	.	.	.	.	.	2000 Jan.
4.1	463.5	.	.	.	.	.	.	.	.	Feb.
2.2	477.9	65.7	21.5	44.2	638.1	390.6	255.9	134.7	6,200.7	Mar.
-0.2	489.8	.	.	.	.	.	.	.	.	Apr.
3.0	483.7	.	.	.	.	.	.	.	.	May
2.4	481.0	45.5	23.7	21.8	660.0	348.2	217.3	130.9	6,337.4	June
15.2	503.7	.	.	.	.	.	.	.	.	July
12.6	530.9	.	.	.	.	.	.	.	.	Aug.
9.9	543.0	58.5	39.2	19.2	682.5	328.3	224.5	103.9	6,441.4	Sep.
5.7	560.0	.	.	.	.	.	.	.	.	Oct.

currencies		By non-residents of the euro area in euro ²⁾				Total in euro ²⁾				
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	
1.6	477.7	.	.	.	.	.	.	.	.	1999 Oct.
2.5	488.8	.	.	.	.	.	.	.	.	Nov.
-4.8	493.6	70.6	41.5	29.2	628.4	886.1	796.4	89.7	6,674.9	Dec.
1.1	497.0	.	.	.	.	.	.	.	.	2000 Jan.
7.6	505.1	.	.	.	.	.	.	.	.	Feb.
5.1	520.7	98.3	53.5	44.8	674.9	1,162.2	1,015.1	147.1	6,829.1	Mar.
0.5	534.4	.	.	.	.	.	.	.	.	Apr.
3.7	528.1	.	.	.	.	.	.	.	.	May
8.2	532.2	83.0	54.7	28.3	703.3	1,136.0	986.2	149.8	6,986.3	June
16.4	557.6	.	.	.	.	.	.	.	.	July
10.5	585.2	.	.	.	.	.	.	.	.	Aug.
11.5	603.1	96.6	78.8	17.9	727.7	1,191.1	1,087.5	103.7	7,098.1	Sep.
10.7	627.8	.	.	.	.	.	.	.	.	Oct.

Table 3.6**Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ¹⁾***(EUR billions; end of period; nominal values)***Amounts outstanding****1. Short-term ²⁾**

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	563.3	213.8	6.7	66.2	273.6	3.0	.	.	.	.
Nov.	581.2	237.2	7.0	67.5	266.0	3.5	.	.	.	.
Dec.	580.7	248.9	6.1	66.5	254.4	4.8	34.6	14.4	12.1	6.3
2000 Jan.	562.9	230.0	6.2	66.1	257.1	3.4	.	.	.	.
Feb.	572.6	240.5	6.6	65.8	256.7	3.0	.	.	.	.
Mar.	591.5	251.2	6.5	66.7	264.6	2.6	36.8	15.5	11.9	8.1
Apr.	591.3	245.8	6.3	72.2	264.1	2.8	.	.	.	.
May	609.4	259.8	5.6	76.1	265.7	2.2	.	.	.	.
June	605.7	259.1	4.2	76.1	264.1	2.2	43.2	18.9	11.7	10.8
July	610.9	264.8	4.6	78.0	260.6	2.9	.	.	.	.
Aug.	613.6	263.8	4.4	79.7	263.5	2.3	.	.	.	.
Sep.	611.6	256.2	4.1	81.5	267.1	2.8	45.2	15.0	12.9	15.7
Oct.	619.7	259.5	4.5	87.5	265.6	2.7	.	.	.	.

2. Long-term ²⁾

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	5,472.0	1,983.7	186.5	199.0	3,009.1	93.7	.	.	.	.
Nov.	5,494.8	1,993.9	194.0	198.4	3,014.3	94.2	.	.	.	.
Dec.	5,465.8	1,976.7	195.5	197.0	3,002.4	94.1	593.8	158.4	81.8	113.9
2000 Jan.	5,481.5	1,985.9	194.5	191.9	3,014.9	94.3	.	.	.	.
Feb.	5,529.6	2,003.8	196.5	192.3	3,041.8	95.1	.	.	.	.
Mar.	5,562.6	2,022.0	197.7	195.7	3,051.3	95.9	638.1	176.1	89.1	128.1
Apr.	5,597.1	2,042.6	200.4	201.9	3,055.2	96.9	.	.	.	.
May	5,638.1	2,066.6	203.8	204.7	3,065.0	98.1	.	.	.	.
June	5,677.3	2,073.3	207.7	211.2	3,087.3	97.8	660.0	185.6	93.0	136.3
July	5,706.2	2,088.5	215.7	218.2	3,084.9	98.9	.	.	.	.
Aug.	5,736.8	2,101.6	220.2	222.0	3,092.8	100.3	.	.	.	.
Sep.	5,758.8	2,115.6	223.0	222.6	3,097.1	100.5	682.5	191.3	101.4	145.1
Oct.	5,782.5	2,125.0	227.6	226.1	3,101.3	102.5	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	6,035.3	2,197.5	193.2	265.2	3,282.7	96.6	.	.	.	.
Nov.	6,076.0	2,231.1	201.0	265.8	3,280.4	97.7	.	.	.	.
Dec.	6,046.5	2,225.7	201.6	263.5	3,256.8	98.9	628.4	172.8	93.9	120.2
2000 Jan.	6,044.4	2,215.9	200.7	258.1	3,272.1	97.7	.	.	.	.
Feb.	6,102.2	2,244.4	203.1	258.1	3,298.5	98.1	.	.	.	.
Mar.	6,154.2	2,273.2	204.1	262.4	3,315.8	98.6	674.9	191.7	101.0	136.2
Apr.	6,188.3	2,288.5	206.8	274.1	3,319.4	99.6	.	.	.	.
May	6,247.5	2,326.4	209.4	280.7	3,330.7	100.3	.	.	.	.
June	6,283.1	2,332.4	211.9	287.4	3,351.4	100.0	703.3	204.5	104.7	147.1
July	6,317.1	2,353.2	220.3	296.2	3,345.5	101.9	.	.	.	.
Aug.	6,350.4	2,365.4	224.5	301.7	3,356.3	102.6	.	.	.	.
Sep.	6,370.5	2,371.8	227.1	304.1	3,364.2	103.3	727.7	206.3	114.4	160.8
Oct.	6,402.2	2,384.5	232.1	313.6	3,366.9	105.2	.	.	.	.

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

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

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
0.3	0.6	0.8	615.3	263.3	18.2	72.8	254.7	5.5	0.8	Nov. Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
0.2	0.3	0.7	628.3	266.7	18.4	74.8	264.8	3.0	0.7	Feb. Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
0.2	0.4	1.2	649.0	278.0	15.9	86.9	264.2	2.6	1.2	May June
.	.	.	.	.	.	.	.	.	.	July
0.2	0.5	0.8	656.8	271.2	17.0	97.3	267.3	3.2	0.8	Aug. Sep. Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
86.6	29.1	124.0	6,059.6	2,135.1	277.3	310.9	3,089.0	123.3	124.0	Nov. Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
93.5	30.0	121.3	6,200.7	2,198.2	286.8	323.8	3,144.8	125.9	121.3	Feb. Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
96.6	29.9	118.7	6,337.4	2,258.9	300.6	347.5	3,184.0	127.7	118.7	May June
.	.	.	.	.	.	.	.	.	.	July
97.4	30.6	116.8	6,441.4	2,306.8	324.4	367.6	3,194.5	131.1	116.8	Aug. Sep. Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
86.9	29.8	124.8	6,674.9	2,398.5	295.5	383.7	3,343.7	128.7	124.8	Nov. Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
93.7	30.3	122.0	6,829.1	2,464.9	305.2	398.6	3,409.5	128.9	122.0	Feb. Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
96.8	30.3	119.9	6,986.3	2,536.9	316.6	434.5	3,448.2	130.3	119.9	May June
.	.	.	.	.	.	.	.	.	.	July
97.6	31.1	117.6	7,098.1	2,578.1	341.5	464.9	3,461.8	134.4	117.6	Aug. Sep. Oct.

Table 3.6 (cont'd)
Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ¹⁾
(EUR billions; transactions during the month or quarter; nominal values)
Gross issues
1. Short-term ²⁾

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	192.8	107.3	1.9	41.4	40.7	1.5	.	.	.	.
Nov.	188.1	117.7	1.8	33.6	33.0	2.0	.	.	.	.
Dec.	163.1	118.1	1.3	23.0	18.5	2.3	21.8	9.6	6.9	4.2
2000 Jan.	240.0	155.1	2.4	40.0	41.2	1.4	.	.	.	.
Feb.	240.7	155.4	2.7	44.3	37.0	1.5	.	.	.	.
Mar.	258.2	169.9	2.2	45.1	40.0	0.9	32.6	14.0	10.2	7.5
Apr.	240.3	141.3	2.8	51.4	43.4	1.4	.	.	.	.
May	266.8	175.7	2.1	53.0	34.6	1.4	.	.	.	.
June	243.2	159.7	3.2	46.6	32.8	1.0	37.5	16.6	9.3	10.0
July	269.9	167.6	2.6	56.6	41.4	1.8	.	.	.	.
Aug.	261.1	168.1	2.0	51.4	38.1	1.6	.	.	.	.
Sep.	293.7	196.7	2.8	56.0	36.3	2.0	38.1	12.1	10.6	14.5
Oct.	339.0	237.8	2.8	61.0	35.5	1.9	.	.	.	.

2. Long-term ²⁾

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	106.8	49.6	4.1	5.5	46.5	1.0	.	.	.	.
Nov.	94.3	45.0	8.9	3.0	36.1	1.3	.	.	.	.
Dec.	70.3	39.1	4.6	1.6	23.5	1.5	48.8	13.2	7.8	15.9
2000 Jan.	101.2	41.4	1.6	0.1	57.3	0.8	.	.	.	.
Feb.	109.3	48.4	3.3	3.9	51.7	2.0	.	.	.	.
Mar.	114.5	51.4	3.0	4.6	53.7	1.7	65.7	24.0	9.7	17.9
Apr.	101.2	45.5	4.7	7.4	41.6	1.9	.	.	.	.
May	112.0	53.6	4.8	4.4	47.6	1.5	.	.	.	.
June	89.5	36.2	8.5	7.8	36.6	0.4	45.5	16.8	6.3	15.1
July	100.5	44.5	10.2	8.6	35.1	2.1	.	.	.	.
Aug.	79.5	36.7	5.6	4.0	31.5	1.7	.	.	.	.
Sep.	89.8	40.8	4.0	3.2	40.7	1.0	58.5	19.6	10.7	20.9
Oct.	98.7	43.2	5.1	4.5	43.3	2.5	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	299.6	157.0	6.0	46.9	87.2	2.5	.	.	.	.
Nov.	282.4	162.7	10.7	36.6	69.2	3.3	.	.	.	.
Dec.	233.4	157.2	5.9	24.6	42.1	3.8	70.6	22.8	14.8	20.1
2000 Jan.	341.3	196.5	4.1	40.1	98.4	2.2	.	.	.	.
Feb.	350.0	203.8	5.9	48.2	88.6	3.4	.	.	.	.
Mar.	372.6	221.3	5.2	49.7	93.7	2.7	98.3	38.0	19.9	25.4
Apr.	341.5	186.9	7.5	58.8	85.0	3.4	.	.	.	.
May	378.8	229.3	6.9	57.4	82.3	2.9	.	.	.	.
June	332.7	195.9	11.7	54.4	69.3	1.4	83.0	33.4	15.6	25.1
July	370.4	212.1	12.7	65.1	76.5	3.9	.	.	.	.
Aug.	340.6	204.8	7.6	55.3	69.6	3.3	.	.	.	.
Sep.	383.5	237.5	6.7	59.2	77.0	3.0	96.6	31.7	21.3	35.5
Oct.	437.7	281.0	7.9	65.5	78.8	4.5	.	.	.	.

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

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

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
0.2	0.2	0.7	565.8	352.7	11.9	102.1	92.4	5.9	0.7	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
0.2	0.2	0.6	771.6	494.4	17.4	136.9	118.3	3.9	0.6	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
0.1	0.3	1.1	787.8	493.3	17.4	160.9	110.9	4.1	1.1	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
0.2	0.4	0.4	862.8	544.4	17.9	178.4	115.9	5.8	0.4	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
6.6	1.0	4.3	320.3	147.0	25.4	26.0	112.8	4.8	4.3	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
9.5	1.9	2.6	390.6	165.3	17.6	26.6	172.1	6.4	2.6	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
4.5	1.5	1.4	348.2	152.1	24.3	34.8	130.3	5.3	1.4	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
3.0	2.9	1.3	328.3	141.7	30.5	36.7	110.4	7.7	1.3	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
6.8	1.1	5.0	886.1	499.7	37.3	128.2	205.2	10.7	5.0	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
9.7	2.1	3.1	1,162.2	659.7	35.1	163.5	290.4	10.4	3.1	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
4.7	1.8	2.5	1,136.0	645.4	41.7	195.7	241.2	9.5	2.5	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
3.2	3.2	1.7	1,191.1	686.1	48.4	215.1	226.3	13.5	1.7	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.

Table 3.6 (cont'd)**Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ¹⁾***(EUR billions; transactions during the month or quarter; nominal values)***Net issues****1. Short-term ²⁾**

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	9.4	12.7	-0.4	1.6	-5.0	0.5	.	.	.	.
Nov.	18.1	23.5	0.3	1.3	-7.6	0.6	.	.	.	.
Dec.	-0.6	11.2	-0.6	-0.9	-11.6	1.3	1.8	2.8	-0.3	-1.3
2000 Jan.	-16.1	-17.7	0.3	-0.4	2.0	-0.2	.	.	.	.
Feb.	9.8	10.7	0.3	-0.4	-0.5	-0.4	.	.	.	.
Mar.	18.1	9.9	-0.1	0.8	7.9	-0.4	0.6	0.5	-0.7	1.5
Apr.	0.8	-4.3	0.0	5.4	-0.4	0.1	.	.	.	.
May	15.6	12.6	-0.7	3.8	0.5	-0.6	.	.	.	.
June	-4.0	-3.0	0.6	0.1	-1.7	0.0	6.5	3.4	-0.2	2.7
July	4.1	4.6	0.4	1.9	-3.5	0.7	.	.	.	.
Aug.	2.2	-1.4	-0.3	1.6	2.9	-0.6	.	.	.	.
Sep.	-5.1	-7.9	-0.2	1.9	0.7	0.4	-1.4	-5.4	0.4	4.0
Oct.	8.6	3.8	0.4	6.0	-1.5	-0.1	.	.	.	.

2. Long-term ²⁾

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	37.7	18.2	2.6	3.4	14.8	-1.3	.	.	.	.
Nov.	22.8	9.6	7.5	0.0	5.3	0.5	.	.	.	.
Dec.	-26.9	-15.4	1.6	-1.1	-11.9	0.0	27.4	5.1	6.0	12.8
2000 Jan.	11.9	5.8	-1.1	-5.5	12.6	0.2	.	.	.	.
Feb.	47.5	17.2	2.0	0.4	27.0	0.8	.	.	.	.
Mar.	31.1	16.9	0.9	3.0	9.5	0.9	44.2	17.6	7.3	14.3
Apr.	34.7	20.4	2.6	6.2	4.6	0.9	.	.	.	.
May	37.5	22.8	3.5	2.8	7.2	1.3	.	.	.	.
June	36.9	8.3	6.4	6.0	16.5	-0.3	21.8	9.4	3.8	8.2
July	32.6	18.9	8.0	7.0	-2.4	1.2	.	.	.	.
Aug.	29.0	12.0	4.3	3.5	7.9	1.3	.	.	.	.
Sep.	23.0	10.2	2.8	2.6	7.2	0.2	19.2	4.4	8.3	7.7
Oct.	22.5	8.1	4.8	3.4	4.2	2.0	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Oct.	47.2	31.0	2.2	5.0	9.8	-0.8	.	.	.	.
Nov.	40.9	33.1	7.7	1.3	-2.3	1.1	.	.	.	.
Dec.	-27.5	-4.2	0.9	-2.0	-23.6	1.2	29.2	7.9	5.7	11.5
2000 Jan.	-4.2	-12.0	-0.8	-5.9	14.6	-0.1	.	.	.	.
Feb.	57.3	27.9	2.4	0.1	26.6	0.4	.	.	.	.
Mar.	49.2	26.8	0.8	3.8	17.3	0.5	44.8	18.1	6.6	15.8
Apr.	35.5	16.1	2.6	11.6	4.2	1.1	.	.	.	.
May	53.1	35.4	2.8	6.6	7.6	0.7	.	.	.	.
June	32.9	5.3	7.1	6.0	14.8	-0.3	28.3	12.8	3.6	10.9
July	36.7	23.5	8.4	8.8	-5.9	1.9	.	.	.	.
Aug.	31.2	10.6	4.0	5.2	10.8	0.7	.	.	.	.
Sep.	17.8	2.2	2.6	4.4	7.9	0.7	17.9	-0.9	8.7	11.8
Oct.	31.1	11.9	5.1	9.4	2.7	2.0	.	.	.	.

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

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

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
0.0	0.0	0.6	28.6	50.2	-1.0	0.7	-24.2	2.4	0.6	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
-0.1	-0.3	-0.2	12.4	3.3	-0.2	1.6	9.3	-1.4	-0.2	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
0.0	0.1	0.5	19.0	8.7	-0.3	12.0	-1.7	-0.3	0.5	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
0.0	0.1	-0.5	-0.2	-10.1	0.3	9.4	0.2	0.6	-0.5	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
3.9	-0.1	-0.3	61.0	17.6	17.6	15.1	12.0	-0.9	-0.3	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
7.0	0.9	-2.9	134.7	57.6	9.1	12.1	56.1	2.7	-2.9	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
3.1	-0.1	-2.6	130.9	60.8	16.4	23.2	31.4	1.8	-2.6	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
0.6	0.5	-2.3	103.9	45.5	23.4	20.8	13.2	3.2	-2.3	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	1999 Oct.
3.9	-0.1	0.2	89.7	67.8	16.6	15.8	-12.2	1.5	0.2	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
6.9	0.6	-3.1	147.1	60.8	8.9	13.8	65.4	1.3	-3.1	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
3.1	0.0	-2.1	149.8	69.5	16.1	35.2	29.7	1.5	-2.1	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
0.7	0.6	-2.9	103.7	35.4	23.7	30.2	13.5	3.8	-2.9	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.

4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices ¹⁾

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

1. Total index and goods and services

	Total		Goods		Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100)	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) ²⁾	100.0	100.0	62.4	62.4	37.6	37.6	100.0	100.0	62.4	37.6
	1	2	3	4	5	6	7	8	9	10
1996	100.0	2.2	100.0	1.9	100.0	2.9	-	-	-	-
1997	101.6	1.6	101.1	1.1	102.4	2.4	-	-	-	-
1998	102.7	1.1	101.8	0.7	104.4	1.9	-	-	-	-
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-
1999 Q3	104.1	1.1	102.7	0.9	106.6	1.5	104.0	0.4	102.9	106.2
Q4	104.4	1.5	103.4	1.5	106.3	1.4	104.5	0.5	103.4	106.6
2000 Q1	105.2	2.0	104.3	2.3	107.0	1.6	105.2	0.7	104.2	107.0
Q2	105.9	2.1	105.1	2.3	107.4	1.7	105.7	0.5	104.9	107.5
Q3	106.7	2.5	105.7	2.9	108.5	1.8	106.6	0.8	105.9	108.0
1999 Nov.	104.3	1.5	103.3	1.4	106.2	1.4	104.4	0.2	103.4	106.6
Dec.	104.7	1.7	103.7	1.8	106.5	1.5	104.8	0.3	103.7	106.8
2000 Jan.	104.8	1.9	103.9	2.1	106.6	1.6	105.0	0.2	104.0	106.9
Feb.	105.2	2.0	104.2	2.2	107.1	1.6	105.1	0.1	104.2	107.1
Mar.	105.6	2.1	104.7	2.5	107.1	1.6	105.4	0.3	104.6	107.1
Apr.	105.7	1.9	104.7	1.9	107.4	1.8	105.5	0.1	104.5	107.5
May	105.8	1.9	105.1	2.2	107.3	1.5	105.6	0.1	104.8	107.3
June	106.3	2.4	105.5	2.7	107.7	1.7	106.1	0.4	105.3	107.7
July	106.5	2.4	105.3	2.8	108.5	1.7	106.3	0.2	105.5	107.9
Aug.	106.5	2.3	105.4	2.7	108.6	1.8	106.5	0.1	105.7	108.0
Sep.	107.0	2.8	106.4	3.3	108.2	1.8	107.0	0.5	106.5	108.1
Oct.	107.0	2.7	106.5	3.2	108.1	1.9	107.1	0.1	106.6	108.3
Nov.	107.3	2.9	106.8	3.4	108.2	1.8	107.4	0.3	106.9	108.6

2. Breakdown of goods and services

	Goods						Services				
	Food ³⁾			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscellan- eous
	Processed food ³⁾	Unprocessed food		Non-energy industrial goods	Energy						
Weight in the total (%) ²⁾	20.8	12.6	8.2	41.6	32.6	9.0	10.3	6.4	2.3	13.8	4.7
	11	12	13	14	15	16	17	18	19	20	21
1996	1.9	1.9	1.7	1.8	1.5	3.0	4.1	2.3	0.9	2.0	2.7
1997	1.4	1.4	1.4	1.0	0.5	2.7	3.0	2.3	-1.4	2.5	2.6
1998	1.6	1.4	1.9	0.1	0.9	-2.6	2.3	1.7	-1.0	2.2	1.8
1999	0.6	0.9	0.0	1.0	0.6	2.4	1.8	2.1	-4.4	2.0	1.8
1999 Q3	-0.1	0.7	-1.4	1.5	0.6	4.9	1.8	2.1	-5.1	2.0	1.7
Q4	0.4	0.9	-0.3	2.1	0.6	7.9	1.4	2.3	-5.1	2.0	2.3
2000 Q1	0.4	1.0	-0.4	3.3	0.6	13.7	1.4	2.5	-3.2	2.0	2.5
Q2	0.9	1.0	0.7	3.0	0.6	12.3	1.5	2.5	-4.8	2.5	2.5
Q3	1.9	1.1	3.1	3.4	0.7	13.6	1.6	2.6	-4.2	2.5	2.5
1999 Nov.	0.5	0.9	-0.2	2.0	0.6	7.3	1.4	2.4	-5.2	2.1	2.3
Dec.	0.5	1.0	-0.3	2.5	0.6	10.1	1.4	2.4	-5.2	2.3	2.3
2000 Jan.	0.4	1.0	-0.6	3.1	0.7	12.1	1.3	2.4	-2.4	2.0	2.6
Feb.	0.6	1.0	-0.1	3.1	0.5	13.6	1.4	2.5	-3.0	1.9	2.5
Mar.	0.4	1.0	-0.5	3.6	0.6	15.3	1.5	2.5	-4.2	2.0	2.5
Apr.	0.6	0.9	0.1	2.6	0.5	10.2	1.4	2.6	-5.0	2.8	2.5
May	0.8	1.0	0.5	3.0	0.6	12.0	1.4	2.4	-4.9	2.1	2.5
June	1.2	1.0	1.5	3.5	0.6	14.5	1.5	2.4	-4.4	2.5	2.6
July	1.6	1.0	2.6	3.3	0.6	13.4	1.5	2.5	-4.3	2.5	2.6
Aug.	2.0	1.1	3.3	3.0	0.6	11.9	1.5	2.5	-4.0	2.6	2.6
Sep.	2.1	1.3	3.3	4.0	0.8	15.5	1.6	2.7	-4.4	2.4	2.4
Oct.	2.0	1.2	3.2	3.8	0.9	14.6	1.8	2.7	-4.8	2.5	2.2
Nov.	2.2	1.4	3.5	4.0	1.0	15.2	1.8	2.8	-4.3	2.4	2.0

Sources: Eurostat and ECB calculations.

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

2) Referring to the index period 2000.

3) Including alcoholic beverages and tobacco.

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 ²⁾		Oil prices ³⁾ (EUR per barrel)
	Total excluding construction		Manufacturing						Con- struction ¹⁾	Total	Total excluding energy	
	Index, 1995 = 100			Inter- mediate goods	Capital goods	Consumer goods						
						Durable consumer goods	Non- durable consumer goods					
1	2	3	4	5	6	7	8	9	10	11	12	
1996	100.3	0.3	0.9	-0.6	1.3	2.1	2.1	2.2	1.2	6.5	-6.9	15.9
1997	101.4	1.1	0.8	1.4	0.3	1.0	0.4	1.4	1.0	10.0	12.9	17.1
1998	100.6	-0.7	-0.6	-2.6	0.6	0.6	0.3	0.7	0.2	-21.2	-12.5	12.0
1999	100.2	-0.4	0.2	-0.5	0.2	0.2	0.5	0.1	0.6	17.8	-3.1	17.1
2000	.	.	.	.	.	.	.	.	.	51.8	18.4	31.3
1999 Q4	101.7	2.1	2.7	5.4	0.2	0.6	0.6	0.6	0.6	61.5	14.0	23.0
2000 Q1	103.3	4.3	4.6	10.3	0.5	0.9	1.0	0.9	1.7	78.3	19.9	27.1
Q2	104.8	5.2	5.2	11.4	0.6	1.4	1.1	1.5	1.9	53.7	18.3	29.1
Q3	106.4	5.8	5.4	12.2	0.7	1.6	1.3	1.8	.	46.7	18.0	33.9
Q4	.	.	.	.	.	.	.	.	.	38.1	17.6	35.0
1999 Dec.	102.2	2.9	3.4	7.3	0.3	0.6	0.7	0.6	-	81.3	19.3	24.8
2000 Jan.	102.8	3.8	4.0	9.1	0.5	0.8	0.9	0.7	-	76.2	19.4	24.9
Feb.	103.3	4.4	4.7	10.5	0.6	0.9	1.0	0.9	-	87.6	20.0	27.6
Mar.	103.8	4.8	5.1	11.2	0.6	1.0	1.0	1.0	-	72.0	20.2	28.4
Apr.	104.1	4.6	4.7	10.3	0.6	1.2	1.0	1.3	-	43.9	19.4	24.6
May	104.8	5.3	5.3	11.6	0.6	1.5	1.0	1.7	-	61.9	22.8	30.4
June	105.3	5.6	5.5	12.3	0.7	1.4	1.2	1.5	-	55.2	12.9	31.5
July	105.8	5.6	5.3	11.8	0.8	1.6	1.3	1.7	-	42.0	14.3	30.6
Aug.	106.2	5.6	5.1	11.5	0.7	1.6	1.3	1.7	-	47.5	18.3	33.6
Sep.	107.3	6.2	5.9	13.2	0.7	1.7	1.3	1.9	-	50.3	21.4	37.4
Oct.	107.9	6.5	5.8	13.6	0.6	1.9	1.5	2.1	-	56.6	23.1	36.8
Nov.	.	.	.	.	.	.	.	.	-	45.6	18.2	38.0
Dec.	.	.	.	.	.	.	.	.	-	14.9	12.1	29.4

2. Deflators of gross domestic product

	Deflators of GDP ⁴⁾ (s.a.)								
	GDP		Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports ⁵⁾	Imports ⁵⁾	
	Index, 1995 = 100								
	13	14	15	16	17	18	19	20	
1996	102.1	2.1	2.1	2.4	2.2	0.9	0.9	0.8	
1997	103.6	1.5	1.8	1.9	1.6	1.0	1.7	2.5	
1998	105.3	1.7	1.3	1.4	1.6	0.9	-0.1	-1.4	
1999	106.6	1.2	1.3	1.2	2.3	0.8	-0.4	0.0	
1998 Q2	105.3	1.8	1.4	1.7	1.7	1.2	0.8	-0.3	
Q3	105.6	1.7	1.1	1.2	1.6	0.8	-0.5	-2.4	
Q4	105.9	1.5	0.8	0.9	1.4	0.5	-1.8	-3.9	
1999 Q1	106.3	1.5	0.8	0.9	2.0	0.5	-2.1	-4.2	
Q2	106.5	1.2	1.2	1.1	2.3	0.5	-1.5	-1.6	
Q3	106.7	1.1	1.4	1.2	2.4	0.9	0.0	1.2	
Q4	106.9	1.0	1.9	1.5	2.4	1.4	1.7	4.6	
2000 Q1	107.3	1.0	2.3	1.9	1.9	2.0	3.9	8.1	
Q2	107.4	0.8	2.2	1.7	1.4	2.4	4.5	8.8	

Sources: Eurostat, except columns 10 and 11 (HWVA, 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) Data to end-1998 are based on national deflators in domestic currency.

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

5 Real economy indicators in the euro area

Table 5.1

National accounts ¹⁾

GDP and expenditure components

1. Current prices

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

	GDP						External balance ³⁾		
	1	Domestic demand		Private consumption 3	Government consumption 4	Gross fixed capital formation 5	Changes in inventories ²⁾ 6	Exports ³⁾ 8	Imports ³⁾ 9
1995		5,308.9	5,210.8							2,998.6	1,093.8	1,092.3	26.2	98.1	1,569.6	1,471.5
1996	5,534.4	5,408.7	3,143.7	1,142.4	1,121.2	1.4	125.7	1,658.0	1,532.3
1997	5,648.0	5,498.7	3,198.5	1,150.7	1,136.9	12.6	149.2	1,828.8	1,679.5
1998	5,874.5	5,733.4	3,324.8	1,177.0	1,197.3	34.2	141.1	1,944.7	1,803.6
1999	6,127.4	6,019.6	3,475.5	1,229.6	1,278.0	36.4	107.8	2,038.7	1,930.9
1999 Q2	1,521.8	1,495.2	863.9	306.4	316.3	8.6	26.6	497.4	470.8
Q3	1,539.4	1,513.1	873.1	308.8	324.0	7.3	26.2	518.9	492.7
Q4	1,557.1	1,531.5	881.9	310.9	326.1	12.6	25.6	541.4	515.7
2000 Q1	1,576.8	1,553.6	894.5	314.4	335.0	9.7	23.2	564.2	541.0
Q2	1,591.3	1,575.3	904.3	315.9	339.9	15.1	15.9	582.9	567.0
Q3	.	.	.	.	.	.	.	.	.

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP						External balance ³⁾		
	10	Domestic demand		Private consumption 12	Government consumption 13	Gross fixed capital formation 14	Changes in inventories ²⁾ 15	Exports ³⁾ 17	Imports ³⁾ 18
1995		5,308.9	5,210.8							2,998.6	1,093.8	1,092.3	26.2	98.1	1,569.6	1,471.5
1996	5,383.4	5,262.9	3,046.0	1,111.4	1,105.5	0.0	120.5	1,637.7	1,517.2
1997	5,505.1	5,350.6	3,092.5	1,121.7	1,130.0	6.4	154.5	1,807.7	1,653.3
1998	5,656.3	5,532.4	3,184.1	1,134.0	1,184.1	30.3	123.8	1,933.8	1,809.9
1999	5,796.5	5,698.3	3,270.5	1,151.3	1,246.3	30.2	98.2	2,024.0	1,925.8
1999 Q2	1,440.7	1,419.2	814.1	287.2	309.4	8.4	21.6	496.9	475.3
Q3	1,454.5	1,427.7	819.8	288.3	315.4	4.1	26.9	513.5	486.6
Q4	1,468.6	1,438.7	824.8	289.4	316.2	8.4	29.9	530.8	500.9
2000 Q1	1,482.1	1,450.1	832.0	291.3	321.7	5.0	32.0	544.8	512.8
Q2	1,494.3	1,463.3	837.9	291.9	324.7	8.8	31.0	557.0	526.0
Q3	1,504.4	1,475.8	841.2	292.4	328.9	13.3	28.6	573.8	545.2

(annual percentage changes)

1995	2.2	2.0	1.8	0.7	2.3	—	—	7.9	7.5
1996	1.4	1.0	1.6	1.6	1.2	—	—	4.3	3.1
1997	2.3	1.7	1.5	0.9	2.2	—	—	10.4	9.0
1998	2.7	3.4	3.0	1.1	4.8	—	—	7.0	9.5
1999	2.5	3.0	2.7	1.5	5.3	—	—	4.7	6.4
1999 Q2	2.1	3.0	2.7	1.5	5.6	—	—	2.4	5.1
Q3	2.6	3.0	2.6	1.6	5.8	—	—	5.7	7.1
Q4	3.3	2.9	2.6	1.5	5.4	—	—	10.2	9.2
2000 Q1	3.5	2.6	2.5	1.7	5.4	—	—	12.8	10.8
Q2	3.7	3.1	2.9	1.6	4.9	—	—	12.1	10.7
Q3	3.4	3.4	2.6	1.4	4.3	—	—	11.7	12.0

Source: Eurostat.

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

2) Including acquisitions less disposals of valuables.

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

Value added by activity ¹⁾

3. Current prices

(index: 1995 = 100, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ²⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
Share in the total (%) ³⁾	100	2.6	23.7	6.0	20.7	25.3	21.7		
	1	2	3	4	5	6	7	8	9
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	104.1	105.9	102.2	99.7	102.7	107.3	104.8	102.7	105.0
1997	106.0	105.2	103.8	96.6	105.3	110.9	105.9	102.1	108.7
1998	109.8	105.6	106.9	97.2	110.3	116.1	109.3	102.2	115.2
1999	114.1	104.1	108.6	101.5	114.5	123.2	113.7	103.8	124.0
1999 Q2	113.3	103.5	107.6	100.8	113.7	122.3	113.5	103.4	123.0
Q3	114.6	101.9	109.2	102.2	114.9	123.9	114.1	103.6	124.9
Q4	115.8	104.6	110.3	103.4	116.3	125.6	114.8	105.1	127.1
2000 Q1	117.5	106.0	111.9	105.6	117.4	127.8	116.2	106.0	126.9
Q2	118.5	103.3	113.7	105.3	118.9	128.7	116.8	106.4	128.4
Q3	.	.	.	.	.	.	.	.	.

4. Constant prices ⁴⁾

(index: 1995 = 100, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ²⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
Share in the total (%) ³⁾	100	2.6	23.7	6.0	20.7	25.3	21.7		
	10	11	12	13	14	15	16	17	18
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	101.5	105.8	99.7	98.1	100.8	103.7	101.8	102.6	101.4
1997	103.8	106.9	102.8	96.3	104.0	107.0	102.8	106.1	103.5
1998	106.7	109.4	105.1	96.2	107.9	111.3	104.4	109.9	106.5
1999	109.2	112.0	106.8	97.9	111.3	115.3	105.6	113.8	110.5
1999 Q2	108.6	111.2	106.1	97.6	110.6	114.6	105.3	112.6	109.3
Q3	109.7	112.6	107.4	98.2	111.6	115.9	105.8	114.5	110.8
Q4	110.6	113.3	108.5	98.9	112.8	117.2	106.2	116.0	112.8
2000 Q1	111.9	112.1	110.3	100.1	114.4	118.8	106.7	117.4	111.3
Q2	112.7	111.7	111.3	99.1	115.6	119.7	107.2	118.5	113.6
Q3	113.8	112.5	112.7	99.4	116.2	121.4	107.8	119.9	111.9

(annual percentage changes)

1995	2.3	0.9	3.0	-0.3	2.3	3.1	1.6	-0.3	0.6
1996	1.5	5.8	-0.3	-1.9	0.8	3.7	1.8	2.6	1.4
1997	2.3	1.0	3.1	-1.9	3.2	3.2	0.9	3.5	2.1
1998	2.8	2.3	2.2	0.0	3.8	4.0	1.6	3.5	2.9
1999	2.4	2.4	1.6	1.7	3.1	3.6	1.2	3.6	3.7
1999 Q2	2.1	1.4	0.8	2.2	2.9	3.5	1.1	3.5	3.1
Q3	2.5	3.3	1.9	2.2	2.9	3.8	1.1	3.8	3.8
Q4	3.2	3.3	3.8	3.0	3.7	3.9	1.1	3.9	4.7
2000 Q1	3.7	1.0	4.9	3.4	3.8	4.5	1.5	4.9	2.1
Q2	3.7	0.4	5.0	1.5	4.6	4.4	1.8	5.2	3.9
Q3	3.7	-0.1	4.9	1.2	4.2	4.8	1.9	4.7	1.0

Source: ECB calculations based on Eurostat data.

1) Estimates based on incomplete national data and therefore presented as indices.

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

3) Share of each branch of activity in total value added in 1995.

4) Value added at 1995 prices.

Table 5.2
Selected other real economy indicators ¹⁾
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			7		8	9	10
1995	100.1	2.8	100.1	3.5	3.7	2.6	7.3	-0.7	-1.2	1.8	0.4	
1996	100.1	-0.1	100.4	0.3	0.0	-0.2	1.5	-0.1	0.0	-0.4	-2.3	
1997	103.7	3.7	104.6	4.2	4.8	5.3	4.8	3.3	3.4	2.6	0.0	
1998	107.6	3.7	109.0	4.2	4.7	4.0	6.5	5.6	6.3	1.9	0.3	
1999	109.8	2.0	111.0	1.9	1.9	2.3	1.5	3.0	3.2	1.5	2.8	
1999 Q3	110.6	2.6	111.7	2.5	2.4	3.3	1.6	3.3	3.6	2.0	2.7	
Q4	112.0	4.2	113.5	4.2	4.6	5.5	2.7	5.4	5.7	3.5	4.5	
2000 Q1	113.4	5.1	114.7	4.8	5.1	5.7	6.7	6.6	7.7	0.1	4.9	
Q2	114.7	5.6	116.6	6.0	6.3	6.3	8.6	7.6	8.3	2.9	-0.1	
Q3	.	.	117.6	5.8	6.3	5.3	10.2	6.5	7.3	2.0	.	
1999 Nov.	112.1	4.3	113.6	4.3	4.8	5.3	3.0	5.3	5.6	3.7	3.7	
Dec.	112.7	5.7	113.8	5.5	6.1	7.6	3.2	7.8	8.5	4.1	7.4	
2000 Jan.	111.9	3.0	113.7	3.2	3.2	4.4	4.7	3.7	4.8	-2.1	1.7	
Feb.	114.3	6.9	114.7	5.8	6.5	6.6	7.2	8.6	9.9	1.5	13.5	
Mar.	114.0	5.3	115.7	5.4	5.5	6.0	7.9	7.1	8.2	0.7	0.7	
Apr.	113.9	5.6	116.4	6.2	6.6	6.0	8.1	9.0	9.9	3.5	-1.0	
May	116.5	7.8	117.1	8.2	8.4	8.8	11.7	9.7	10.8	3.3	2.7	
June	113.6	3.5	116.4	3.8	4.2	4.2	6.4	4.2	4.6	1.9	-2.0	
July	.	.	117.0	5.3	5.6	4.9	8.1	6.5	7.3	1.7	.	
Aug.	.	.	117.5	6.6	7.3	6.5	12.2	8.4	10.1	1.6	.	
Sep.	.	.	118.2	5.8	6.3	4.9	10.8	5.4	5.8	2.5	.	
Oct.	.	.	118.1	3.8	4.1	3.5	8.9	1.4	1.6	0.6	.	
Nov.	.	.	.	.	.	.	.	.	.	.	.

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

	Retail sales (s.a.)									New passenger car registrations	
	Current prices				Constant prices					Thousands ²⁾	(s.a.)
	Total		Total		Food, beverages, tobacco	Non-food	Textiles, clothing, footwear	Household equipment			
	Index 1995 = 100		Index 1995 = 100								
12	13	14	15	16	17	18	19	20	21		
1995	100.0	.	100.0	.	.	.	.	.	777	0.9
1996	101.9	1.9	100.5	0.5	0.6	.	-1.0	0.1	826	6.2	
1997	104.1	2.2	101.7	1.2	1.1	1.3	0.6	1.5	861	4.2	
1998	107.8	3.5	104.7	2.9	2.1	3.5	2.1	4.5	923	7.2	
1999	111.4	3.3	107.4	2.6	3.2	2.3	1.4	3.1	973	5.4	
1999 Q3	111.8	2.9	107.7	2.3	3.2	1.8	-1.1	4.0	995	6.6	
Q4	113.4	4.2	108.8	3.0	3.5	2.6	2.8	3.7	953	-0.4	
2000 Q1	114.1	3.7	109.0	2.4	3.1	1.7	1.2	5.4	981	1.5	
Q2	115.7	4.7	110.2	3.3	3.3	2.8	1.5	5.1	978	0.2	
Q3	116.7	4.4	110.7	2.8	2.4	2.3	3.1	4.3	922	-7.8	
1999 Nov.	113.5	3.7	108.9	2.4	3.0	2.1	1.7	3.7	957	-1.8	
Dec.	113.4	4.1	108.6	2.8	2.6	2.8	2.7	3.7	923	-2.7	
2000 Jan.	113.6	3.9	108.8	2.6	3.6	1.7	-0.3	4.6	976	0.8	
Feb.	114.7	5.1	109.7	3.7	3.3	3.8	6.9	6.8	994	5.3	
Mar.	113.8	2.3	108.6	1.0	2.5	-0.5	-2.7	4.6	972	-0.9	
Apr.	115.1	4.7	109.9	3.6	3.3	3.5	1.8	5.9	971	-1.7	
May	116.2	5.8	110.6	4.3	5.1	3.9	3.3	5.9	977	1.4	
June	115.7	3.6	109.9	2.0	1.6	1.1	-0.6	3.4	984	1.1	
July	116.0	3.7	110.4	2.4	2.1	1.5	0.7	5.2	883	-14.4	
Aug.	116.7	4.3	110.7	2.5	2.5	2.1	1.5	2.8	936	-4.3	
Sep.	117.4	5.3	111.1	3.4	2.7	3.4	7.5	5.0	947	-1.6	
Oct.	.	.	.	.	.	.	.	.	913	-7.0
Nov.	.	.	.	.	.	.	.	.	931	-3.2

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

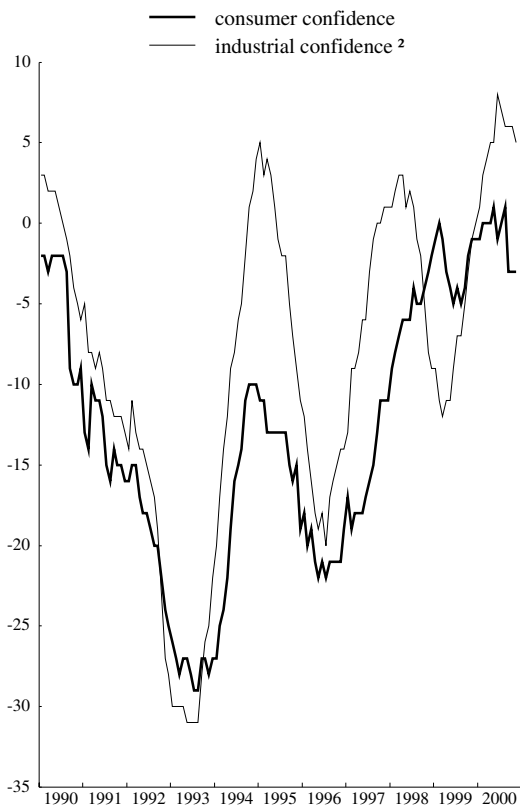
Business and consumer surveys

(percentage balances, seasonally adjusted, unless otherwise indicated)

	Manufacturing industry				Construction confidence indicator 5	Retail trade confidence indicator 6	Consumer confidence indicator 7
	Confidence indicator 1	Production expectations 2	Assessment of order books 3	Capacity utilisation ¹⁾ (percentages) 4			
1996	-16	-1	-30	80.6	-36	-11	-21
1997	-4	11	-15	81.0	-33	-9	-15
1998	-1	11	-5	83.0	-19	-3	-5
1999	-7	7	-17	81.8	-7	-5	-3
2000	.	.	.	83.8	.	.	.
1999 Q4	-1	14	-9	81.9	-3	-7	-1
2000 Q1	3	15	-2	83.0	0	0	0
Q2	6	17	5	83.7	2	3	0
Q3	6	18	5	83.9	2	-2	-1
Q4	.	.	.	84.7	.	.	.
1999 Nov.	-1	15	-9	-	0	-9	-1
Dec.	0	13	-6	-	-4	-2	-1
2000 Jan.	1	13	-4	-	2	-2	-1
Feb.	3	16	-2	-	-2	-3	0
Mar.	4	15	1	-	0	5	0
Apr.	5	15	3	-	3	-3	0
May	5	16	4	-	1	4	1
June	8	19	8	-	3	7	-1
July	7	19	5	-	2	-3	0
Aug.	6	18	4	-	5	-3	1
Sep.	6	18	5	-	-1	-1	-3
Oct.	6	19	5	-	2	-1	-3
Nov.	5	17	4	-	-1	-3	-3

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 ¹⁾
(annual percentage changes, unless otherwise indicated)

	Employment						Unemployment (s.a.)			
	Whole economy				Industry (excluding construction)	Services	Total		Adult ²⁾	Youth ²⁾
	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	.	.	.	.	.	14.321	11.3	9.5	23.3
1996	100.1	0.1	0.5	0.5	-1.2	1.2	14.724	11.5	9.8	23.9
1997	100.9	0.8	0.9	0.2	-0.4	1.4	14.822	11.6	9.9	23.2
1998	102.5	1.6	1.8	0.8	1.1	2.1	14.082	10.9	9.4	21.3
1999	104.3	1.7	2.1	-0.4	0.1	2.5	13.013	10.0	8.7	19.2
1999 Q3	104.9	1.7	2.2	-0.8	-0.1	2.6	12.910	9.9	8.6	18.9
Q4	105.4	1.7	2.2	-0.5	0.1	2.5	12.613	9.6	8.5	18.2
2000 Q1	105.9	1.9	2.3	-0.1	0.2	2.6	12.370	9.4	8.3	18.1
Q2	106.6	2.2	2.5	0.4	0.9	2.9	11.972	9.1	8.0	17.5
Q3	.	.	.	.	.	.	11.763	9.0	7.8	17.4
1999 Nov.	-	-	-	-	-	-	12.590	9.6	8.4	18.2
Dec.	-	-	-	-	-	-	12.560	9.6	8.4	18.1
2000 Jan.	-	-	-	-	-	-	12.501	9.5	8.4	18.1
Feb.	-	-	-	-	-	-	12.390	9.5	8.3	18.1
Mar.	-	-	-	-	-	-	12.218	9.3	8.2	17.9
Apr.	-	-	-	-	-	-	12.103	9.2	8.1	17.7
May	-	-	-	-	-	-	11.980	9.1	8.0	17.5
June	-	-	-	-	-	-	11.834	9.0	7.9	17.3
July	-	-	-	-	-	-	11.781	9.0	7.8	17.3
Aug.	-	-	-	-	-	-	11.806	9.0	7.8	17.5
Sep.	-	-	-	-	-	-	11.701	8.9	7.8	17.3
Oct.	-	-	-	-	-	-	11.573	8.8	7.7	17.0
Nov.	-	-	-	-	-	-	11.505	8.8	7.7	16.9

2. Labour costs and productivity
(annual percentage changes)

	Unit labour cost in the whole economy, and components (s.a.)			Labour cost indices ³⁾ and components					Earnings per employee in manufacturing
	Unit labour cost	Compensation per employee	Labour productivity	Total	Wages and salaries	Other	Industry excluding construction	Services	
							Total	Total	
11	12	13	14	15	16	17	18	19	
1995	1.5	3.2	1.7	-	-	-	-	-	3.8
1996	1.9	3.0	1.1	3.4	3.0	4.6	3.7	4.0	3.7
1997	0.7	2.3	1.5	2.5	2.4	2.8	2.4	2.6	2.6
1998	0.2	1.4	1.2	1.8	2.0	1.2	1.9	1.4	2.9
1999	1.3	2.0	0.7	2.2	2.4	1.7	2.3	1.9	2.4
1998 Q2	0.1	1.1	1.0	1.9	2.1	1.1	2.9	1.5	3.1
Q3	0.5	1.2	0.8	1.7	1.8	1.2	1.5	1.2	2.9
Q4	1.0	1.2	0.2	1.8	1.9	1.4	2.1	1.3	3.2
1999 Q1	1.6	1.6	0.0	2.1	2.2	1.4	2.3	1.7	2.7
Q2	1.6	2.1	0.5	2.1	2.2	1.5	1.7	2.1	2.6
Q3	1.1	1.8	0.7	2.3	2.4	1.9	2.6	2.1	2.5
Q4	0.3	1.7	1.4	2.4	2.6	1.9	2.6	1.8	1.9
2000 Q1	0.6	2.4	1.7	3.6	3.7	3.1	3.7	3.0	2.8
Q2	0.5	1.9	1.3	3.7	3.8	3.2	3.5	3.0	2.7

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

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

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

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

6 Saving, investment and financing in the euro area

Table 6

Saving, investment and financing

(as a percentage of GDP, unless otherwise indicated)

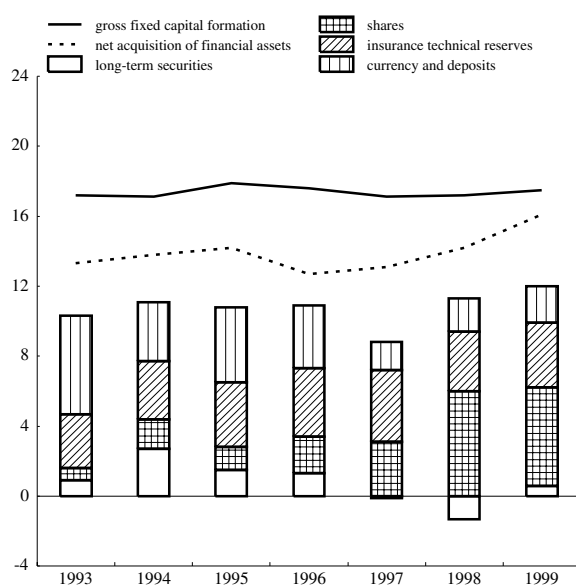
	Euro area saving and investment ¹⁾			Investment of private non-financial sectors ^{1) 2)}							
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other than shares	Long-term securities	Shares	Insurance technical reserves
	1	2	3	4	5	6	7	8	9	10	11
1992	21.3	22.5	-0.9	18.8	11.8	13.5	4.0	1.6	0.4	1.4	2.9
1993	20.4	20.7	0.6	17.2	10.4	13.3	5.6	0.5	0.9	0.7	3.1
1994	20.8	20.3	0.3	17.1	10.2	13.8	3.4	2.5	2.7	1.7	3.3
1995	22.5	21.2	0.5	17.9	11.3	14.2	4.3	1.8	1.5	1.3	3.7
1996	22.0	20.7	1.0	17.6	11.1	12.7	3.6	0.3	1.3	2.1	3.9
1997	22.1	20.1	1.6	17.1	10.9	13.1	1.6	-0.5	-0.1	3.1	4.1
1998	22.1	20.1	1.2	17.2	11.1	14.2	1.9	-2.1	-1.3	6.0	3.4
1999	21.6	20.5	0.3	17.5	11.4	16.1	2.1	0.2	0.6	5.6	3.7

	Financing of private non-financial sectors ^{1) 2)}									Net financial investment ³⁾	Financial investment as a % of gross investment ⁴⁾	Net incurrence of liabilities as a % of financing ⁵⁾
	Gross saving	Households	Net incurrence of liabilities	Securities other than shares	Long-term securities	Shares	Loans	Long-term loans				
	12	13	14	15	16	17	18	19				
1992	21.0	13.1	10.2	0.7	0.6	1.4	6.7	4.7	3.3	41.8	32.7	
1993	20.7	12.7	7.9	1.3	1.4	1.5	3.6	4.4	5.4	43.6	27.6	
1994	20.7	11.9	9.6	1.0	1.1	1.8	3.9	4.0	4.2	44.7	31.7	
1995	22.2	11.9	7.7	-1.8	-1.8	1.3	5.0	3.7	6.5	44.2	25.8	
1996	21.7	11.4	8.8	0.2	0.0	1.7	5.8	4.9	3.9	41.9	28.9	
1997	20.4	10.8	9.2	0.1	0.1	1.3	5.8	4.6	3.9	43.4	31.1	
1998	19.2	10.1	11.6	0.3	0.2	2.3	6.9	5.4	2.6	45.2	37.7	
1999	18.0	9.7	13.9	0.6	0.3	2.0	8.7	7.0	2.2	47.9	43.6	

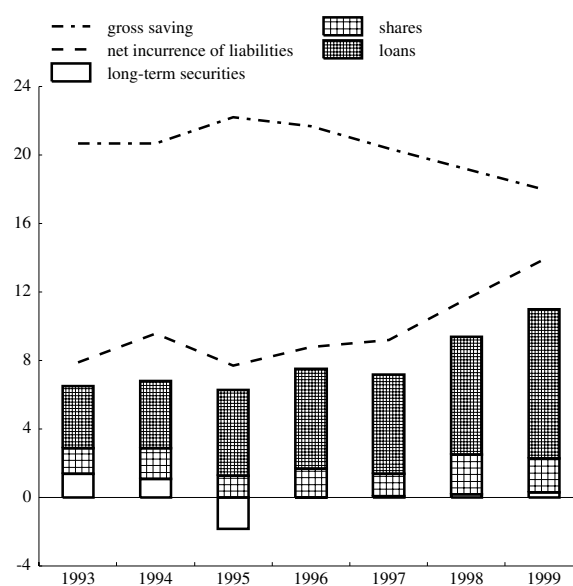
Investment and financing of private non-financial sectors ^{1) 2)}

(as a percentage of GDP)

Investment



Financing



Source: ECB.

1) Selected items of investment and financing.

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

3) Column 6 - column 14.

4) Column 6 ÷ (column 4 + column 6).

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

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

Table 7.1

Revenue, expenditure and deficit / surplus ¹⁾

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue	Direct taxes			Indirect taxes	Received by EU institutions	Social contributions			Sales	Capital revenue	Capital taxes	Memo: fiscal burden ²⁾
			Households	Corporations				Employers	Employees					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	46.4	46.0	11.9	9.6	2.3	13.0	0.9	16.7	8.5	5.3	2.3	0.3	0.2	41.8
1992	47.6	46.9	11.9	9.8	2.0	13.0	0.9	17.1	8.6	5.5	2.4	0.7	0.6	42.6
1993	48.3	47.8	12.1	10.0	2.1	13.3	0.8	17.5	8.7	5.7	2.5	0.5	0.3	43.2
1994	47.7	47.3	11.6	9.6	2.0	13.5	0.8	17.5	8.5	5.7	2.4	0.4	0.2	42.8
1995	47.2	46.6	11.6	9.5	2.0	13.3	0.9	17.3	8.4	5.7	2.5	0.5	0.3	42.6
1996	48.0	47.5	12.0	9.6	2.3	13.4	0.8	17.6	8.7	5.7	2.5	0.5	0.3	43.3
1997	48.3	47.6	12.2	9.6	2.6	13.6	0.7	17.6	8.7	5.7	2.5	0.7	0.4	43.7
1998	47.8	47.3	12.4	9.9	2.4	14.2	0.7	16.5	8.5	5.0	2.4	0.5	0.3	43.4
1999	48.4	47.8	12.8	10.1	2.6	14.4	0.6	16.4	8.5	5.0	2.4	0.6	0.3	44.0

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure	Investment	Capital transfers	Paid by EU institutions	Memo: primary expenditure ⁴⁾
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments ³⁾	Subsidies	Paid by EU institutions					
1991	50.8	46.0	11.2	5.3	5.1	24.4	20.5	2.5	0.6	4.8	3.3	1.6	0.0	45.7
1992	52.2	47.4	11.4	5.4	5.6	25.1	21.5	2.3	0.5	4.7	3.2	1.5	0.0	46.6
1993	53.8	49.1	11.6	5.5	5.8	26.1	22.4	2.5	0.6	4.7	3.1	1.7	0.1	48.0
1994	52.7	48.3	11.3	5.3	5.5	26.1	22.5	2.4	0.6	4.4	2.9	1.5	0.0	47.2
1995	52.2	47.7	11.2	5.2	5.7	25.7	22.4	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.2	48.2	11.2	5.2	5.7	26.2	22.9	2.2	0.6	4.0	2.6	1.4	0.0	46.5
1997	50.8	47.1	11.0	5.1	5.1	25.9	22.8	2.1	0.5	3.7	2.4	1.3	0.1	45.8
1998	49.9	46.0	10.7	5.0	4.7	25.6	22.3	2.0	0.5	3.9	2.4	1.5	0.1	45.2
1999	49.7	45.6	10.7	5.1	4.2	25.5	22.3	2.0	0.5	4.1	2.5	1.6	0.1	45.4

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

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+) ⁵⁾	Government consumption ⁶⁾							
	Total	Central government	State government	Local government	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
1991	-4.4	-4.2	-0.3	-0.1	0.3	0.7	20.2	11.2	5.3	4.6	1.7	-2.3	8.8	11.5
1992	-4.6	-4.0	-0.3	-0.2	-0.1	1.0	20.7	11.4	5.4	4.8	1.7	-2.4	8.9	11.8
1993	-5.5	-4.9	-0.5	-0.2	-0.1	0.3	21.1	11.6	5.5	4.9	1.8	-2.5	9.1	12.1
1994	-5.0	-4.3	-0.5	-0.2	0.0	0.5	20.8	11.3	5.3	5.0	1.7	-2.4	8.8	12.0
1995	-5.0	-4.1	-0.5	-0.1	-0.3	0.7	20.5	11.2	5.2	5.1	1.8	-2.5	8.6	11.9
1996	-4.3	-3.6	-0.4	-0.1	-0.2	1.4	20.6	11.2	5.2	5.1	1.8	-2.5	8.6	12.0
1997	-2.6	-2.3	-0.4	0.1	0.1	2.5	20.3	11.0	5.1	5.1	1.8	-2.5	8.4	11.9
1998	-2.1	-2.1	-0.3	0.2	0.1	2.6	20.0	10.7	5.0	5.1	1.7	-2.4	8.3	11.8
1999	-1.3	-1.6	-0.1	0.1	0.3	3.0	20.1	10.7	5.1	5.1	1.7	-2.4	8.3	11.8

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

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1996	-3.8	-3.4	-7.4	-5.0	-4.1	-0.2	-7.1	2.6	-1.8	-3.8	-4.0	-3.2
1997	-1.9	-2.7	-4.0	-3.2	-3.0	0.7	-2.7	3.4	-1.1	-1.7	-2.6	-1.5
1998	-0.9	-2.1	-2.5	-2.6	-2.7	2.1	-2.8	3.7	-0.7	-2.3	-2.3	1.3
1999	-0.7	-1.4	-1.8	-1.1	-1.8	1.9	-1.9	4.4	1.0	-2.1	-2.0	1.9

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

1) Revenue, expenditure and deficit / surplus based on the ESA 95. Data for years up to 1995 are not directly comparable with data for recent years. Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.

2) The fiscal burden comprises taxes and social contributions.

3) Comprises social benefits, social transfers in kind via market producers and transfers to non-profit institutions serving households.

4) Comprises total expenditure minus interest expenditure.

5) Comprises total deficit / surplus excluding interest expenditure.

6) Corresponds to final consumption expenditure (P.3) of the general government in the ESA 95.

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

	Total	Financial instrument				Holder				
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ²⁾				Other creditors ³⁾
						Total	MFI	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1991	57.4	2.6	16.1	8.3	30.4	48.1	24.9	7.2	16.0	9.3
1992	60.9	2.6	16.7	8.7	32.9	50.3	26.7	7.5	16.1	10.7
1993	67.3	2.7	17.6	8.2	38.9	52.6	27.9	8.6	16.0	14.7
1994	70.0	2.9	16.6	8.3	42.1	56.1	29.9	9.7	16.5	13.8
1995	74.1	2.9	18.2	7.7	45.3	58.5	30.5	10.9	17.1	15.6
1996	75.3	2.9	17.7	7.6	47.1	59.1	30.3	13.1	15.7	16.2
1997	74.7	2.9	16.9	6.4	48.5	57.1	29.0	14.4	13.6	17.6
1998	73.0	2.8	15.7	5.5	49.0	53.5	27.0	16.2	10.4	19.5
1999	72.1	2.9	14.7	4.5	50.0	50.3	25.4	14.8	10.1	21.8

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

	Total	Issued by ⁴⁾				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency ⁵⁾	Non-domestic currency	Other currencies
1991	57.4	46.3	4.5	6.3	0.3	11.7	45.7	4.5	17.6	18.5	21.4	56.3	1.7	1.1
1992	60.9	49.4	4.7	6.3	0.4	12.1	48.8	6.0	17.8	21.0	22.1	59.7	2.1	1.3
1993	67.3	54.9	5.2	6.6	0.6	12.0	55.3	6.4	18.5	24.3	24.4	65.6	2.7	1.7
1994	70.0	57.5	5.4	6.4	0.7	11.2	58.7	7.1	16.6	26.5	26.9	68.0	2.7	1.9
1995	74.1	61.3	5.7	6.3	0.8	10.6	63.5	6.5	17.6	26.2	30.3	72.2	2.7	2.0
1996	75.3	62.5	6.1	6.2	0.5	10.2	65.1	6.0	19.2	25.2	30.9	73.3	2.5	2.0
1997	74.7	61.9	6.3	5.9	0.6	8.8	65.9	5.6	18.6	25.0	30.9	72.6	2.5	2.1
1998	73.0	60.7	6.3	5.7	0.3	7.7	65.3	5.2	16.3	25.7	30.8	71.2	2.8	1.8
1999	72.1	60.0	6.2	5.6	0.3	7.0	65.2	4.7	14.4	26.6	30.9	70.3	-	1.8

3. Euro area countries – government debt

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1996	130.9	59.8	111.3	68.2	57.1	74.3	122.1	6.2	75.2	69.1	62.7	57.1
1997	125.4	60.9	108.3	66.9	59.3	65.1	119.8	6.0	70.0	64.5	59.4	54.1
1998	119.6	60.7	105.5	65.1	59.7	55.0	116.2	6.4	66.6	64.0	55.7	48.7
1999	116.1	61.1	104.6	63.7	58.9	50.1	115.1	6.0	62.9	65.2	55.8	46.6

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

1) Data are partially estimated. Data for years up to 1995 are not directly comparable with data for recent years. General government gross consolidated debt at nominal value at the end of the year. Holdings by other governments are not consolidated.

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

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

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

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

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

	Total	Source of change				Financial instrument				Holder			
		Borrowing requirement ²⁾	Valuation effects ³⁾	Other changes in volume ⁴⁾	Aggregation effect ⁵⁾	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ⁶⁾	MFIs	Other financial corporations	Other creditors ⁷⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1991	5.0	5.1	0.0	0.2	-0.2	0.1	1.1	-0.1	3.8	.	.	.	.
1992	6.6	5.6	0.3	0.7	0.0	0.1	1.5	0.8	4.1	4.8	3.1	0.7	1.8
1993	7.9	7.5	0.3	0.1	0.0	0.2	1.2	-0.3	6.8	3.5	2.0	1.3	4.3
1994	5.9	5.1	0.2	0.7	-0.1	0.4	-0.1	0.6	5.1	6.1	3.3	1.5	-0.2
1995	7.7	5.6	0.2	2.2	-0.3	0.2	2.4	-0.2	5.3	5.2	2.2	1.7	2.5
1996	3.7	4.2	-0.2	0.1	-0.4	0.1	0.1	0.2	3.3	2.6	0.8	2.6	1.1
1997	2.2	2.3	0.2	-0.2	-0.1	0.0	-0.1	-0.9	3.2	0.1	-0.1	1.8	2.1
1998	1.5	1.8	-0.2	0.0	-0.1	0.1	-0.5	-0.7	2.6	-1.1	-0.8	2.4	2.6
1999	1.7	1.3	0.3	0.0	0.0	0.2	-0.4	-0.8	2.7	-1.3	-0.6	-0.8	3.0

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+)	Deficit-debt adjustment ⁸⁾											Other ¹⁰⁾
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				Total	Currency and deposits	Securities ⁹⁾	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	5.0	-4.4	0.6	1.1	0.3	0.1	0.4	0.2	-0.1	0.2	0.0	0.1	0.2	-0.6
1992	6.6	-4.6	2.0	0.8	0.2	0.1	0.3	0.1	-0.1	0.2	0.3	0.3	0.7	0.2
1993	7.9	-5.5	2.4	1.4	1.0	0.2	0.4	-0.2	-0.3	0.2	0.3	0.3	0.1	0.6
1994	5.9	-5.0	0.9	0.2	0.0	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	-0.2
1995	7.7	-5.0	2.7	0.6	0.0	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.7	-4.3	-0.6	-0.1	-0.1	0.0	0.0	0.0	-0.3	0.2	-0.2	-0.1	0.1	-0.4
1997	2.2	-2.6	-0.4	-0.5	0.1	-0.1	-0.1	-0.4	-0.8	0.3	0.2	0.2	-0.2	0.1
1998	1.5	-2.1	-0.6	-0.3	0.2	0.0	0.0	-0.6	-0.8	0.3	-0.2	0.0	0.0	-0.1
1999	1.7	-1.3	0.4	-0.1	0.5	0.0	0.1	-0.6	-1.0	0.2	0.3	0.2	0.0	0.2

Source: ECB.

- 1) Data are partially estimated. Data for years up to 1995 are not directly comparable with data for recent years. Annual change in gross nominal consolidated debt expressed as a percentage of GDP [$debt(t) - debt(t-1) \div GDP(t)$].
- 2) The borrowing requirement is by definition equal to transactions in government debt.
- 3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).
- 4) Comprises, in particular, the impact of the reclassification of units and certain types of debt assumption.
- 5) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt, due to variations in the exchange rates used for aggregation before 1999.
- 6) Holders resident in the country whose government has issued the debt.
- 7) Includes residents of euro area countries other than the country whose government has issued the debt.
- 8) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.
- 9) Excluding financial derivatives.
- 10) Comprises mainly transactions in other assets and liabilities (trade credit, other receivables/payables and financial derivatives).

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

Table 8.1

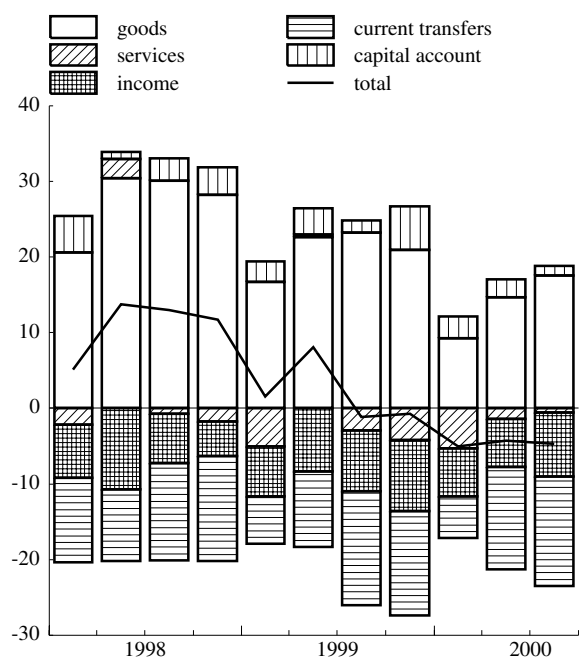
Summary balance of payments ^{1) 2)}

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

	Current account					Capital account	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers		Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	61.5	115.7	3.1	-15.2	-42.2	13.0	.	-44.5	-24.3	.	.	.	.
1998	31.1	109.3	-2.0	-28.8	-47.4	12.4	-61.2	-83.2	-99.7	-7.5	120.9	8.2	17.8
1999	-5.8	83.4	-11.8	-32.4	-45.0	13.5	19.1	-120.6	-41.7	8.1	163.1	10.2	-26.8
1999 Q3	-2.8	23.2	-2.9	-8.1	-15.0	1.6	-1.4	-12.2	21.7	6.5	-17.4	0.0	2.6
Q4	-6.5	20.9	-4.2	-9.4	-13.8	5.7	2.6	-46.6	-2.7	-0.4	52.8	-0.5	-1.9
2000 Q1	-7.9	9.3	-5.3	-6.3	-5.5	2.8	47.8	148.0	-192.6	2.5	91.3	-1.4	-42.7
Q2	-6.6	14.7	-1.4	-6.3	-13.5	2.4	-2.9	-18.2	51.9	4.8	-45.3	3.8	7.2
Q3	-5.9	17.6	-0.6	-8.5	-14.4	1.2	-0.4	-91.3	13.2	-1.8	74.6	4.9	5.0
1999 Aug.	-1.8	4.6	-0.7	-0.8	-5.0	0.6	15.8	-9.2	3.1	3.0	18.6	0.4	-14.6
Sep.	-3.3	5.0	-1.1	-1.8	-5.4	0.3	-18.8	0.1	12.0	1.5	-33.1	0.7	21.8
Oct.	-0.5	9.1	-0.4	-5.0	-4.1	1.6	8.4	-9.3	-14.6	-2.2	34.2	0.3	-9.5
Nov.	-2.1	6.3	-2.3	-1.7	-4.4	1.2	1.5	-17.0	11.2	1.9	5.4	0.0	-0.6
Dec.	-3.9	5.5	-1.5	-2.7	-5.2	3.0	-7.3	-20.3	0.7	-0.2	13.3	-0.8	8.2
2000 Jan.	-9.0	-0.5	-2.1	-5.0	-1.3	1.4	19.2	0.8	-5.3	-0.8	26.7	-2.2	-11.6
Feb.	0.0	4.2	-2.1	-1.0	-1.2	0.1	-1.9	146.0	-152.9	1.9	2.8	0.3	1.8
Mar.	1.2	5.6	-1.1	-0.3	-3.0	1.3	30.5	1.1	-34.4	1.4	61.8	0.5	-32.9
Apr.	-5.9	4.3	-1.3	-3.8	-5.1	1.5	2.7	1.1	-5.9	2.1	5.1	0.2	1.6
May	-0.1	4.4	-0.3	-1.0	-3.1	0.6	10.5	-8.7	1.9	0.3	15.7	1.3	-11.0
June	-0.6	5.9	0.2	-1.5	-5.3	0.2	-16.2	-10.6	55.8	2.3	-66.1	2.3	16.5
July	-2.2	8.4	0.6	-5.7	-5.5	0.5	7.0	-11.3	-5.9	-3.2	28.0	-0.5	-5.3
Aug.	-2.2	4.6	0.3	-1.6	-5.6	0.1	-3.9	-45.7	15.3	-0.6	25.9	1.2	6.1
Sep.	-1.5	4.5	-1.5	-1.1	-3.4	0.7	-3.5	-34.3	3.9	2.0	20.6	4.2	4.3
Oct.	-0.1	8.2	-1.2	-1.2	-6.0	0.1	-6.8	-15.7	-1.7	-2.2	11.8	1.0	6.8

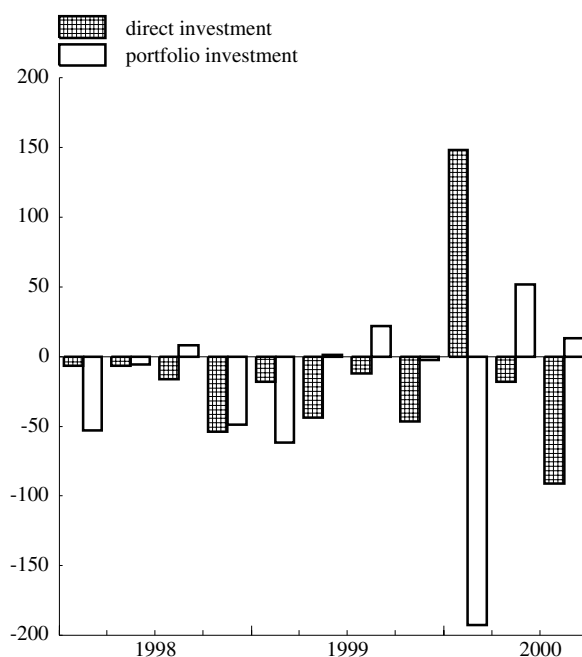
Current and capital accounts

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



Direct and portfolio investment

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



Source: ECB.

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

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

Table 8.2**Balance of payments: current and capital accounts ¹⁾***(EUR billions (ECU billions to end-1998); 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		
1997	1,212.9	1,151.4	749.1	633.4	214.2	211.0	189.5	204.7	60.1	102.3	18.9	5.9
1998	1,270.2	1,239.2	779.2	669.9	229.8	231.9	198.5	227.3	62.7	110.0	17.7	5.3
1999	1,335.6	1,341.4	814.5	731.1	241.5	253.3	213.2	245.6	66.4	111.5	19.7	6.2
1999 Q3	331.0	333.8	205.4	182.2	64.3	67.2	48.6	56.7	12.8	27.8	3.2	1.6
Q4	357.7	364.1	227.1	206.2	63.0	67.3	52.5	61.9	15.0	28.8	7.8	2.0
2000 Q1	359.5	367.4	221.2	211.9	58.5	63.8	54.7	61.0	25.2	30.7	4.3	1.4
Q2	387.7	394.3	239.0	224.3	66.8	68.3	66.9	73.2	14.9	28.4	4.7	2.4
Q3	386.2	392.1	244.8	227.2	70.4	71.0	59.9	68.4	11.1	25.5	3.2	2.0
1999 Aug.	100.6	102.4	60.4	55.7	20.8	21.5	15.3	16.1	4.1	9.1	1.0	0.4
Sep.	112.5	115.8	70.7	65.8	20.9	22.0	16.7	18.5	4.1	9.5	0.9	0.5
Oct.	116.7	117.1	75.2	66.1	20.8	21.3	15.8	20.8	4.9	9.0	2.1	0.5
Nov.	117.9	120.0	76.2	70.0	20.1	22.5	16.9	18.6	4.6	9.0	1.9	0.7
Dec.	123.2	127.0	75.7	70.2	22.1	23.6	19.8	22.5	5.6	10.8	3.8	0.9
2000 Jan.	111.9	121.0	64.5	65.0	18.2	20.4	16.4	21.4	12.9	14.2	1.9	0.5
Feb.	115.8	115.8	72.9	68.7	18.6	20.7	17.4	18.4	6.8	8.0	0.5	0.4
Mar.	131.8	130.6	83.8	78.2	21.7	22.8	20.9	21.1	5.5	8.5	1.8	0.5
Apr.	116.1	121.9	72.2	67.9	20.4	21.7	18.9	22.7	4.5	9.6	2.1	0.5
May	137.7	137.8	84.8	80.4	23.0	23.3	23.9	24.9	6.1	9.2	1.7	1.1
June	133.9	134.5	82.0	76.1	23.5	23.2	24.2	25.6	4.3	9.6	1.0	0.8
July	132.2	134.4	83.9	75.5	24.8	24.2	19.7	25.4	3.9	9.4	1.1	0.6
Aug.	120.8	123.0	75.5	70.9	23.4	23.1	18.5	20.1	3.4	9.0	0.9	0.8
Sep.	133.2	134.7	85.3	80.9	22.3	23.7	21.8	22.9	3.8	7.2	1.2	0.6
Oct.	140.7	140.9	92.9	84.7	23.0	24.2	21.3	22.5	3.5	9.5	0.7	0.6

Source: ECB.

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

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

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	213.2	245.6	12.4	5.0	200.8	240.6	44.1	45.4	64.1	105.9	92.6	89.4
1999 Q2	60.9	69.2	3.0	1.3	57.9	67.9	14.4	11.7	18.4	32.9	25.2	23.3
Q3	48.6	56.7	3.1	1.4	45.5	55.2	8.9	10.1	15.5	24.5	21.2	20.6
Q4	52.5	61.9	3.3	1.4	49.1	60.5	11.7	13.0	15.1	23.8	22.4	23.7
2000 Q1	54.7	61.0	3.1	1.1	51.5	59.9	13.3	13.5	13.5	21.7	24.8	24.7
Q2	66.9	73.2	3.0	1.4	64.0	71.9	19.2	13.8	17.2	30.8	27.6	27.3

	Income on direct investment				Income on portfolio investment							
	Equity		Debt		Equity		Debt instruments					
	Credit 13	Debit 14	Credit 15	Debit 16			Total		Bonds and notes		Money market instruments	
					Credit 19	Debit 20	Credit 21	Debit 22	Credit 23	Debit 24		
1999	37.7	41.5	6.4	3.8	9.6	32.5	54.5	73.4	51.7	71.7	2.9	1.7
1999 Q2	13.0	10.7	1.4	1.0	3.3	15.0	15.0	17.9	14.2	17.2	0.9	0.7
Q3	7.4	9.2	1.5	1.0	2.4	6.4	13.1	18.0	12.6	17.6	0.5	0.4
Q4	9.7	11.9	2.0	1.1	2.3	5.9	12.8	17.9	12.1	17.9	0.7	0.0
2000 Q1	11.0	12.0	2.3	1.5	1.9	5.8	11.6	15.9	.	.	.	.
Q2	16.9	12.2	2.3	1.6	3.5	17.2	13.7	13.5	.	.	.	.

Source: ECB.

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

	Abroad			In the euro area		
	Total 1	Equity capital and reinvested earnings 2	Other capital, mostly intercompany loans 3	Total 4	Equity capital and reinvested earnings 5	Other capital, mostly intercompany loans 6
1997	-93.1	.	.	48.6	.	.
1998	-175.0	.	.	91.8	.	.
1999	-286.8	-212.2	-74.6	166.2	126.8	39.5
1999 Q3	-30.5	-33.2	2.8	18.2	12.5	5.7
Q4	-139.6	-124.7	-14.9	93.0	90.1	2.9
2000 Q1	-63.3	-33.2	-30.1	211.3	191.3	20.0
Q2	-71.9	-44.8	-27.1	53.7	19.3	34.5
Q3	-110.8	-102.7	-8.2	19.5	17.5	2.1
1999 Aug.	-13.6	-11.8	-1.8	4.4	3.3	1.1
Sep.	-11.9	-9.7	-2.2	12.0	6.4	5.6
Oct.	-16.5	-14.8	-1.7	7.1	1.2	5.9
Nov.	-26.6	-15.9	-10.7	9.6	8.4	1.2
Dec.	-96.6	-94.0	-2.6	76.3	80.5	-4.2
2000 Jan.	-7.0	-6.4	-0.5	7.8	7.4	0.4
Feb.	-20.1	-13.6	-6.5	166.1	159.1	7.1
Mar.	-36.2	-13.1	-23.1	37.3	24.8	12.6
Apr.	-16.0	-7.4	-8.6	17.1	5.1	12.0
May	-33.8	-15.2	-18.6	25.1	11.4	13.7
June	-22.1	-22.2	0.2	11.5	2.7	8.8
July	-9.9	-21.2	11.3	-1.5	9.2	-10.7
Aug.	-53.7	-55.3	1.6	8.0	3.6	4.4
Sep.	-47.2	-26.2	-21.1	13.0	4.7	8.3
Oct.	-24.8	-27.9	3.1	9.2	6.5	2.6

Source: ECB.

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

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

	Total		Equity		Debt instruments					
	Assets	Liabilities	Assets	Liabilities	Assets			Liabilities		
					Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
1	2	3	4	5	6	7	8	9	10	
1998	-327.6	227.9	-105.5	105.9	-222.1	-203.8	-18.2	122.0	108.3	13.7
1999	-309.6	267.8	-155.4	106.0	-154.1	-153.6	-0.5	161.8	109.0	52.8
1999 Q3	-60.1	81.8	-34.6	29.4	-25.4	-25.8	0.4	52.5	42.1	10.4
Q4	-86.4	83.7	-55.4	44.3	-31.0	-15.4	-15.5	39.5	17.4	22.1
2000 Q1	-153.9	-38.8	-116.9	-105.7	-37.0	-38.6	1.6	67.0	46.8	20.2
Q2	-85.2	137.0	-54.3	52.4	-30.9	-24.6	-6.3	84.6	50.7	33.9
Q3	-79.1	92.3	-47.8	28.5	-31.3	-30.2	-1.2	63.8	74.4	-10.5
1999 Aug.	-24.2	27.4	-14.3	5.3	-9.9	-9.9	0.0	22.1	15.1	7.0
Sep.	-16.5	28.5	-10.6	10.7	-5.8	-2.9	-2.9	17.8	17.1	0.7
Oct.	-21.4	6.8	-13.3	9.7	-8.1	-2.7	-5.4	-2.9	2.4	-5.3
Nov.	-31.3	42.4	-18.6	15.8	-12.7	-7.7	-4.9	26.6	17.6	9.0
Dec.	-33.7	34.5	-23.5	18.7	-10.2	-5.0	-5.2	15.7	-2.6	18.4
2000 Jan.	-23.5	18.2	-21.8	7.2	-1.7	-8.8	7.1	11.0	11.8	-0.9
Feb.	-87.2	-65.7	-68.7	-92.5	-18.6	-15.7	-2.8	26.9	12.8	14.1
Mar.	-43.2	8.7	-26.5	-20.4	-16.7	-14.1	-2.6	29.1	22.2	6.9
Apr.	-28.0	22.2	-17.5	-2.9	-10.5	-9.1	-1.4	25.1	13.0	12.1
May	-28.1	29.9	-18.6	8.4	-9.5	-6.1	-3.4	21.5	18.4	3.1
June	-29.1	84.9	-18.2	47.0	-10.9	-9.4	-1.5	38.0	19.3	18.7
July	-30.8	24.9	-22.2	7.7	-8.6	-7.1	-1.6	17.2	25.6	-8.4
Aug.	-21.6	36.9	-17.5	17.5	-4.2	-4.0	-0.2	19.4	15.5	4.0
Sep.	-26.6	30.5	-8.1	3.3	-18.5	-19.1	0.6	27.2	33.3	-6.1
Oct.	-26.5	24.8	-15.6	8.9	-10.9	-10.2	-0.7	15.9	19.5	-3.5

2. Assets by instrument and sector of holder

	Equity				Debt instruments							
	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Bonds and notes				Money market instruments			
					Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors
1	2	3	4	5	6	7	8	9	10	11	12	
1999	0.1	-2.1	-1.7	-151.8	0.1	-1.7	-15.2	-136.8	0.9	-0.1	-7.5	6.2
1999 Q2	0.0	-0.3	-3.3	-38.7	-0.2	-0.3	-11.6	-51.4	0.5	0.0	1.1	8.0
Q3	0.0	-0.5	0.5	-34.6	-0.3	-0.6	-0.7	-24.3	-1.0	-0.2	-0.9	2.5
Q4	0.0	-0.9	-1.0	-53.5	-0.4	-0.3	-4.3	-10.4	-0.4	0.1	-4.7	-10.6
2000 Q1	0.0	-0.7	1.7	-117.9	-1.2	-0.1	-15.5	-21.7	1.2	0.1	3.2	-2.8
Q2	0.0	-0.7	1.5	-55.1	0.6	-0.7	-7.7	-16.8	0.0	0.0	1.3	-7.5

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

Table 8.6**Balance of payments: other investment account and reserve assets***(EUR billions (ECU billions to end-1998); net flows)***1. Other investment by sector ^{1) 2)}**

	Total		Eurosystem		General government		MFIs (excluding the Eurosystem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-82.3	203.2	-0.7	3.5	-1.0	-7.6	-22.6	192.5	-37.6	40.5	15.0	152.0	-58.0	14.9
1999	-25.0	188.0	-4.0	8.6	2.8	-12.5	18.2	159.6	-46.4	54.4	64.6	105.2	-41.9	32.3
1999 Q3	-27.5	10.0	-3.3	0.4	1.2	-2.1	-7.6	12.1	-12.3	13.8	4.8	-1.7	-17.7	-0.4
Q4	11.7	41.1	0.2	2.1	0.5	-3.9	-0.2	39.0	-5.0	7.6	4.7	31.3	11.2	4.0
2000 Q1	-86.6	177.9	-7.7	2.6	-6.0	-2.7	-30.0	163.1	-11.2	20.0	-18.8	143.1	-42.8	14.9
Q2	-29.6	-15.7	-0.3	3.3	1.0	-0.3	-21.1	-20.7	-4.9	7.6	-16.2	-28.3	-9.3	2.0
Q3	-26.8	101.4	-0.3	-2.8	-4.1	-1.0	-12.5	76.2	-8.1	8.1	-4.4	68.1	-10.0	28.9
1999 Aug.	-12.2	30.8	-5.1	-1.8	1.1	0.3	-6.8	31.8	-5.7	1.5	-1.1	30.3	-1.5	0.5
Sep.	-3.7	-29.4	-1.4	0.9	0.8	-1.3	7.5	-25.5	-2.5	4.6	10.1	-30.1	-10.6	-3.5
Oct.	-22.0	56.1	-1.6	0.5	-1.1	-1.1	-21.9	51.8	-3.7	3.6	-18.2	48.2	2.6	4.9
Nov.	-58.7	64.1	1.5	-1.3	1.2	-2.0	-56.6	63.2	1.7	1.4	-58.3	61.8	-4.8	4.2
Dec.	92.4	-79.1	0.3	2.9	0.4	-0.8	78.3	-76.0	-3.0	2.6	81.3	-78.7	13.4	-5.2
2000 Jan.	-24.1	50.8	-3.0	3.1	-2.9	-1.0	-2.6	43.4	-3.9	6.2	1.4	37.2	-15.6	5.3
Feb.	-32.4	35.2	-2.3	0.5	-2.7	-0.3	-17.4	26.4	-4.9	7.7	-12.5	18.7	-10.0	8.6
Mar.	-30.1	91.9	-2.5	-1.0	-0.4	-1.4	-10.0	93.3	-2.3	6.1	-7.7	87.2	-17.2	1.0
Apr.	-35.3	40.4	-0.3	3.4	0.4	-0.5	-30.8	37.1	-5.4	5.7	-25.5	31.4	-4.5	0.4
May	-16.6	32.3	-2.7	0.3	0.5	0.6	-9.1	27.8	-0.5	-0.8	-8.5	28.7	-5.4	3.6
June	22.3	-88.4	2.7	-0.4	0.2	-0.4	18.8	-85.7	1.0	2.6	17.8	-88.3	0.6	-2.0
July	10.4	17.6	-0.1	-1.3	3.5	0.1	9.8	19.2	-1.9	6.8	11.7	12.4	-2.8	-0.5
Aug.	-32.6	58.5	-0.2	-1.5	-1.5	0.1	-22.0	26.6	-3.8	-1.0	-18.2	27.6	-8.9	33.3
Sep.	-4.7	25.3	0.0	0.0	-6.2	-1.2	-0.3	30.4	-2.4	2.3	2.1	28.1	1.8	-4.0
Oct.	-16.8	28.6	-0.5	0.3	7.3	2.8	-21.0	25.3	-3.6	6.8	-17.4	18.5	-2.6	0.3

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

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999	-2.6	8.1	5.5	-1.4	0.5	-0.9
1999 Q2	-0.5	2.1	1.6	0.0	0.0	0.0
Q3	-3.2	0.3	-2.9	-0.1	0.1	0.0
Q4	0.2	2.1	2.4	0.0	0.0	0.0
2000 Q1	-7.7	2.6	-5.1	-0.1	0.0	0.0
Q2	0.0	3.1	3.0	-0.2	0.2	0.0

Source: ECB.

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

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

2.2. General government

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 7	Liabilities 8	Balance 9	Assets 10	Liabilities 11	Balance 12	Assets 13	Liabilities 14	Balance 15
1999	0.0	0.0	0.0	3.9	-12.6	-8.7	-1.2	0.2	-1.0
1999 Q2	0.0	0.0	0.0	2.4	-1.9	0.4	-1.3	-0.2	-1.6
Q3	0.0	0.0	0.0	1.2	-2.1	-0.8	-0.1	0.0	-0.1
Q4	0.0	0.0	0.0	0.0	-3.9	-3.9	0.4	0.0	0.4
2000 Q1	0.0	0.0	0.0	-5.9	-2.3	-8.2	-0.1	-0.4	-0.5
Q2	0.0	0.0	0.0	1.2	-0.5	0.7	-0.2	0.2	0.0

2.3. MFIs (excluding the Eurosystem)

	Loans/currency and deposits			Other assets/liabilities		
	Assets 16	Liabilities 17	Balance 18	Assets 19	Liabilities 20	Balance 21
1999	17.7	158.9	176.6	0.5	0.7	1.2
1999 Q2	19.9	35.5	55.5	-1.5	1.2	-0.3
Q3	-6.7	11.3	4.6	-0.9	0.9	0.0
Q4	0.5	37.5	37.9	-0.7	1.5	0.8
2000 Q1	-27.7	163.0	135.3	-2.2	0.1	-2.1
Q2	-22.3	-21.5	-43.8	1.2	0.8	2.0

2.4. Other sectors

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 22	Liabilities 23	Balance 24	Assets 25	Liabilities 26	Balance 27	Assets 28	Liabilities 29	Balance 30
1999	-6.4	3.4	-3.0	-13.2	17.5	4.3	-22.4	11.4	-11.0
1999 Q2	-1.8	-1.8	-3.6	-7.6	14.0	6.4	-7.9	1.8	-6.1
Q3	-1.6	-0.1	-1.7	-12.6	-2.0	-14.6	-3.5	1.7	-1.8
Q4	-1.3	2.1	0.8	16.6	0.2	16.8	-4.0	1.7	-2.3
2000 Q1	-4.3	2.9	-1.4	-38.1	18.4	-19.8	-0.4	-6.4	-6.8
Q2	-3.9	0.3	-3.6	-5.3	2.8	-2.5	-0.1	-1.0	-1.1

3. Reserve assets ¹⁾

	Total	Monetary gold	Special drawing rights	Reserve position in the IMF	Foreign exchange							Other claims
					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	
1999	10.2	0.3	1.0	2.0	7.1	2.3	-1.0	0.2	3.6	2.1	-0.1	0.0
1999 Q2	5.4	0.0	-1.1	-0.1	6.5	-4.7	-2.6	0.0	10.0	3.8	0.0	0.1
Q3	0.0	0.0	0.2	1.9	-2.4	4.2	-2.8	0.2	-3.4	-0.6	0.0	0.3
Q4	-0.5	0.3	-0.7	0.2	-0.3	1.0	3.0	0.0	-1.9	-2.3	-0.1	-0.1
2000 Q1	-1.4	0.7	0.2	0.2	-2.8	2.3	-4.5	0.0	2.6	-3.1	0.0	0.2
Q2	3.8	0.0	-0.1	3.3	0.7	-0.9	0.2	0.0	-3.7	5.3	-0.2	-0.1

Source: ECB.

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

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

	Total	Direct investment			Portfolio investment					Financial derivatives	Other investment				Reserve assets
		Total	Equity (including reinvested earnings)	Other capital	Total	Equity securities	Debt instruments				Total	Trade credits	Loans/currency and deposits	Other assets/liabilities	
							Total	Bonds and notes	Money market instruments						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1997	32.7	177.6	148.6	29.1	-724.7	-358.7	-366.0	-339.8	-26.2	-5.9	222.4	79.8	51.3	91.4	363.3
1998	-175.3	136.4	112.7	23.7	-704.6	-476.0	-228.6	-205.4	-23.2	2.2	61.5	99.7	-102.1	63.9	329.2
1999	-131.0	373.4	290.8	82.6	-730.9	-596.8	-134.1	-72.7	-61.4	1.9	-147.8	112.6	-340.4	80.0	372.3

Source: ECB.

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

2. Reserves and related assets of the Eurosystem ^{1) 2)}

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

	Reserve assets														Memo: related assets
	Total	Monetary gold	In fine troy ounces (millions)	Special drawing rights	Reserve position in the IMF	Foreign exchange								Other claims	Claims on euro area residents denom- inated in foreign currency
						Total	Currency and deposits		Securities				Financial derivatives		
							With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes	Money market instru- ments			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1998 Dec. ³⁾	329.2	99.6	404.131	5.2	23.2	199.9	12.6	18.3	169.0	0.0	116.6	52.4	0.0	1.3	7.6
1999 Dec.	372.3	116.4	402.762	4.5	24.3	225.1	12.8	21.7	190.5	0.0	134.0	56.5	0.0	2.1	14.4
2000 Jan. ⁴⁾	378.1	116.2	401.639	4.3	24.4	231.4	14.4	28.4	188.5	-	-	-	0.2	1.9	14.7
Feb. ⁴⁾	383.2	121.1	400.503	4.4	23.9	231.9	12.0	26.2	193.5	-	-	-	0.2	2.0	16.1
Mar.	385.4	116.0	400.503	4.4	24.8	238.9	12.7	26.0	200.1	-	-	-	0.2	1.2	17.0
Apr.	399.7	121.3	400.503	4.3	22.7	249.8	18.2	28.4	203.0	-	-	-	0.2	1.7	18.1
May	388.9	117.2	400.503	4.5	21.1	244.6	16.2	29.0	199.2	-	-	-	0.2	1.4	19.1
June	385.8	120.8	400.503	4.5	20.5	238.3	14.4	25.8	198.0	-	-	-	0.1	1.7	18.6
July ⁴⁾	391.4	119.6	399.539	4.5	20.9	244.4	10.5	27.1	206.7	-	-	-	0.2	1.9	17.5
Aug.	402.6	124.3	399.539	4.8	20.9	251.9	10.9	25.5	215.3	-	-	-	0.2	0.8	17.3
Sep.	408.1	124.7	399.539	4.9	21.3	255.9	11.2	24.3	220.1	-	-	-	0.3	1.3	16.6
Oct. ⁴⁾	416.2	125.6	399.538	4.7	21.5	263.1	10.3	24.4	228.1	-	-	-	0.3	1.4	16.3
Nov. ⁴⁾	400.1	123.8	399.537	4.8	20.8	249.8	9.0	22.6	217.8	-	-	-	0.3	0.9	16.7

3. Reserves and related assets of the European Central Bank ^{1) 5)}

(EUR billions; end-of-period positions)

	Reserve assets														Memo: related assets
	Total	Monetary gold	In fine troy ounces (millions)	Special drawing rights	Reserve position in the IMF	Foreign exchange								Other claims	Claims on euro area residents denom- inated in foreign currency
						Total	Currency and deposits		Securities				Financial derivatives		
							With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes	Money market instru- ments			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1999 Dec.	49.3	7.0	24.030	0.0	0.0	40.9	0.3	6.4	34.3	0.0	28.0	6.3	0.0	1.4	2.6
2000 Jan.	50.0	7.0	24.030	0.0	0.0	41.7	0.4	7.6	33.7	-	-	-	0.0	1.3	3.2
Feb.	48.1	7.3	24.030	0.0	0.0	39.5	0.4	6.5	32.6	-	-	-	0.0	1.3	4.2
Mar.	49.8	7.0	24.030	0.0	0.0	42.0	0.4	7.4	34.1	-	-	-	0.0	0.9	4.3
Apr.	52.8	7.3	24.030	0.0	0.0	44.3	1.1	8.1	35.1	-	-	-	0.0	1.2	4.3
May	50.1	7.0	24.030	0.0	0.0	42.1	1.7	6.2	34.3	-	-	-	0.0	0.9	4.5
June	50.6	7.2	24.030	0.0	0.0	42.2	1.0	7.7	33.5	-	-	-	0.0	1.2	4.1
July	51.0	7.2	24.030	0.0	0.0	42.9	0.5	5.5	36.8	-	-	-	0.0	1.0	4.1
Aug.	55.0	7.5	24.030	0.0	0.0	46.8	0.6	7.8	38.3	-	-	-	0.0	0.8	4.1
Sep.	52.4	7.5	24.030	0.0	0.0	43.7	0.7	6.1	36.9	-	-	-	0.0	1.2	3.7
Oct.	53.8	7.6	24.030	0.0	0.0	44.9	0.7	6.4	37.7	-	-	-	0.0	1.4	4.0
Nov.	47.2	7.4	24.030	0.0	0.0	38.8	0.7	5.0	33.1	-	-	-	0.0	0.9	3.0

Source: ECB.

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

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

3) Position as at 1 January 1999.

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

5) Part of the Eurosystem's reserves.

9 External trade in goods of the euro area

Table 9

1. Exports ¹⁾

(EUR billions (ECU billions to end-1998); f.o.b. 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	Export trade indices 1995 = 100		
									Value ²⁾ 9	Volume ²⁾ 10	Unit value 11
1996	669.7	52.0	14.2	13.1	85.0	194.3	295.1	16.0	107.6	104.7	102.8
1997	762.8	57.0	16.5	14.4	99.6	217.6	343.8	13.8	122.5	115.9	105.7
1998	796.3	56.1	15.8	12.6	104.4	221.7	371.1	14.7	127.9	120.0	106.6
1999	831.6	55.6	16.4	13.6	114.1	225.5	384.7	21.7	133.6	122.6	109.0
1997 Q1	170.7	13.0	3.9	3.7	22.7	49.1	74.9	3.5	109.7	104.2	105.3
Q2	191.8	14.4	4.1	3.6	25.3	54.1	86.7	3.6	123.3	117.3	105.1
Q3	193.5	14.1	4.2	3.4	25.8	55.9	86.8	3.3	124.3	116.6	106.6
Q4	206.8	15.5	4.3	3.7	25.8	58.5	95.5	3.5	132.9	125.7	105.7
1998 Q1	194.5	13.8	4.2	3.4	26.7	54.7	88.0	3.7	125.0	115.9	107.8
Q2	204.5	14.6	3.9	3.3	27.0	56.6	95.5	3.7	131.4	123.1	106.8
Q3	195.9	13.5	3.9	3.0	25.8	55.3	91.0	3.6	125.9	118.2	106.5
Q4	201.4	14.2	3.8	2.9	25.0	55.1	96.7	3.7	129.4	122.8	105.4
1999 Q1	187.8	12.4	3.8	2.6	25.8	51.3	86.7	5.1	120.7	112.6	107.2
Q2	203.2	13.5	4.0	3.1	27.9	55.1	94.4	5.2	130.6	119.9	108.9
Q3	209.5	14.0	4.1	3.9	29.7	56.9	95.5	5.5	134.6	122.9	109.5
Q4	231.1	15.7	4.5	4.1	30.7	62.1	108.1	5.8	148.5	134.9	110.1
2000 Q1	229.7	13.6	4.8	4.8	32.5	62.2	105.3	6.5	147.6	128.6	114.8
Q2	247.4	14.9	5.1	5.2	34.1	64.9	116.5	6.8	159.0	136.7	116.3
Q3	249.3	.	.	.	.	.	.	.	160.2	134.1	119.5
1998 Jan.	58.6	4.3	1.3	1.2	8.4	16.3	26.0	1.2	112.9	104.8	107.7
Feb.	63.8	4.5	1.4	1.0	8.6	18.1	28.9	1.2	123.0	114.1	107.8
Mar.	72.1	5.0	1.5	1.2	9.6	20.3	33.1	1.3	139.0	128.7	108.0
Apr.	68.2	4.9	1.3	1.1	9.2	19.0	31.3	1.3	131.4	122.9	106.9
May	65.9	4.8	1.3	1.1	8.7	18.3	30.7	1.2	127.1	118.9	106.9
June	70.5	4.9	1.3	1.1	9.1	19.3	33.5	1.2	135.9	127.3	106.7
July	73.0	4.8	1.3	1.1	9.3	21.1	34.2	1.2	140.8	131.7	106.9
Aug.	56.7	4.2	1.2	1.0	7.7	15.6	25.9	1.1	109.3	103.2	105.9
Sep.	66.2	4.5	1.3	0.9	8.8	18.5	30.9	1.3	127.6	119.7	106.6
Oct.	69.0	4.8	1.3	1.0	8.6	19.6	32.5	1.2	133.1	125.8	105.8
Nov.	67.1	4.8	1.3	1.0	8.1	18.2	32.5	1.3	129.3	123.3	104.8
Dec.	65.3	4.6	1.2	0.9	8.2	17.3	31.7	1.2	125.8	119.3	105.5
1999 Jan.	54.3	3.7	1.1	0.8	7.7	14.7	24.9	1.3	104.8	98.1	106.8
Feb.	60.2	4.0	1.2	0.8	8.3	16.5	27.4	1.9	116.1	108.6	106.9
Mar.	73.2	4.7	1.5	1.0	9.8	20.0	34.4	1.9	141.2	130.9	107.9
Apr.	65.9	4.4	1.3	1.0	9.1	17.8	30.7	1.5	127.0	116.6	108.9
May	63.7	4.5	1.3	1.0	9.0	17.4	29.0	1.7	122.9	113.2	108.5
June	73.6	4.7	1.3	1.1	9.8	19.9	34.7	2.0	141.9	129.8	109.3
July	76.2	4.6	1.4	1.2	10.3	20.9	35.6	2.2	146.8	132.8	110.6
Aug.	61.1	4.3	1.3	1.2	9.2	16.2	27.4	1.6	117.7	107.0	110.0
Sep.	72.3	5.1	1.4	1.5	10.1	19.8	32.5	1.7	139.3	129.0	108.0
Oct.	77.4	5.3	1.5	1.4	10.2	21.0	36.3	1.8	149.1	135.7	109.9
Nov.	77.6	5.4	1.5	1.2	10.7	20.9	36.0	1.9	149.5	137.3	108.9
Dec.	76.2	5.1	1.6	1.5	9.8	20.2	35.9	2.1	146.9	131.8	111.4
2000 Jan.	66.0	4.0	1.4	1.5	9.4	17.6	30.1	2.1	127.3	111.8	113.9
Feb.	75.2	4.4	1.6	1.6	10.8	20.9	33.9	2.1	145.1	125.5	115.6
Mar.	88.4	5.2	1.8	1.7	12.3	23.7	41.2	2.4	170.4	148.7	114.6
Apr.	73.4	4.4	1.6	1.6	10.3	19.5	34.1	2.0	141.5	122.2	115.8
May	89.1	5.4	1.9	1.8	12.0	23.2	42.3	2.4	171.8	147.7	116.3
June	85.0	5.0	1.6	1.7	11.8	22.2	40.1	2.4	163.8	140.1	116.9
July	84.0	4.8	1.5	1.7	11.5	23.2	39.2	2.1	162.0	136.1	119.0
Aug.	77.7	4.9	1.5	1.9	11.6	20.4	35.1	2.2	149.7	126.2	118.6
Sep.	87.7	.	.	.	.	.	.	.	169.0	139.9	120.8

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 ¹⁾***(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 ²⁾ 9	Volume ²⁾ 10	Unit value 11
1996	593.9	50.4	36.5	73.5	54.2	167.1	193.7	18.5	105.5	102.9	102.6
1997	674.2	55.5	41.5	81.3	62.5	189.3	230.0	14.0	119.8	110.3	108.6
1998	711.0	55.1	41.3	58.5	68.0	202.0	270.1	16.1	126.3	123.0	102.7
1999	780.3	52.4	39.4	77.7	71.4	211.2	307.6	20.7	138.7	130.4	106.3
1997 Q1	159.1	12.8	9.7	21.2	14.8	44.8	52.1	3.7	113.1	106.0	106.7
Q2	168.0	14.1	11.1	18.6	16.1	46.7	57.8	3.6	119.4	111.4	107.2
Q3	166.6	13.6	10.1	20.0	15.3	49.1	55.9	2.6	118.5	106.9	110.8
Q4	180.4	15.1	10.7	21.4	16.2	48.6	64.3	4.1	128.2	117.0	109.6
1998 Q1	179.9	13.7	10.9	16.4	17.7	51.6	65.3	4.3	127.9	119.2	107.3
Q2	179.2	13.7	11.1	15.1	17.3	50.4	67.3	4.3	127.4	121.6	104.7
Q3	171.1	13.4	9.7	13.8	16.4	50.8	63.4	3.6	121.6	119.5	101.8
Q4	180.8	14.3	9.6	13.2	16.5	49.2	74.1	3.9	128.5	131.9	97.4
1999 Q1	179.2	12.4	9.2	13.8	17.0	50.3	71.6	5.0	127.4	128.8	98.9
Q2	189.5	12.9	10.2	16.8	17.7	50.8	76.1	5.1	134.7	129.8	103.8
Q3	193.9	12.9	9.5	21.2	17.3	54.4	73.7	4.9	137.8	126.0	109.4
Q4	217.6	14.2	10.4	25.9	19.4	55.7	86.2	5.7	154.7	137.5	112.5
2000 Q1	231.1	12.5	11.3	31.7	20.1	60.6	87.4	7.5	164.2	136.1	120.7
Q2	242.9	13.8	12.5	32.3	21.3	62.1	93.1	7.8	172.6	137.1	125.9
Q3	241.4	.	.	.	.	.	.	.	171.6	131.1	130.9
1998 Jan.	57.7	4.5	3.5	5.7	5.6	16.6	20.4	1.4	123.0	114.3	107.6
Feb.	57.9	4.3	3.5	5.4	5.6	16.7	20.8	1.6	123.4	114.4	107.9
Mar.	64.3	4.9	3.8	5.3	6.5	18.3	24.1	1.3	137.1	128.6	106.6
Apr.	60.1	4.8	3.7	5.2	5.8	16.8	22.7	1.3	128.2	121.5	105.5
May	56.9	4.4	3.5	5.2	5.6	15.8	21.2	1.2	121.4	115.7	104.9
June	62.1	4.6	3.9	4.7	6.0	17.8	23.4	1.7	132.5	127.8	103.7
July	59.3	4.7	3.6	4.7	6.0	17.8	21.2	1.3	126.4	123.6	102.2
Aug.	50.1	4.1	2.8	4.4	4.7	15.0	18.1	1.0	106.9	105.7	101.1
Sep.	61.8	4.6	3.3	4.7	5.8	17.9	24.1	1.4	131.7	129.2	101.9
Oct.	62.5	4.8	3.3	4.7	5.8	17.4	25.1	1.4	133.2	133.9	99.5
Nov.	59.7	4.6	3.1	4.2	5.4	16.2	24.9	1.3	127.3	131.8	96.6
Dec.	58.6	5.0	3.1	4.3	5.3	15.7	24.2	1.2	125.0	130.2	96.0
1999 Jan.	55.0	3.9	3.0	4.6	5.1	15.5	21.4	1.5	117.4	119.5	98.2
Feb.	56.4	3.9	2.9	4.2	5.4	16.1	22.1	1.7	120.3	122.1	98.5
Mar.	67.8	4.7	3.3	5.0	6.4	18.6	28.0	1.7	144.6	144.7	99.9
Apr.	61.6	4.2	3.3	5.6	5.8	16.1	24.9	1.7	131.4	128.3	102.4
May	62.4	4.3	3.3	5.7	5.8	16.5	25.2	1.6	133.1	127.2	104.6
June	65.5	4.4	3.5	5.4	6.2	18.2	25.9	1.8	139.7	133.5	104.6
July	64.5	4.4	3.4	6.7	5.7	18.4	24.3	1.6	137.4	127.3	108.0
Aug.	58.5	4.1	2.7	7.0	5.2	16.3	21.9	1.5	124.8	113.5	110.0
Sep.	70.9	4.4	3.5	7.6	6.4	19.6	27.6	1.8	151.3	137.3	110.2
Oct.	70.4	4.5	3.4	7.9	6.5	18.9	27.4	1.9	150.2	134.9	111.3
Nov.	74.3	4.8	3.6	8.5	6.7	18.8	29.8	2.1	158.4	142.9	110.8
Dec.	72.9	4.9	3.5	9.5	6.2	18.0	29.1	1.7	155.6	134.8	115.4
2000 Jan.	71.0	4.0	3.5	10.3	5.8	18.5	26.5	2.4	151.4	128.0	118.3
Feb.	75.4	4.0	3.6	10.2	6.8	20.1	28.2	2.5	160.9	133.6	120.4
Mar.	84.6	4.5	4.2	11.1	7.5	22.0	32.7	2.6	180.5	146.7	123.0
Apr.	73.0	4.2	3.7	9.6	6.5	18.3	28.3	2.4	155.7	127.1	122.5
May	87.9	5.0	4.7	11.3	7.5	22.7	33.8	2.8	187.4	147.9	126.7
June	82.0	4.6	4.1	11.3	7.3	21.1	31.0	2.6	174.9	136.4	128.2
July	78.9	4.4	4.0	11.9	6.7	20.9	28.2	2.8	168.2	131.6	127.8
Aug.	78.2	4.4	3.6	12.4	6.7	20.5	28.4	2.2	166.7	127.9	130.4
Sep.	84.3	.	.	.	.	.	.	.	179.8	133.9	134.3

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 ¹⁾
(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	1.6	-22.3	-60.4	30.9	27.2	101.4	-8.3
1997	88.6	1.5	-25.1	-66.8	37.1	28.3	113.8	-2.2
1998	85.3	1.0	-25.5	-45.9	36.4	19.7	101.0	-1.4
1999	51.3	3.2	-23.0	-64.1	42.7	14.2	77.1	1.0
1997 Q1	11.6	0.2	-5.8	-17.5	8.0	4.3	22.8	-0.8
Q2	23.8	0.3	-7.0	-15.0	9.1	7.4	28.8	-0.4
Q3	26.8	0.4	-5.9	-16.6	10.5	6.7	30.9	0.3
Q4	26.3	0.5	-6.4	-17.7	9.6	9.8	31.3	-1.3
1998 Q1	14.6	0.1	-6.7	-13.0	9.0	3.2	22.7	-0.7
Q2	25.4	0.9	-7.2	-11.7	9.6	6.1	28.2	-0.6
Q3	24.8	0.1	-5.8	-10.9	9.3	4.5	27.6	0.0
Q4	20.6	-0.1	-5.7	-10.3	8.5	5.9	22.6	-0.2
1999 Q1	8.5	0.0	-5.4	-11.2	8.8	1.0	15.1	0.2
Q2	13.7	0.6	-6.2	-13.7	10.2	4.3	18.3	0.1
Q3	15.6	1.1	-5.4	-17.4	12.4	2.5	21.8	0.6
Q4	13.5	1.5	-5.9	-21.8	11.3	6.4	21.9	0.1
2000 Q1	-1.4	1.1	-6.6	-26.9	12.4	1.6	17.9	-0.9
Q2	4.6	1.1	-7.4	-27.1	12.8	2.8	23.4	-1.0
Q3	7.9	.	.	.	.	.	.	.
1998 Jan.	0.9	-0.2	-2.2	-4.6	2.8	-0.3	5.6	-0.2
Feb.	5.9	0.2	-2.2	-4.3	3.1	1.4	8.1	-0.4
Mar.	7.8	0.1	-2.3	-4.1	3.1	2.0	9.0	0.0
Apr.	8.0	0.1	-2.4	-4.1	3.4	2.2	8.6	0.0
May	9.0	0.4	-2.3	-4.1	3.1	2.4	9.5	-0.1
June	8.3	0.3	-2.6	-3.5	3.1	1.5	10.1	-0.5
July	13.8	0.0	-2.2	-3.6	3.3	3.3	13.0	0.0
Aug.	6.6	0.1	-1.6	-3.5	3.0	0.6	7.7	0.1
Sep.	4.4	-0.1	-2.0	-3.8	3.0	0.5	6.8	-0.1
Oct.	6.6	0.0	-2.0	-3.7	2.8	2.2	7.4	-0.2
Nov.	7.4	0.2	-1.9	-3.3	2.7	2.0	7.7	0.0
Dec.	6.6	-0.3	-1.9	-3.3	2.9	1.7	7.5	0.1
1999 Jan.	-0.7	-0.2	-1.8	-3.8	2.6	-0.8	3.5	-0.2
Feb.	3.8	0.1	-1.7	-3.3	2.9	0.4	5.3	0.2
Mar.	5.4	0.0	-1.9	-4.0	3.4	1.4	6.4	0.2
Apr.	4.2	0.1	-2.0	-4.6	3.4	1.8	5.7	-0.2
May	1.3	0.2	-2.1	-4.8	3.2	0.8	3.8	0.1
June	8.1	0.2	-2.2	-4.3	3.6	1.7	8.8	0.3
July	11.7	0.2	-2.0	-5.5	4.6	2.5	11.3	0.6
Aug.	2.5	0.2	-1.4	-5.8	4.0	-0.2	5.5	0.1
Sep.	1.3	0.7	-2.1	-6.1	3.8	0.2	4.9	-0.1
Oct.	6.9	0.8	-1.9	-6.5	3.7	2.1	8.9	-0.1
Nov.	3.3	0.6	-2.1	-7.2	4.0	2.1	6.2	-0.2
Dec.	3.2	0.2	-1.9	-8.1	3.6	2.2	6.8	0.4
2000 Jan.	-5.0	0.0	-2.2	-8.8	3.6	-0.9	3.6	-0.3
Feb.	-0.2	0.4	-2.0	-8.6	4.0	0.7	5.7	-0.4
Mar.	3.8	0.6	-2.4	-9.4	4.8	1.7	8.6	-0.2
Apr.	0.4	0.2	-2.1	-8.0	3.7	1.1	5.8	-0.4
May	1.2	0.4	-2.8	-9.5	4.6	0.4	8.5	-0.3
June	3.0	0.5	-2.5	-9.6	4.5	1.2	9.1	-0.2
July	5.2	0.4	-2.5	-10.1	4.8	2.3	11.0	-0.7
Aug.	-0.5	0.5	-2.0	-10.5	4.9	0.0	6.7	-0.1
Sep.	3.3	.	.	.	.	.	.	.

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 ¹⁾						Bilateral ECU or euro exchange rates ²⁾			
	Narrow group				Broad group		US dollar	Japanese yen	Swiss franc	Pound sterling
	Nominal	Real CPI	Real PPI	Real ULCM	Nominal	Real CPI				
1	2	3	4	5	6	7	8	9	10	
1996	107.9	108.8	107.5	111.1	95.4	105.9	1.270	138.1	1.568	0.814
1997	99.1	99.4	99.2	99.8	90.4	96.6	1.134	137.1	1.644	0.692
1998	101.5	101.3	101.6	99.6	96.6	99.1	1.121	146.4	1.622	0.676
1999	95.7	95.7	95.7	95.9	96.6	95.8	1.066	121.3	1.600	0.659
2000	85.7	86.5	87.0	87.2	88.2	86.2	0.924	99.5	1.558	0.609
1999 Q1	100.0	100.0	100.0	100.0	100.0	100.0	1.122	130.7	1.599	0.687
Q2	96.1	96.0	96.0	96.5	96.5	96.0	1.057	127.7	1.600	0.658
Q3	94.6	94.7	94.5	94.5	95.5	94.6	1.049	118.7	1.602	0.655
Q4	92.2	92.2	92.2	92.7	94.2	92.6	1.038	108.4	1.600	0.636
2000 Q1	89.0	89.6	89.7	89.9	91.1	89.5	0.986	105.5	1.607	0.614
Q2	86.0	86.6	87.0	87.1	88.4	86.6	0.933	99.6	1.563	0.610
Q3	84.7	85.7	86.3	86.6	87.3	85.3	0.905	97.4	1.544	0.612
Q4	83.0	84.0	85.1	85.2	85.9	83.6	0.868	95.3	1.516	0.600
1999 Jan.	102.0	101.8	101.8	-	101.4	101.4	1.161	131.3	1.605	0.703
Feb.	99.9	99.9	99.8	-	100.0	100.0	1.121	130.8	1.598	0.689
Mar.	98.3	98.3	98.4	-	98.7	98.6	1.088	130.2	1.595	0.671
Apr.	97.1	96.9	97.0	-	97.5	97.2	1.070	128.2	1.602	0.665
May	96.6	96.5	96.4	-	96.9	96.4	1.063	129.7	1.603	0.658
June	94.7	94.7	94.7	-	95.1	94.4	1.038	125.3	1.595	0.650
July	94.8	95.2	94.8	-	95.0	94.5	1.035	123.7	1.604	0.658
Aug.	95.4	95.6	95.4	-	96.3	95.5	1.060	120.1	1.600	0.660
Sep.	93.6	93.4	93.4	-	95.2	93.8	1.050	112.4	1.602	0.647
Oct.	94.4	94.2	94.3	-	96.3	94.7	1.071	113.5	1.594	0.646
Nov.	92.0	92.0	92.1	-	94.0	92.4	1.034	108.2	1.605	0.637
Dec.	90.1	90.4	90.3	-	92.2	90.7	1.011	103.7	1.601	0.627
2000 Jan.	90.2	90.8	90.9	-	92.4	90.8	1.014	106.5	1.610	0.618
Feb.	89.2	89.8	89.9	-	91.2	89.5	0.983	107.6	1.607	0.615
Mar.	87.7	88.3	88.4	-	89.7	88.1	0.964	102.6	1.604	0.611
Apr.	86.1	86.6	86.9	-	88.4	86.7	0.947	99.9	1.574	0.598
May	84.5	85.0	85.6	-	86.9	85.1	0.906	98.1	1.556	0.602
June	87.4	88.1	88.4	-	89.9	88.1	0.949	100.7	1.561	0.629
July	86.9	88.0	88.1	-	89.4	87.6	0.940	101.4	1.551	0.623
Aug.	84.6	85.5	86.0	-	87.0	85.1	0.904	97.8	1.551	0.607
Sep.	82.8	83.6	84.7	-	85.3	83.3	0.872	93.1	1.531	0.608
Oct.	81.6	82.4	83.4	-	84.4	82.2	0.855	92.7	1.513	0.589
Nov.	82.3	83.2	84.3	-	85.1	82.8	0.856	93.3	1.522	0.600
Dec.	85.4	86.4	87.5	-	88.1	85.7	0.897	100.6	1.514	0.613
% ch. vs. ⁴⁾ prev. month										
2000 Dec.	3.7	3.8	3.8	-	3.6	3.5	4.8	7.9	-0.5	2.2
% ch. vs. ⁴⁾ prev. year										
2000 Dec.	-5.3	-4.4	-3.1	-	-4.4	-5.6	-11.2	-3.0	-5.5	-2.1

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 and capture third-market effects. The narrow group is composed of the countries whose currencies are shown in the table. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices in manufacturing (PPI) and unit labour costs in manufacturing (ULCM). Where deflators are not yet available, estimates are used.
- 2) To December 1998, rates for the ECU (source BIS); from January 1999, rates for the euro.
- 3) Indicative rates for these currencies are shown up to September 2000, as the ECB did not provide official reference rates for these currencies before that.
- 4) The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year. A positive change denotes an appreciation of the euro.

Bilateral ECU or euro exchange rates ²⁾									
Swedish krona	Danish krone	Greek drachma	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar ⁵⁾	Korean won ³⁾	Singapore dollar ³⁾	
11	12	13	14	15	16	17	18	19	
8.51	7.36	305.5	8.20	1.731	1.623	9.68	1,007.9	1.765	1996
8.65	7.48	309.3	8.02	1.569	1.528	8.75	1,069.8	1.678	1997
8.92	7.50	330.7	8.47	1.665	1.787	8.69	1,568.9	1.876	1998
8.81	7.44	325.8	8.31	1.584	1.652	8.27	1,267.3	1.806	1999
8.45	7.45	336.6	8.11	1.371	1.589	7.20	1,043.5	1.592	2000
8.98	7.44	322.7	8.60	1.696	1.770	8.69	1,342.6	1.911	1999 Q1
8.90	7.43	325.0	8.24	1.557	1.618	8.19	1,258.8	1.810	Q2
8.71	7.44	326.1	8.22	1.558	1.613	8.14	1,252.8	1.772	Q3
8.65	7.44	329.2	8.19	1.528	1.613	8.07	1,217.4	1.737	Q4
8.50	7.45	332.7	8.11	1.434	1.564	7.68	1,109.8	1.674	2000 Q1
8.28	7.46	336.2	8.20	1.381	1.585	7.27	1,042.0	1.608	Q2
8.40	7.46	337.6	8.10	1.341	1.576	7.06	1,009.5	1.569	Q3
8.60	7.45	340.1	8.04	1.325	1.632	6.77	1,011.6	1.516	Q4
9.08	7.44	323.6	8.65	1.765	1.839	8.99	1,362.4	1.950	1999 Jan.
8.91	7.44	322.0	8.65	1.679	1.751	8.68	1,330.2	1.905	Feb.
8.94	7.43	322.5	8.51	1.651	1.726	8.43	1,336.2	1.881	Mar.
8.91	7.43	325.5	8.32	1.594	1.668	8.30	1,292.2	1.834	Apr.
8.97	7.43	325.2	8.23	1.553	1.605	8.24	1,272.1	1.820	May
8.83	7.43	324.2	8.17	1.524	1.580	8.05	1,212.6	1.775	June
8.74	7.44	325.0	8.18	1.540	1.576	8.03	1,229.4	1.756	July
8.75	7.44	326.4	8.26	1.583	1.645	8.23	1,269.1	1.779	Aug.
8.63	7.43	327.0	8.23	1.552	1.619	8.15	1,260.1	1.781	Sep.
8.73	7.43	329.2	8.29	1.581	1.641	8.32	1,289.9	1.793	Oct.
8.63	7.44	328.7	8.19	1.516	1.618	8.04	1,215.9	1.727	Nov.
8.59	7.44	329.7	8.10	1.491	1.580	7.86	1,149.6	1.694	Dec.
8.60	7.44	331.1	8.12	1.469	1.542	7.89	1,145.9	1.697	2000 Jan.
8.51	7.45	333.2	8.10	1.427	1.564	7.65	1,110.8	1.674	Feb.
8.39	7.45	333.9	8.11	1.408	1.583	7.51	1,076.1	1.654	Mar.
8.27	7.45	335.2	8.15	1.389	1.588	7.38	1,051.4	1.620	Apr.
8.24	7.46	336.6	8.20	1.355	1.570	7.06	1,015.3	1.566	May
8.32	7.46	336.6	8.25	1.402	1.597	7.40	1,061.1	1.641	June
8.41	7.46	336.9	8.18	1.389	1.598	7.33	1,047.9	1.636	July
8.39	7.46	337.3	8.10	1.341	1.557	7.05	1,007.6	1.556	Aug.
8.41	7.46	338.6	8.03	1.295	1.575	6.80	973.2	1.517	Sep.
8.52	7.45	339.5	8.00	1.292	1.618	6.67	965.1	1.498	Oct.
8.63	7.46	340.2	8.00	1.320	1.639	6.68	990.6	1.497	Nov.
8.66	7.46	340.7	8.13	1.368	1.642	7.00	1,089.6	1.558	Dec.
0.4	0.0	0.2	1.7	3.6	0.2	4.8	10.0	4.1	% ch. vs. ⁴⁾ prev. month 2000 Dec.
0.9	0.2	3.3	0.4	-8.2	4.0	-11.0	-5.2	-8.0	% ch. vs. ⁴⁾ prev. year 2000 Dec.

II Economic and financial developments in the other EU Member States

Table 11
Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	HICP	General government deficit (-)/surplus (+) as a % of GDP	General government gross debt as a % of GDP	Long-term government bond yield ¹⁾ as a % per annum	Exchange rate ²⁾ as national currency per ECU or euro	Current and new capital account as a % of GDP	Unit labour costs ³⁾	Real GDP	Industrial production index ⁴⁾	Standardised unemployment rate as a % of labour force (s.a.)	Broad money ⁵⁾	3-month interest rate ¹⁾ as a % per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Denmark												
1997	1.9	0.5	61.4	6.25	7.48	0.6	1.9	3.1	5.3	5.6	4.7	3.73
1998	1.3	1.2	55.8	4.94	7.50	-0.9	2.3	2.5	2.2	5.2	4.6	4.27
1999	2.1	2.8	52.6	4.91	7.44	2.3	3.0	1.7	1.8	5.2	4.2	3.44
2000	.	.	.	5.64	7.45	.	.	2.6	.	.	.	5.00
1999 Q3	2.3	-	-	5.35	7.44	2.4	3.0	1.7	-0.3	5.2	3.4	3.19
Q4	2.8	-	-	5.57	7.44	2.2	-0.6	3.3	4.4	4.9	4.1	3.78
2000 Q1	2.8	-	-	5.79	7.45	1.4	1.9	2.6	3.2	4.9	2.2	3.95
Q2	2.9	-	-	5.67	7.46	1.5	2.6	3.4	7.7	4.8	1.3	4.73
Q3	2.6	-	-	5.69	7.46	.	1.6	2.7	8.1	4.9	2.3	5.84
Q4	.	-	-	5.42	7.45	.	.	.	.	.	.	5.48
2000 June	2.9	-	-	5.67	7.46	-	-	-	0.4	4.8	3.3	5.14
July	2.8	-	-	5.76	7.46	-	-	-	6.2	4.9	0.5	5.78
Aug.	2.2	-	-	5.64	7.46	-	-	-	8.7	4.9	2.5	5.66
Sep.	2.7	-	-	5.66	7.46	-	-	-	9.0	5.0	4.0	6.10
Oct.	2.8	-	-	5.57	7.45	-	-	-	4.9	5.0	2.6	5.55
Nov.	2.7	-	-	5.49	7.46	-	-	-	.	.	0.5	5.50
Dec.	.	-	-	5.20	7.46	-	-	-	.	.	.	5.38
Sweden												
1997	1.8	-2.0	75.0	6.62	8.65	-	0.6	2.1	7.0	9.9	4.2	4.43
1998	1.0	1.9	72.4	4.99	8.92	3.2	0.9	3.6	3.8	8.3	3.5	4.36
1999	0.6	1.9	65.7	4.98	8.81	1.6	-0.4	4.1	2.0	7.2	6.8	3.32
2000	.	.	.	5.37	8.45	.	.	4.0	.	.	.	4.07
1999 Q3	0.7	-	-	5.48	8.71	2.7	-0.3	4.2	1.5	7.1	6.1	3.22
Q4	1.0	-	-	5.69	8.65	0.8	-1.1	4.2	2.7	6.8	9.1	3.69
2000 Q1	1.2	-	-	5.79	8.50	3.0	7.1	3.8	6.0	6.5	8.7	3.99
Q2	1.2	-	-	5.30	8.28	1.5	5.1	4.1	11.2	6.0	8.9	4.09
Q3	1.3	-	-	5.30	8.40	1.8	6.4	3.7	9.3	5.7	5.1	4.14
Q4	.	-	-	5.09	8.60	.	.	.	.	.	.	4.06
2000 June	1.4	-	-	5.13	8.32	-	-	-	12.6	6.0	6.1	4.05
July	1.3	-	-	5.31	8.41	-	-	-	8.0	5.6	5.9	4.21
Aug.	1.4	-	-	5.31	8.39	-	-	-	9.4	5.9	4.4	4.13
Sep.	1.3	-	-	5.27	8.41	-	-	-	10.0	5.5	5.1	4.08
Oct.	1.3	-	-	5.23	8.52	-	-	-	.	5.4	1.2	4.03
Nov.	1.8	-	-	5.13	8.63	-	-	-	.	5.6	3.4	4.02
Dec.	.	-	-	4.92	8.66	-	-	-	.	.	.	4.13
United Kingdom												
1997	1.8	-2.0	51.1	7.13	0.692	0.9	2.9	3.5	1.3	7.0	11.2	6.92
1998	1.6	0.4	48.0	5.60	0.676	0.0	2.9	2.6	0.8	6.3	9.7	7.42
1999	1.3	1.3	45.7	5.01	0.659	-1.1	3.6	2.3	0.6	6.1	5.3	5.54
2000	.	.	.	5.33	0.609	.	.	3.1	.	.	.	6.19
1999 Q3	1.2	1.2	45.7	5.39	0.655	-1.8	3.3	2.3	1.8	6.0	3.5	5.28
Q4	1.2	1.9	45.4	5.46	0.636	-0.3	3.0	2.9	2.1	5.9	3.6	5.98
2000 Q1	0.8	6.1	43.6	5.60	0.614	-1.3	2.7	3.0	1.9	5.8	3.8	6.20
Q2	0.6	-0.4	43.7	5.31	0.610	-0.8	1.1	3.2	2.5	5.5	5.6	6.28
Q3	0.8	2.3	42.4	5.31	0.612	.	.	2.9	0.6	5.4	8.2	6.21
Q4	.	.	.	5.09	0.600	.	.	.	.	.	.	6.07
2000 June	0.8	-1.8	43.7	5.21	0.629	-	-	-	3.3	5.4	6.6	6.23
July	1.0	7.9	43.3	5.24	0.623	-	-	-	0.4	5.3	6.8	6.19
Aug.	0.6	-2.0	43.8	5.32	0.607	-	-	-	1.2	5.4	8.7	6.22
Sep.	1.0	1.2	42.4	5.38	0.608	-	-	-	0.1	5.5	9.1	6.21
Oct.	1.0	7.3	42.0	5.20	0.589	-	-	-	0.7	.	.	6.16
Nov.	1.0	-3.4	42.6	5.11	0.600	-	-	-	.	.	.	6.09
Dec.	.	.	.	4.95	0.613	-	-	-	.	.	.	5.96

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

1) Average-of-period values.

2) For more information, see Table 10.

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

4) Total excluding construction; adjusted for working days.

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

12 Economic and financial developments outside the EU

Table 12.1

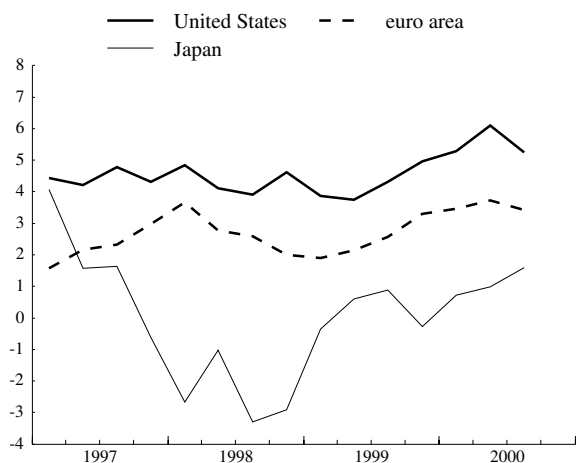
Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs ¹⁾	Real GDP	Industrial production index ¹⁾	Unemployment rate as a % of labour force (s.a.)	M2 ²⁾	3-month interbank deposit rate ³⁾ as a % per annum	10-year government bond yield ³⁾ as a % per annum	Exchange rate ⁴⁾ as national currency per ECU or euro	Fiscal deficit (-)/surplus (+) ⁵⁾ as a % of GDP	Gross public debt ⁶⁾ as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
1997	2.3	0.0	4.4	7.6	4.9	4.9	5.76	6.45	1.134	-0.9	56.4
1998	1.6	0.7	4.4	5.5	4.5	7.4	5.57	5.33	1.121	0.3	53.3
1999	2.2	-1.7	4.2	4.8	4.2	7.4	5.42	5.64	1.066	1.0	50.3
2000	.	.	.	.	.	.	6.53	6.03	0.924	.	.
1999 Q3	2.3	-0.8	4.3	5.0	4.2	7.4	5.44	5.88	1.049	1.3	50.4
Q4	2.6	-3.1	5.0	5.6	4.1	5.9	6.14	6.13	1.038	1.3	50.3
2000 Q1	3.2	-3.7	5.3	6.3	4.1	5.6	6.11	6.48	0.986	2.0	49.2
Q2	3.3	-4.4	6.1	7.0	4.0	5.7	6.63	6.18	0.933	2.2	46.4
Q3	3.5	-5.4	5.3	6.5	4.0	5.6	6.70	5.89	0.905	2.3	45.1
Q4	.	.	.	.	.	.	6.69	5.56	0.868	.	.
2000 July	3.7	.	.	6.4	4.0	5.2	6.73	6.04	0.940	.	.
Aug.	3.4	.	.	6.4	4.1	5.4	6.69	5.83	0.904	.	.
Sep.	3.5	.	.	6.6	3.9	6.2	6.67	5.80	0.872	.	.
Oct.	3.4	.	.	5.7	3.9	6.1	6.78	5.74	0.855	.	.
Nov.	3.4	.	.	4.7	4.0	5.9	6.75	5.72	0.856	.	.
Dec.	.	.	.	.	.	.	6.54	5.23	0.897	.	.
Japan											
1997	1.7	-2.2	1.6	3.6	3.4	3.1	0.62	2.15	137.1	-2.7	-
1998	0.6	6.3	-2.5	-7.1	4.1	4.4	0.66	1.30	146.4	-10.3	-
1999	-0.3	-2.5	0.2	0.8	4.7	3.7	0.22	1.75	121.3	-10.4	-
2000	.	.	.	.	.	.	0.28	1.76	99.5	.	-
1999 Q3	0.0	-5.0	0.9	3.1	4.7	3.6	0.10	1.78	118.7	-	-
Q4	-1.0	-6.0	-0.3	4.8	4.6	3.0	0.29	1.77	108.4	-	-
2000 Q1	-0.7	-7.0	0.7	6.2	4.8	2.2	0.14	1.79	105.5	-	-
Q2	-0.7	-7.3	1.0	7.1	4.7	2.3	0.12	1.72	99.6	-	-
Q3	-0.7	.	1.6	5.4	4.6	1.9	0.32	1.79	97.4	-	-
Q4	.	.	.	.	.	.	0.56	1.73	95.3	-	-
2000 July	-0.5	-4.5	.	4.2	4.7	2.0	0.22	1.72	101.4	-	-
Aug.	-0.8	.	.	8.3	4.6	1.8	0.32	1.77	97.8	-	-
Sep.	-0.8	.	.	3.9	4.7	2.0	0.41	1.88	93.1	-	-
Oct.	-0.9	.	.	6.6	4.7	2.1	0.52	1.83	92.7	-	-
Nov.	-0.5	.	.	.	4.8	2.1	0.55	1.75	93.3	-	-
Dec.	.	.	.	.	.	.	0.62	1.62	100.6	-	-

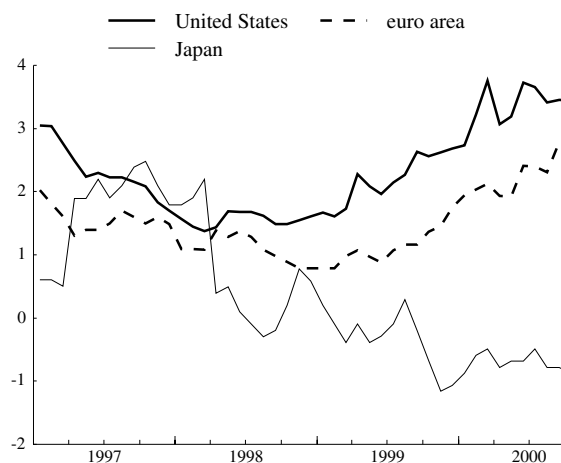
Real gross domestic product

(annual percentage changes; quarterly)



Consumer price indices

(annual percentage changes; monthly)



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

1) Manufacturing.

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

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

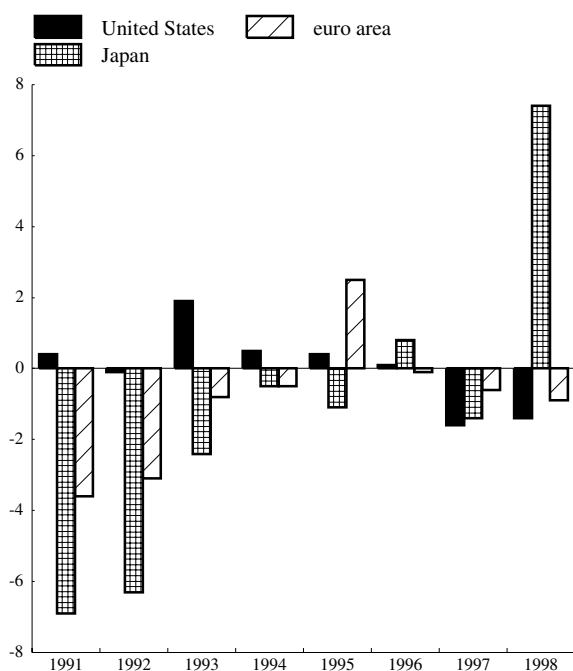
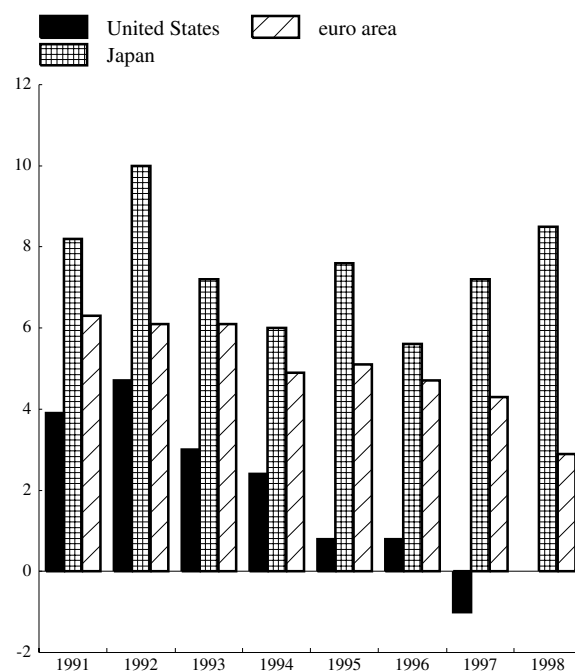
4) For more information, see Table 10.

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

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

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

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households ¹⁾			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditure	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
1996	17.3	19.1	-1.4	8.8	8.4	5.2	8.7	5.1	1.0	11.5	5.7	12.8	4.9
1997	18.1	19.9	-1.5	9.4	8.6	1.8	8.7	3.4	1.8	11.7	3.7	12.4	4.7
1998	18.8	20.8	-2.3	9.6	8.8	3.9	8.5	5.4	1.7	12.3	5.8	12.7	5.8
1999	18.5	21.1	-3.4	9.8	9.3	7.3	8.7	8.8	3.6	12.6	5.2	11.4	6.7
1998 Q4	18.6	20.9	-2.6	9.7	9.0	1.6	8.4	3.3	-1.0	12.6	4.4	12.6	6.1
1999 Q1	18.8	21.0	-2.7	9.6	9.1	8.3	8.7	9.7	6.3	12.4	4.6	11.9	6.6
Q2	18.4	20.8	-3.2	9.6	9.5	7.9	8.7	9.6	0.4	12.7	5.0	11.6	6.9
Q3	18.4	21.1	-3.6	9.8	9.3	7.2	8.6	8.6	3.6	12.6	4.8	11.1	6.4
Q4	18.3	21.4	-3.9	10.0	9.3	5.9	8.7	7.4	4.2	12.6	6.5	10.9	7.1
2000 Q1	18.2	21.4	-4.0	9.9	9.6	7.7	8.8	9.0	5.8	12.8	4.4	10.1	8.2
Q2	18.5	22.0	-4.1	10.3	9.6	5.8	9.0	7.4	3.3	12.5	4.4	10.0	5.9
Q3	18.4	21.9	-4.5	10.4	9.8	5.7	9.1	7.3	2.0	12.4	2.3	9.6	5.7
Japan													
1996	31.3	29.8	1.4	16.1	15.6	1.7	15.1	0.3	1.0	6.7	6.4	13.3	1.1
1997	31.2	28.7	2.6	16.6	16.1	3.3	13.7	1.2	0.1	5.4	7.1	13.4	0.7
1998	29.3	26.4	3.1	14.5	14.6	-6.6	15.1	-9.5	-1.5	5.0	5.6	13.7	-0.5
1999	.	26.0	.	.	.	2.6	.	-2.9	1.3	.	6.9	.	-0.5
1998 Q4	.	26.9	.	.	.	13.4	.	-7.0	-7.0	.	11.3	.	-1.0
1999 Q1	.	26.9	.	.	.	0.8	.	-15.2	-2.2	.	-3.6	.	6.2
Q2	.	24.2	.	.	.	-16.9	.	-17.1	1.7	.	14.6	.	-7.2
Q3	.	26.4	.	.	.	9.7	.	-1.3	1.3	.	4.4	.	1.3
Q4	.	26.9	.	.	.	15.3	.	19.9	4.0	.	11.6	.	-2.2
2000 Q1	.	26.3	.	.	.	7.7	.	-3.4	-3.4	.	3.9	.	9.7
Q2	.	24.8	.	.	.	-26.9	.	-19.6	0.5	.	5.2	.	-9.2
Q3	.	27.1	.	.	.	15.5	.	0.7	-0.4	.	0.6	.	2.3

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

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


Sources: ECB, Federal Reserve Board, Bank of Japan and Economic Planning Agency.

1) Households including non-profit institutions serving households.

Past data for selected economic indicators for the euro area plus Greece

A. Main monetary and financial markets statistics

A.1 Monetary aggregates and counterparts

(EUR billions (not seasonally adjusted; end of period) and annual percentage changes ¹⁾)

	M1		M2		M3		Credit ²⁾		MFI loans to residents of the euro area plus Greece, excluding MFIs and general government	
	Amount ¹	% change ²	Amount ³	% change ⁴	Amount ⁵	% change ⁶	Amount ⁷	% change ⁸	Amount ⁹	% change ¹⁰
1999 Jan.	1,814.5	.	4,033.1	.	4,605.8	.	7,787.7	.	5,155.4	.
Feb.	1,784.0	.	3,992.0	.	4,592.8	.	7,807.9	.	5,157.7	.
Mar.	1,806.0	.	4,010.6	.	4,609.6	.	7,883.9	.	5,205.2	.
Apr.	1,820.4	.	4,030.8	.	4,649.6	.	7,916.4	.	5,226.8	.
May	1,851.5	.	4,057.1	.	4,683.2	.	7,988.8	.	5,260.4	.
June	1,896.0	.	4,084.9	.	4,709.2	.	8,065.8	.	5,353.8	.
July	1,896.6	.	4,102.6	.	4,719.1	.	8,083.0	.	5,389.8	.
Aug.	1,861.4	.	4,070.6	.	4,701.3	.	8,086.2	.	5,385.0	.
Sep.	1,887.1	.	4,080.0	.	4,728.4	.	8,137.9	.	5,424.8	.
Oct.	1,894.0	.	4,098.3	.	4,750.0	.	8,206.8	.	5,472.2	.
Nov.	1,928.7	.	4,128.1	.	4,802.8	.	8,306.7	.	5,538.3	.
Dec.	1,984.1	.	4,226.9	.	4,896.4	.	8,330.0	.	5,569.2	.
2000 Jan.	1,992.7	9.4	4,220.8	4.2	4,904.4	5.4	8,388.1	8.1	5,615.4	8.7
Feb.	1,981.9	10.7	4,213.0	5.2	4,924.5	6.2	8,446.5	8.5	5,649.8	9.4
Mar.	1,992.8	10.0	4,222.4	4.9	4,963.9	6.6	8,542.0	8.3	5,721.0	9.8
Apr.	2,034.7	11.4	4,267.0	5.4	5,060.2	6.8	8,607.3	8.6	5,782.8	10.4
May	2,015.4	8.7	4,255.6	4.6	5,054.4	6.1	8,641.5	8.1	5,812.0	10.3
June	2,032.5	7.1	4,267.3	4.3	5,054.5	5.5	8,654.1	7.2	5,879.8	9.5
July	2,032.2	6.9	4,266.2	3.6	5,062.0	5.3	8,670.8	7.1	5,909.3	9.1
Aug.	1,997.3	7.0	4,254.2	4.1	5,068.3	5.8	8,673.9	7.1	5,930.3	9.6
Sep.	2,012.2	6.2	4,262.8	4.0	5,074.0	5.5	8,754.3	7.1	6,011.4	10.0
Oct.	2,009.5	5.6	4,267.4	3.6	5,094.9	5.4	8,796.3	6.5	6,056.8	9.8

A.2 Financial market interest rates and statistics on securities other than shares

(percentages per annum and EUR billions)

	Money market rates		Government bond yields		Euro-denominated securities issued by residents of the euro area plus Greece					
	3-month deposits ¹¹	12-month deposits ¹²	2 years ¹³	10 years ¹⁴	Gross issues				Net issues ¹⁹	Amounts outstanding ²⁰
					Total ¹⁵	By MFIs ³⁾ ¹⁶	By general government ³⁾ ¹⁷	By non-financial and non-monetary financial corporations ³⁾ ¹⁸		
1999 Jan.	3.33	3.24	3.11	3.87	346.5	46.8	39.6	2.7	64.0	5,742.0
Feb.	3.27	3.19	3.17	4.02	292.0	49.1	35.6	2.8	46.2	5,786.9
Mar.	3.21	3.19	3.19	4.22	297.3	47.8	35.4	2.0	41.0	5,828.1
Apr.	2.87	2.91	2.93	4.09	333.6	48.8	34.3	2.7	39.8	5,867.8
May	2.75	2.83	2.89	4.24	289.0	46.4	37.9	3.5	46.9	5,915.7
June	2.80	2.98	3.16	4.56	279.4	48.6	28.7	8.3	35.9	5,951.9
July	2.84	3.17	3.38	4.89	327.9	44.7	36.4	3.3	40.5	5,991.4
Aug.	2.86	3.37	3.65	5.10	239.0	50.2	32.3	1.8	34.3	6,026.3
Sep.	2.89	3.43	3.75	5.27	310.6	51.8	31.3	3.4	58.3	6,083.3
Oct.	3.53	3.81	4.16	5.51	302.0	52.0	30.5	2.0	48.4	6,133.0
Nov.	3.64	3.82	4.07	5.22	284.6	57.2	26.2	3.7	40.6	6,173.8
Dec.	3.58	3.94	4.24	5.32	235.1	66.9	20.2	2.5	-31.5	6,139.9
2000 Jan.	3.47	4.04	4.43	5.72	346.9	56.7	30.6	1.2	-0.6	6,140.9
Feb.	3.65	4.18	4.59	5.68	351.7	58.0	26.6	1.7	57.5	6,198.3
Mar.	3.86	4.33	4.62	5.51	376.1	58.8	26.6	1.4	50.6	6,251.4
Apr.	4.03	4.42	4.61	5.43	344.0	54.3	26.4	2.2	36.4	6,286.0
May	4.44	4.88	5.04	5.53	380.8	60.2	22.9	1.8	53.0	6,344.9
June	4.59	5.01	5.05	5.36	334.8	58.5	21.7	3.5	34.3	6,381.8
July	4.66	5.14	5.21	5.47	372.0	57.0	22.1	3.4	36.6	6,415.6
Aug.	4.85	5.28	5.30	5.41	342.2	59.8	21.8	2.2	32.3	6,449.9
Sep.	4.91	5.24	5.24	5.48	385.8	61.6	21.3	1.7	18.7	6,470.3
Oct.	5.08	5.23	5.19	5.42	439.8	63.9	19.4	1.8	32.2	6,503.0
Nov.	5.12	5.20	5.14	5.34	.	.	.	.	.	.
Dec.	4.94	4.87	4.80	5.07	.	.	.	.	.	.

Sources: ECB, Reuters for columns 11 and 12.

1) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions. For the calculation of growth rates, see the technical notes.

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

3) As a percentage of the total.

B. Price, real economy and fiscal developments

(annual percentage changes, unless otherwise indicated)

	Price developments			Real economy developments					Fiscal developments	
	HICP	Industrial producer prices	GDP deflator	Real GDP	Industrial production (excluding construction)	Retail sales (total; s.a.; constant prices)	Unemployment (% of labour force)	Trade balance (EUR billions; (ECU billions to end-1998))	Deficit (-) / surplus (+) (% of GDP)	Government debt (% of GDP)
	1	2	3	4	5	6	7	8	9	10
1996	2.3	0.4	2.1	1.4	0.3	0.5	11.5	62.4	-4.3	75.9
1997	1.7	1.1	1.6	2.3	4.2	1.3	11.5	74.5	-2.6	75.3
1998	1.2	-0.7	1.7	2.8	4.3	2.9	10.9	68.4	-2.2	73.6
1999	1.1	-0.4	1.2	2.5	1.9	2.6	10.0	34.0	-1.3	72.7
1999 Q3	1.1	0.1	1.1	2.6	2.5	2.4	9.9	11.7	-	-
Q4	1.5	2.2	1.0	3.3	4.1	2.9	9.7	8.7	-	-
2000 Q1	2.1	4.4	1.1	3.5	4.8	2.6	9.5	-6.3	-	-
Q2	2.1	5.2	0.9	3.7	6.0	3.2	9.2	-1.9	-	-
Q3	2.5	5.8	.	3.4	5.8	2.9	9.1	2.0	-	-
1999 Nov.	1.5	2.2	-	-	4.3	2.4	9.7	1.6	-	-
Dec.	1.7	2.9	-	-	5.4	2.8	9.7	1.5	-	-
2000 Jan.	1.9	3.8	-	-	3.3	2.7	9.6	-6.3	-	-
Feb.	2.1	4.4	-	-	5.8	3.5	9.5	-1.6	-	-
Mar.	2.2	4.9	-	-	5.4	1.5	9.4	1.7	-	-
Apr.	1.9	4.7	-	-	6.2	3.4	9.3	-1.1	-	-
May	1.9	5.3	-	-	8.2	3.9	9.2	-0.8	-	-
June	2.4	5.6	-	-	3.8	2.3	9.1	-0.1	-	-
July	2.4	5.6	-	-	5.3	2.7	9.1	3.4	-	-
Aug.	2.4	5.6	-	-	6.5	2.7	9.1	-2.3	-	-
Sep.	2.8	6.3	-	-	5.7	3.5	9.0	0.9	-	-
Oct.	2.7	6.5	-	-	3.8	.	8.9	.	-	-
Nov.	2.9	.	-	-	.	.	8.9	.	-	-

Sources: European Commission (Eurostat) and ECB calculations.

C. Effective exchange rates

(period averages; index 1999 Q1=100)

	Narrow group				Broad group	
	Nominal	Real CPI	Real PPI	Real ULCM	Nominal	Real CPI
	1	2	3	4	5	6
1996	108.1	108.7	107.4	112.2	95.4	105.8
1997	99.1	99.4	99.1	100.9	90.3	96.4
1998	101.5	101.3	101.5	99.4	96.5	99.1
1999	95.6	95.7	95.7	95.4	96.5	95.8
2000	85.4	86.3	86.9	85.8	88.0	86.1
1999 Q4	92.0	92.1	92.2	91.4	94.1	92.6
2000 Q1	88.8	89.5	89.6	87.9	90.9	89.4
Q2	85.7	86.4	86.8	85.8	88.2	86.5
Q3	84.5	85.5	86.1	85.3	87.1	85.2
Q4	82.7	83.8	84.9	84.1	85.7	83.4
1999 Dec.	89.9	90.3	90.2	-	92.1	90.7
2000 Jan.	90.1	90.7	90.8	-	92.3	90.7
Feb.	89.0	89.7	89.8	-	91.0	89.4
Mar.	87.4	88.1	88.3	-	89.5	88.0
Apr.	85.8	86.5	86.8	-	88.2	86.6
May	84.2	84.8	85.5	-	86.7	84.9
June	87.1	88.0	88.2	-	89.8	88.0
July	86.7	87.7	87.9	-	89.2	87.4
Aug.	84.3	85.3	85.9	-	86.8	85.0
Sep.	82.5	83.4	84.5	-	85.1	83.1
Oct.	81.3	82.1	83.2	-	84.2	82.0
Nov.	82.0	83.0	84.1	-	84.9	82.7
Dec.	85.1	86.3	87.4	-	87.9	85.6

Source: ECB.

Technical notes

Relating to Table 2.4

Seasonal adjustment of the euro area monetary aggregates

Multiplicative versions of X-12-ARIMA (version 0.2.2¹) and TRAMO/SEATS² (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 website (<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.

Relating to Tables 2.5 to 2.8

As far as possible, the data are harmonised and comparable. Nevertheless, as a result of the implementation of a new reporting scheme in January 1999, data for Tables 2.5 to 2.8 prior to the first quarter of 1999 are not directly comparable with those referring to later periods. In addition, quarterly flows cannot be calculated for any of the periods as, for the time being, reclassification and revaluation adjustments are not compiled. Tables 2.5 to 2.8 can be used for a structural analysis, while it is not advisable to perform a detailed analysis of the growth rates.

- 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 by the European Central Bank (ECB) is presented in the document entitled “Statistical information collected and compiled by the ESCB”, dated May 2000. This document is an update of the report entitled “Statistical requirements for Stage Three of Monetary Union (Implementation Package)” of July 1996, and describes the provision of statistics as it stands today. The document covers money and banking and related statistics, balance of payments statistics, international investment position statistics and financial accounts statistics. The requirements of the ECB for statistics on prices and costs, national accounts, the labour market, government receipts and expenditure, short-term indicators of output and demand, and the European Commission Business and Consumer Surveys are set out in the document entitled “Requirements in the field of general economic statistics” of August 2000.¹

The focus of these statistics is the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available in a downloadable format (csv files) on the ECB’s website (<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 2.8 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless indicated otherwise, price and cost statistics before 1999 are based on the data expressed in national currency terms.

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

As a general rule, the cut-off date for the statistics included in the ECB Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, it was 3 January 2001.

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

Overview

Key developments in the euro area are summarised in an overview table.

Monetary policy and financial statistics

Tables 1.1 to 1.5 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations, statistics relating to minimum reserves, and the banking system’s liquidity position. Tables 1.2 and 1.3 reflect the switch to variable rate tenders in June 2000. Monetary data relating to Monetary Financial Institutions (MFIs), including the Eurosystem, are shown in Tables 2.1 to 2.3. Table 2.3 is consolidated; inter-MFI positions within the euro area are not shown, but any difference between the sum total of such claims and liabilities as recorded is shown in column 13. Table 2.4 sets out monetary aggregates drawn from the consolidated MFI balance sheet; they also include some (monetary) liabilities of central government. Table 2.5 shows a quarterly sectoral and maturity analysis of loans by MFIs to euro area residents. Table 2.6 shows a quarterly analysis of deposits held by euro area residents with MFIs. Table 2.7 provides a quarterly analysis of MFI claims on and

¹ Money and banking statistics are the responsibility of the ECB at the European level; responsibility for balance of payments, international investment position and financial accounts statistics is shared with the European Commission (Eurostat); price and cost and other economic statistics are the responsibility of the European Commission (Eurostat).

liabilities to non-residents of the euro area. Table 2.8 shows a quarterly currency analysis of certain MFI balance sheet items. A complete list of MFIs is published on the ECB's website. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual: Guidance for the statistical classification of customers" (ECB, November 1999). The "Money and Banking Statistics Compilation Guide" (EMI, April 1998) explains recommended practices to be followed by the NCBs. From 1 January 1999 the statistical information is collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16).

Statistics on money market interest rates, long-term government bond yields and stock market indices (Tables 3.1 to 3.3) are produced by the ECB using data from wire services. For details concerning the statistics on retail bank interest rates (Table 3.4), see the footnote at the bottom of the relevant page.

Statistics on securities issues are presented in Tables 3.5 and 3.6. The statistics on securities issues are estimated to cover approximately 95% of total issues by euro area residents. Table 3.5 shows securities issued, redemptions and amounts outstanding, broken down into short-term securities and long-term securities. Net issues differ from the change in amounts outstanding owing to valuation changes, reclassifications and other adjustments. Table 3.6 contains a sectoral breakdown of issuers of euro-denominated securities, whether resident in the euro area or elsewhere. For euro area residents, the sectoral breakdown is in line with the European System of Accounts 1995 (ESA 95).² For non-euro area residents, the term "banks (including central banks)" is used to indicate institutions of a similar type to MFIs (including the Eurosystem) resident outside the euro area. The term "international organisations" includes the European Investment Bank. (The ECB is included in the Eurosystem.)

The totals (columns 1, 7 and 14) in Table 3.6 are identical to the data on amounts outstanding (columns 8, 16 and 20), gross issues (columns 5, 13 and 17) and net issues (columns 7, 15 and 19) of euro-denominated securities in Table 3.5. The amounts outstanding of securities issued by MFIs (column 2) in Table 3.6 are broadly comparable with money market paper and debt securities issued as shown on the liabilities side of the aggregated MFI balance sheet in Table 2.8.3 (columns 2 and 10), although the coverage of securities issues statistics is at present somewhat narrower.

Prices and real economy indicators

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

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. Data from January 2000 include the cost of health and educational services; earlier data on the

2 The code numbers in the ESA 95 for the sectors shown in tables in the Monthly Bulletin are: MFIs (including Eurosystem) comprises the ECB and the national central banks of Member States in the euro area (S121) and other monetary financial institutions (S122); non-monetary financial corporations comprises other financial intermediaries (S123), financial auxiliaries (S124) and insurance corporations and pension funds (S125); non-financial corporations (S11); central government (S1311); other general government comprises state government (S1312), local government (S1313) and social security funds (S1314).

extended basis are, in general, not available. The HICP from January 2000 also covers spending by non-residents which had previously been excluded from the HICP in certain Member States. The table includes seasonally adjusted HICP data which are compiled by the ECB.

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the ESA 95 during 1999 and thereafter has begun to pave the way for fully comparable data, including quarterly summary accounts, across the euro area. Before 1999 the deflators of GDP in Table 4.2.2 are derived from national data in domestic currency. National accounts in this issue are based on the ESA 95.

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

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

A need was foreseen 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 in spring 2001.

General government fiscal position

Tables 7.1 to 7.3 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The euro area aggregates are compiled by the ECB from harmonised data provided by the NCBs, which are regularly updated. Data on deficit and debt for the euro area countries may therefore differ from those used by the European Commission in the context of the excessive deficit procedure.

Table 7.1 shows general government revenue and expenditure on the basis of definitions laid down in Commission Regulation No. 1500/2000 of 10 July 2000 amending the ESA 95. Table 7.2 shows details of general government gross consolidated debt at nominal value in accordance with the Treaty provisions on the excessive deficit procedure. Tables 7.1 and 7.2 include summary data for individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. Table 7.3 analyses changes in general government debt. The difference between the change in government debt and government deficit, the deficit-debt adjustment, is mainly explained by government transactions in financial assets and by foreign exchange valuation effects.

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

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.6) and international investment position (i.i.p.)

statistics generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of May 2000 (ECB/2000/04) on the statistical reporting requirements of the ECB, and to Eurostat's documentation.

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

Some earlier data have been partially estimated and may not be fully comparable with more recent observations. That is the case for the b.o.p. financial account before end-1998, the services account before end-1997, the monthly pattern of income for the years 1997 to 1999 and the i.i.p. at end-1997. Table 8.5.2 provides a sectoral breakdown of euro area purchasers of securities issued by non-residents of the euro area. It is not possible to show a sectoral breakdown of euro area issuers of securities acquired by non-residents.

The euro area i.i.p. (Table 8.7.1) is compiled on a net basis by aggregating national data. The i.i.p. is valued at current market prices with the exception of direct investment stocks, where book values are used to a large extent.

The outstanding amounts of the Eurosystem's international reserves and related assets are shown in Table 8.7.2. The corresponding reserves and related assets held by the ECB are shown in Table 8.7.3. The data in Tables 8.7.2 and 8.7.3 are in line with the recommendations for the IMF/BIS template on international reserves and foreign currency liquidity. Reserve assets data before end-1999 are not fully comparable with later observations. A publication on the statistical treatment of the Eurosystem's international reserves is available on the ECB's website.

Table 9 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. Real indices (deflated by consumer prices, producer prices and unit labour costs in manufacturing respectively) for the group of 13 currencies are shown, together with one nominal and one real index (deflated by consumer prices) for a broader group of 39 currencies. The bilateral rates shown are those against the 13 currencies used in the ECB's calculation of the "narrow" effective exchange rate of the euro. The ECB publishes daily reference rates for these and some other currencies.

Other statistics

Statistics on other EU Member States (Table 11) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Tables/Charts 12.1 and 12.2 are obtained from national sources. Saving, investment and financing data for the United States and Japan (Table/Chart 12.2) are structured in the same way as the capital and financial flows data shown for the euro area in Table/Chart 6.

Past data for selected economic indicators for the euro area plus Greece

Data for the euro area plus Greece up to end-2000 are shown in an additional table at the end of the "Euro area statistics" section. This table, which will appear only in this January 2001 issue of the ECB

Monthly Bulletin, but will be kept up to date on the ECB's website, provides past data for the euro area plus Greece for a selected number of indicators. Detailed information on the different parts of the table is provided below.

Table A.1 presents monetary aggregates and the main counterparts of M3, as drawn from the consolidated MFI balance sheet. For the consolidation of the data referring to the "Euro 11 plus Greece", balance sheet positions of MFIs in the first 11 countries participating in the euro area vis-à-vis those resident in Greece have been taken into account. Business denominated in Greek drachmae has also been identified and treated as if it had been in euro.

Table A.2 shows financial market interest rates and securities other than shares statistics. Before January 1999 synthetic euro area money market rates were calculated on the basis of national rates weighted by GDP. From January 1999 to December 2000 euro interbank offered rates (EURIBOR) and ATHIBOR are weighted by GDP. Up to August 2000, 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.

For securities issues statistics (also shown in Table A.2), the fact that residents of Greece will become residents of the euro area has given rise to two structural modifications. The first change involves the inclusion of all

securities issued by Greek residents in euro and Greek drachmae. The second effect is caused by the inclusion of all securities issued by euro area residents – in addition to those in Greece – and denominated in Greek drachmae. Securities issues statistics including Greece are compiled for both stocks and flows.

Aggregated data for the euro area plus Greece on price and real economy developments (Table B) are provided by the European Commission (Eurostat). Data on fiscal developments have been aggregated by the ECB.

Table C shows past nominal and real effective exchange rate indices for the euro plus the Greek drachma. The methodology applied for the calculation is the same as that described in the article in the April 2000 issue of the ECB Monthly Bulletin entitled "The nominal and real effective exchange rates of the euro". New weights for the euro area partner countries have been calculated, excluding Greece from the partners but including it in the euro area (for the countries included in the calculations, see footnote 1 to Table 10 on "Exchange rates" in the "Euro area statistics" section of this issue). A "theoretical" euro exchange rate, in which account is taken of Greek drachma-related developments as well as deflators for the euro area plus Greece, has been constructed prior to January 2001. The full set of data, starting from 1990 (1993 for the broad group), can be downloaded in CSV format from the ECB's website.



Chronology of monetary policy measures of the Eurosystem¹

4 January 2000

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

5 January 2000

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

15 January 2000

At the request of the Greek authorities, the ministers of the euro area Member States, the ECB and the ministers and central bank governors of Denmark and Greece decide, following a common procedure, to revalue the central rate of the Greek drachma in the exchange rate mechanism (ERM II) by 3½%, with effect from 17 January 2000.

20 January 2000

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

It also announces that the Eurosystem intends to allot an amount of €20 billion for each of the longer-term refinancing operations to be conducted in the first half of 2000. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the first half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the financial sector through its main refinancing operations.

3 February 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.25%, starting from the operation to be settled on 9 February 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.25% and 2.25% respectively, both with effect from 4 February 2000.

17 February, 2 March 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.25%, 4.25% and 2.25% respectively.

16 March 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.5%, starting from the operation to be settled on 22 March 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.5% and 2.5% respectively, with effect from 17 March 2000.

30 March, 13 April 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.5%, 4.5% and 2.5% respectively.

¹ The chronology of monetary policy measures of the Eurosystem taken in 1999 can be found on pages 176 to 179 of the ECB Annual Report 1999.

27 April 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 3.75%, starting from the operation to be settled on 4 May 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 4.75% and 2.75% respectively, both with effect from 28 April 2000.

11 May 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

25 May 2000

The Governing Council of the ECB decides that the interest rates on the main refinancing operations, the marginal lending facility and the deposit facility will remain unchanged at 3.75%, 4.75% and 2.75% respectively.

8 June 2000

The Governing Council of the ECB decides to raise the interest rate on the main refinancing operations of the Eurosystem by 0.50 percentage point to 4.25% and to apply this in the two operations (which will be conducted as fixed rate tenders) to be settled on 15 and 21 June 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 5.25% and 3.25% respectively, both with effect from 9 June 2000.

It also announces that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem

will be conducted as variable rate tenders, applying the multiple rate auction procedure. The Governing Council decides to set a minimum bid rate for these operations equal to 4.25%. The switch to variable rate tenders in the main refinancing operations is not intended as a further change in the monetary policy stance of the Eurosystem, but as a response to the severe overbidding which has developed in the context of the current fixed rate tender procedure.

19 June 2000

In accordance with Article 122 (2) of the Treaty establishing the European Community, the ECOFIN Council decides that Greece fulfils the necessary conditions on the basis of the criteria set out in Article 121 (1) and abrogates the derogation of Greece with effect from 1 January 2001. The ECOFIN Council took its decision, taking account of the reports of the European Commission and the ECB on the progress made in the fulfilment by Sweden and Greece of their obligations regarding the achievement of Economic and Monetary Union, after consulting the European Parliament, and after a discussion in the EU Council meeting in the composition of Heads of State or Government.

The ECOFIN Council, acting with the unanimity of the Member States of the European Community without a derogation and the Member State concerned, upon a proposal from the European Commission and after consultation of the ECB, also adopts the irrevocable conversion rate between the Greek drachma and the euro, with effect from 1 January 2001. Following the determination of the euro conversion rate of the Greek drachma (which is equal to its prevailing central rate against the euro in the exchange rate mechanism, ERM II), the ECB and the Bank of Greece announce that they will monitor the convergence of the market exchange rate of the Greek drachma against the euro towards its euro conversion rate, which should be completed at the latest by 29 December 2000.

21 June 2000

The Governing Council of the ECB decides that the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 5.25% and 3.25% respectively. It reiterates that, as announced on 8 June 2000, the forthcoming main refinancing operations of the Eurosystem will be conducted as variable rate tenders, applying the multiple rate auction procedure, with a minimum bid rate of 4.25%.

The Governing Council also announces that, for the longer-term refinancing operations to be conducted in the second half of 2000, the Eurosystem intends to allot an amount of €15 billion per operation. This amount takes into consideration the expected liquidity needs of the banking system of the euro area in the second half of 2000 and the desire of the Eurosystem to continue to provide the bulk of its refinancing of the financial sector through its main refinancing operations.

6 July, 20 July, 3 August 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.25%, 5.25% and 3.25% respectively.

31 August 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 6 September 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 1 September.

14 September 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.50%, 5.50% and 3.50% respectively.

5 October 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.75%, with effect from the operation to be settled on 11 October 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.75% and 3.75% respectively, both with effect from 6 October.

19 October, 2 November, 16 November, 30 November 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

14 December 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides to reconfirm the existing reference value for monetary growth, namely an annual growth rate of 4½% for the broad aggregate M3. This decision is taken on the grounds that the available evidence continues to support the assumptions underlying the initial derivation of the reference value in December

1998 (and its confirmation in December 1999), namely that, over the medium term, M3 income velocity declines at a trend rate in the range from ½% to 1% per annum and potential output grows at a trend rate between 2% and 2½% per annum. The Governing Council will undertake the next review of the reference value in December 2001.

2 January 2001

On 1 January 2001 the euro was introduced in Greece. Greece thus became the twelfth EU Member State to adopt the single currency and the first to do so since the start of Stage Three of Economic and Monetary Union (EMU) on 1 January 1999. As a result, the Bank of Greece is now a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which previously adopted the euro. In accordance with Article 49 of the Statute of the European System of Central Banks and of the European Central Bank, the Bank of Greece pays up the remainder of its contribution to the capital of the ECB, as well as its share of the ECB's reserves, and also transfers to the ECB its contribution to the foreign reserve assets of the ECB.

Further to the announcement on 29 December 2000, the first main refinancing operation of

2001, in which the Greek counterparties of the Eurosystem participate for the first time, is successfully conducted. The allotment volume of €101 billion takes into account the additional liquidity needs of the euro area banking system resulting from the integration of the Greek Monetary Financial Institutions.

4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

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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.

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"Annual Report 1998", April 1999.

"Annual Report 1999", April 2000.

Convergence Report

"Convergence Report 2000", May 2000.

Monthly Bulletin

Articles published from January 1999 onwards:

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"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.

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

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