



EUROPEAN CENTRAL BANK

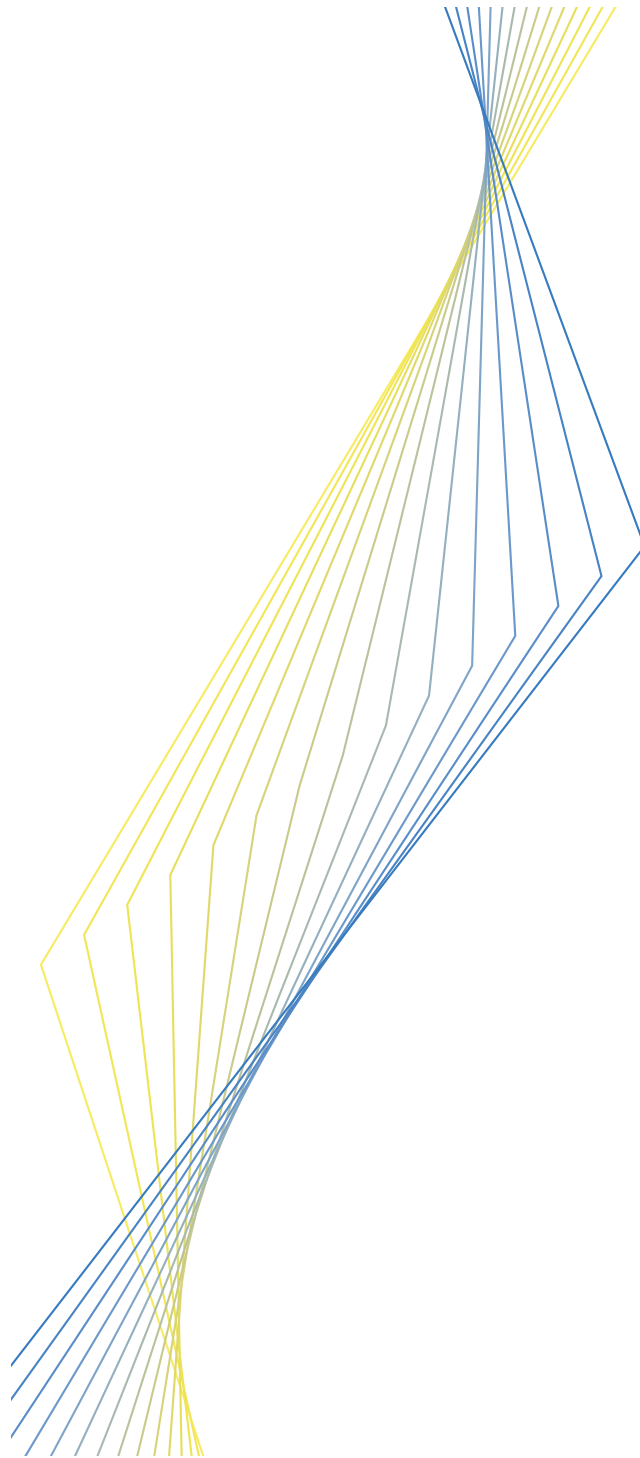
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**M O N T H L Y
B U L L E T I N**

November 2000



EUROPEAN CENTRAL BANK



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Abbreviations

Countries

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

Others

BIS	Bank for International Settlements
BPM4	IMF Balance of Payments Manual (4th edition)
BPM5	IMF Balance of Payments Manual (5th edition)
CDs	certificates of deposit
c.i.f.	cost, insurance and freight at the importer's border
CPI	Consumer Price Index
ECB	European Central Bank
ECU	European Currency Unit
EMI	European Monetary Institute
ESA 95	European System of Accounts 1995
ESCB	European System of Central Banks
EU	European Union
EUR	euro
f.o.b.	free on board at the exporter's border
GDP	gross domestic product
HICP	Harmonised Index of Consumer Prices
ILO	International Labour Organization
IMF	International Monetary Fund
MFIs	Monetary Financial Institutions
NCBs	national central banks
repos	repurchase agreements
SITC Rev. 3	Standard International Trade Classification (revision 3)

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

Editorial

At the meetings held on 19 October 2000 and 2 November 2000 the Governing Council of the ECB 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 annual M3 growth stood at 5.4% in the period from July to September 2000, unchanged from the three-month period ending in August 2000. While remaining above the reference value of 4½%, M3 growth has shown signs of moderation over recent months. For example, the six-month annualised and seasonally adjusted rate of growth of M3 stood at 3.6% in September. This moderation in M3 growth, which was mainly related to slower M1 growth, reflected the increases in ECB interest rates since November 1999. A further factor to be taken into account when assessing the information relating to the first pillar is the fact that the annual growth rate of credit to the private sector increased to 10.8% in September. However, this was influenced somewhat by the financing by companies of payments for UMTS licences. The growth rate of total MFI credit to euro area residents remained broadly unchanged in that month.

Turning to the second pillar, at this juncture a key factor affecting the outlook for price stability in the medium term are the prospects for economic growth in the euro area. In this respect, one determinant will be the development of world economic growth. In the United States the decline in real GDP growth in the third quarter of 2000 may be seen as the first sign of an orderly slowdown towards more sustainable levels, in line with the projections currently available. More generally, the extended period of high oil prices has increased the uncertainty surrounding the sustainability of recent growth trends. However, by contrast with previous periods of strong and prolonged

increases in oil prices, the world economy is now less dependent on oil, and inflationary pressures have risen but are still being contained. This should help to avoid any sustained negative effect on confidence and thereby ensure that the impact of high oil prices on growth remains moderate over the medium term. Overall, the outlook for world economic growth and its impact on the euro area remain favourable.

Other considerations also argue in favour of a positive outlook for growth in the euro area. Euro area real GDP has been growing at a high rate for four consecutive quarters, including the second quarter of 2000. Private consumption, in particular, has been supported by high employment growth. Some monthly indicators which extend into, or cover, the third quarter of 2000 point to a possible moderation in real GDP growth rates. In particular, the pace of growth in industrial production appears to have declined somewhat and some survey data, including confidence indicators, while remaining at high levels, have also indicated that there has been a certain degree of moderation. Overall, however, the information available, including forecasts produced by private and public institutions, continues to be consistent with the expectation of strong real GDP growth in the period ahead.

This picture is broadly supported by bond yields in the euro area. These have changed little over recent weeks. They continue to reflect medium-term market expectations of strong economic growth and of consumer price inflation evolving in line with the ECB's definition of price stability.

The sound fundamentals of the euro area should also increasingly be reflected in exchange rates. These have remained out of line with economic fundamentals for a prolonged period of time and this is posing risks to the world economy. In addition, for the euro area, the continued undervaluation of the euro vis-à-vis other major currencies is putting upward pressure on import prices.

For these reasons, the ECB intervened in foreign exchange markets in early November. Exchange rate developments will continue to be monitored closely.

As regards developments in consumer prices, in September 2000 annual HICP inflation rose to 2.8%, from 2.3% in August. This increase, which was already expected at the time of the decision to increase ECB interest rates on 5 October 2000, mainly resulted from energy price developments. A contribution was also provided by the higher year-on-year change in prices of non-energy industrial goods in the HICP, from 0.6% in August to 0.8% in September 2000, which reflects the pass-through from higher producer price increases at earlier stages in the production process. This, in combination with the slight increase in the annual rate of change of processed food prices, led the rate of annual HICP inflation excluding seasonal food and energy to increase to 1.4% in September 2000, from 1.3% in August.

Owing to developments in energy prices and the past decline in the euro, consumer price inflation may remain above 2% for longer than was expected just a few months ago. In this respect, in order to support the maintenance of price stability over the medium term, it is important that economic agents accurately perceive the nature of current price developments. In particular, it needs to be recognised that current upward pressures can be overcome most smoothly if economic agents see them for what they are, namely one-off or temporary price increases resulting from external factors. If, as the markets expect, oil prices do not rise further, the effects of past oil price increases will gradually drop out of the annual inflation rate.

At the current juncture two main considerations should guide economic agents' expectations with regard to the outlook for the euro area economy. First, the Governing Council is committed to maintaining price

stability in the medium term. Monetary policy will not accommodate inflationary tendencies in the euro area.

Second, euro area countries are now in a much better position to withstand the adverse effects of a sharp oil price increase than they were in the 1970s. This view is underpinned by the fact that the level of oil dependency of the euro area is now lower than in the past, and by the higher macroeconomic stability currently enjoyed by euro area countries. In addition, several of the rigidities in labour and product markets which affected the economies of countries of what is now the euro area in the 1970s and 1980s have been overcome. There are therefore good reasons to remain confident with regard to the economic outlook for the euro area.

However, this positive outlook needs to be underpinned by responsible fiscal policy-making and by social partners reacting appropriately to the increase in oil prices. It is crucial that any loosening in fiscal policy be avoided, and that further progress be made along the path towards fiscal consolidation. Similarly, continued wage moderation is important in order to contribute both to further decreases in the level of unemployment and to maintaining a favourable outlook for price stability. It will be equally important for structural reform to be intensified in order to allow the current high growth rates of real GDP and employment to be sustained without generating inflationary pressure.

This issue of the ECB Monthly Bulletin contains two articles. The first describes and reviews the two pillars of the ECB's monetary policy strategy and the main arguments for their adoption. The second article reviews developments in electronic money and the implications for monetary policy, the oversight of payment systems and the prudential supervision of financial intermediaries.

Economic developments in the euro area

I Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

At its meetings on 19 October and 2 November 2000 the Governing Council of the ECB decided to leave the minimum bid rate on 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).

Slowdown in M3 growth in recent months

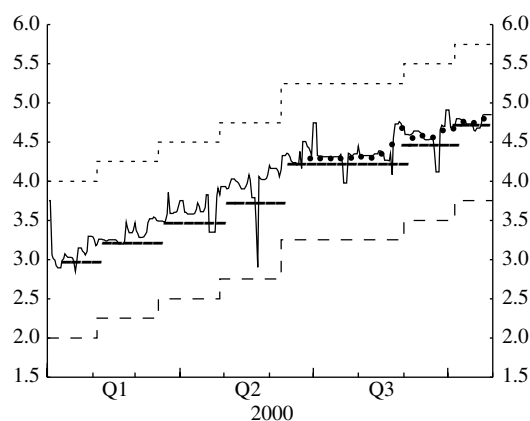
In September 2000 the annual rate of increase in the broad monetary aggregate M3 declined slightly, to 5.5%, from 5.6% in the previous month (see Chart 2). The three-month average of the annual growth rates of M3, covering the period from July to September 2000, was 5.4%, unchanged from the three-month average for the period from June to August 2000. (The latter figure was revised upwards from 5.3%.) The slight decline in the

Chart 1

ECB interest rates and money market rates

(percentages per annum; daily data)

- marginal lending rate
- - - deposit rate
- main refinancing/minimum bid rate
- overnight interest rate (EONIA)
- marginal rate in main refinancing operation



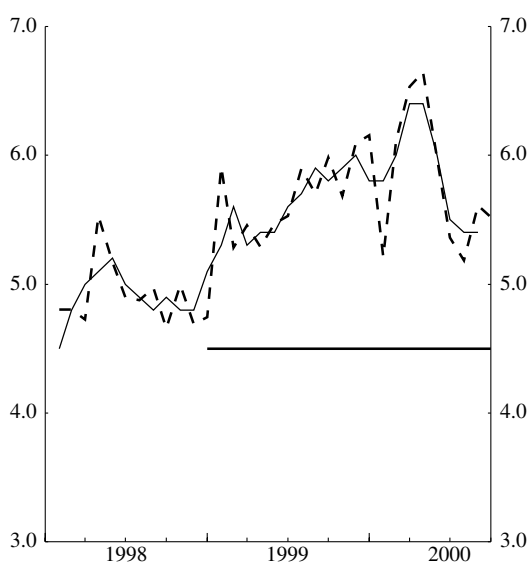
Sources: ECB and Reuters.

Chart 2

M3 growth and the reference value

(annual percentage changes)

- - M3
- M3 (three-month centred moving average rounded to the first decimal)
- reference value (4½%)



Source: ECB.

annual rate of growth of M3 in September 2000 mirrored a subdued monthly increase, in seasonally adjusted terms, of €12 billion or 0.2% (see Table 1). There are some indications that this slowdown may reflect, at least in part, a reversal of the impact of the German UMTS auction observed in August 2000. Funds stockpiled in advance for the payment of the licence fees in the German UMTS auction, which may have led to an upward distortion of M3 in August, were transferred to the Government at the beginning of September and, hence, subsequently dropped out of M3.

Seen over a somewhat longer period, there has been a clear slowdown in M3 growth in the last two quarters. The seasonally adjusted and annualised six-month growth rate of M3 fell to 3.6% in the six-month period ending in September 2000, compared with 4.9% in the six-month period up to August, and 5.3% in the period up to June. The weakening in the pace of growth of M3 mainly reflected the

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

	Sep. 2000 levels	July 2000 change		Aug. 2000 change		Sep. 2000 change		July 2000 to Sep. 2000 average change	
	EUR billions	EUR billions	%	EUR billions	%	EUR billions	%	EUR billions	%
M3	4,955.0	29.0	0.6	29.0	0.6	12.4	0.2	23.5	0.5
Currency in circulation and overnight deposits (= M1)	1,994.4	12.8	0.6	16.1	0.8	-1.9	-0.1	9.0	0.5
Other short-term deposits (= M2 - M1)	2,171.1	5.0	0.2	10.7	0.5	11.5	0.5	9.1	0.4
Marketable instruments (= M3 - M2)	789.5	11.2	1.5	2.2	0.3	2.8	0.4	5.4	0.7

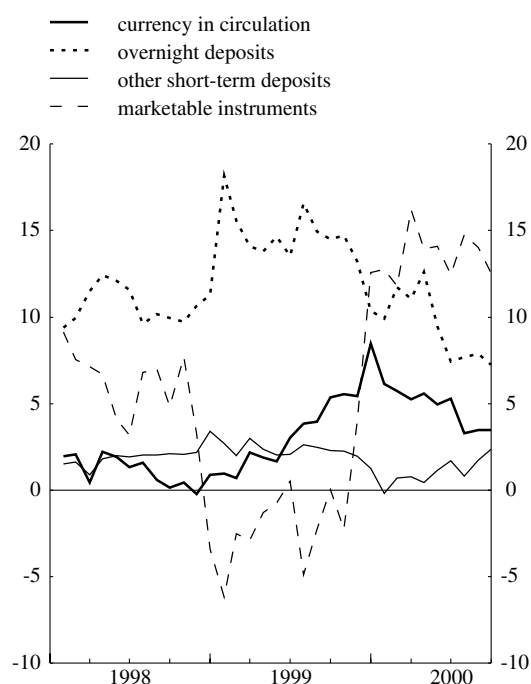
*Source: ECB.**Note: Due to rounding, the sum of the components of M3 in euro (billions) may not add up to the total reported for M3.*

slowdown in the pace of its most liquid components in M1. In all likelihood, this in turn mirrored the continued rise in short-term interest rates in the euro area as from the autumn of 1999.

With regard to the main components of M3 (see Chart 3), the annual rate of growth of currency in circulation remained unchanged at 3.5% in September 2000, while that of overnight deposits fell to 7.2% in September, from 7.9% in the previous month. As a result of the slowdown in overnight deposits, the annual growth rate of M1 declined to 6.6% in September 2000 (from 7.1% in August).

The annual growth rate of short-term deposits other than overnight deposits increased in September, to 2.4%, from 1.7% in August. This development reflected a buoyant demand for deposits with an agreed maturity of up to two years (the annual rate of increase of which rose to 12.2% in September, from 9.7% in the previous month). By contrast, the annual rate of contraction in deposits redeemable at a period of notice of up to three months increased, standing at 4.2% in September (compared with 3.7% in August). These divergent developments are attributable to the fact that retail rates paid on deposits with an agreed maturity of up to two years increased broadly in line with market rates from autumn 1999 onwards,

while retail rates paid on deposits redeemable at a period of notice of up to three months rose only very moderately (see Chart 5). The annual rate of increase in the intermediate aggregate M2 remained almost unchanged in September 2000, at 4.3% (4.2% in August).

Chart 3**Components of M3***(annual percentage changes)**Source: ECB.*

The annual rate of growth of the marketable instruments included in M3 declined further in September, to 12.5%, from 14.0% in the previous month. This development was solely attributable to the fall in the annual rate of growth of money market fund shares and money market paper (15.6% in September, as against 19.0% in August). Some signs of a slowdown in the demand for marketable instruments can be observed in recent months, but the annual rate of growth has nevertheless continued to be high, reflecting the rise in short-term interest rates and the flattening of the yield curve observed in the course of this year. In evaluating the demand for this component of M3, however, the caveat should be borne in mind that marketable instruments include non-resident holdings of money market paper issued by euro area Monetary Financial Institutions (MFIs), which should, in principle, be excluded from M3.

Stability of the growth of credit to euro area residents

With regard to the counterparts of M3, the annual rate of increase in longer-term financial liabilities of the MFI sector stood at 7.3% in September, compared with 7.4% in the previous month. Among these liabilities, the annual rate of increase in deposits redeemable with a period of notice of over three months continued to rise, whereas the annual growth rate of deposits with an agreed

maturity of over two years, and of debt securities issued with a maturity of over two years, declined. Finally, the annual growth rate of capital and reserves continued to increase at a rapid pace.

The annual rate of change in the outstanding amount of central government deposits held with the MFI sector increased significantly to 10.7% in September (compared with 1.8% in August), mainly reflecting the payments of the UMTS licences to the German Government.

On the assets side of the consolidated balance sheet of the MFI sector, the annual growth rate of total credit granted to euro area residents stood at 6.9% in September 2000, compared with 7.0% in August. The broad stability of this aggregate concealed divergent sectoral trends reflecting the sale of UMTS licences in Germany. While the annual rate of change in credit extended to general government declined further (-4.5% in September, compared with -2.5% in August), the annual rate of increase in credit to the private sector rose to 10.8%, from 10.1% in August.

The further decline in the rate of growth of credit to general government reflected a more pronounced reduction both in MFI holdings of general government debt securities and in loans. Among the components of credit to the private sector, the annual growth rate of loans to the private

Table 2

M3 and its main counterparts

(end-of-month levels and 12-month flows; EUR billions)

	Amounts outstanding	12-month flows					
		2000 Sep.	2000 Apr.	2000 May	2000 June	2000 July	2000 Aug.	2000 Sep.
1. Credit to the private sector	6,647.0	650.3	648.4	583.7	582.6	601.6	643.4
2. Credit to general government	1,931.7	14.3	-14.6	-21.5	-25.5	-49.1	-90.3
3. Net external assets	251.9	-205.7	-179.8	-110.2	-132.7	-95.3	-132.4
4. Longer-term financial liabilities	3,783.4	246.8	256.2	239.0	246.3	257.9	256.1
5. Other counterparts (net liabilities)	92.2	-90.8	-76.8	-34.6	-62.0	-59.1	-90.7
M3 (=1+2+3-4-5)	4,955.0	303.4	275.1	247.9	240.5	258.8	255.8

Source: ECB.

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

sector increased in September 2000, to 9.8%, from 9.5% in the previous month. The annual growth rate of MFI holdings of the securities issued by the private sector also increased further (to 17.7% for securities other than shares and 20.7% for shares).

During September 2000 the net external assets position of the euro area MFI sector decreased by €22 billion. Over the 12 months up to September 2000, the net external assets of the MFI sector decreased by €132 billion, compared with a decline of €95 billion for the 12 months up to August 2000 (see Table 2).

Debt securities issuance activity by the private sector remained high in August

In August 2000 net issuance of debt securities by euro area residents was slightly higher than in August 1999 and the average monthly net issuance over the previous 12 months (see Chart 4). The annual growth rate of the

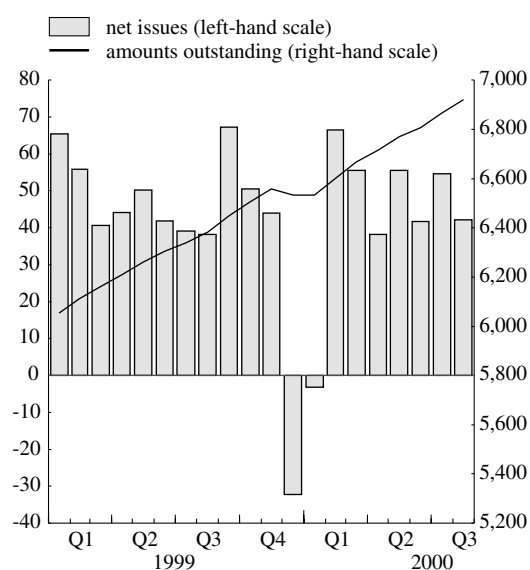
amount outstanding of debt securities issued by euro area residents increased slightly, from 8.3% in July 2000 to 8.4% in August. Underlying this development was a decline between July and August 2000 of 2.1 percentage points in the annual growth rate in the amount outstanding of short-term debt securities (to 14.6%), and a rise of 0.4 percentage point in the case of long-term securities (to 7.8%).

With regard to the currency breakdown, the annual growth rate of the amount outstanding of debt securities issued by euro area residents and denominated in euro was 7.1% in August, broadly unchanged from July 2000. At the same time, the annual growth rate of the amount outstanding of debt securities issued by euro area residents in currencies other than the euro increased significantly, from 23.8% in July 2000 to 26.2% in August. However, in terms of total amounts outstanding, the share of 8% of currencies other than the euro is still relatively low.

The sectoral breakdown reveals that the net issuance of debt securities by the private sector remained high in August 2000. The annual growth rates of the amounts outstanding of euro-denominated debt securities issued by MFIs and non-monetary financial corporations were 11.0% and 23.1% respectively in August 2000, broadly unchanged from July. The annual growth rate of the amount outstanding of debt securities issued by non-financial corporations increased to 17.4% in August 2000, compared with 16.2% in July 2000. This increase was partly driven by telecommunications companies in relation to the financing of UMTS licences.

By contrast, debt securities issued by the public sector remained subdued. In August 2000 the annual growth rate of the amount outstanding of debt securities issued by the central government sector decreased slightly, to 2.8%, from 2.9% in July 2000. However, the annual growth rate of the amount outstanding of debt securities issued by other parts of the general government sector

Chart 4
Debt securities issued by euro area residents
(EUR billions)



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

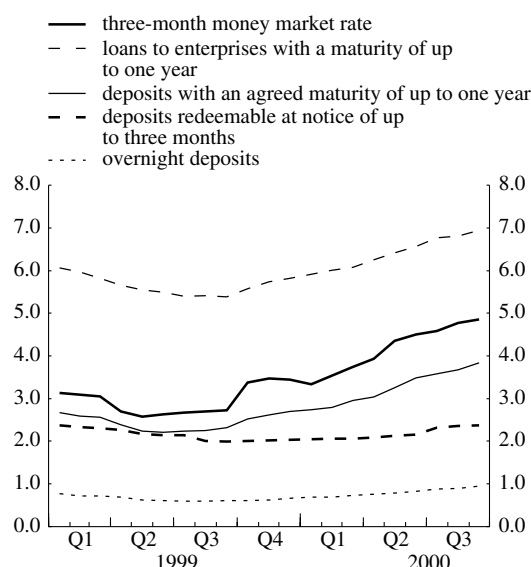
increased from 4.9% in July 2000 to 6.0% in August.

Retail bank interest rates increased at short maturities and stabilised at longer maturities in September

Short-term retail bank interest rates in the euro area continued to edge upwards in September 2000 (see Chart 5). This reflected the increases in money market interest rates observed in recent months, including those associated with the increase in ECB interest rates on 31 August 2000. The increases in short-term retail bank interest rates in September 2000 as compared with August varied between 3 basis points for the interest rate on deposits at a period of notice of up to three months and 17 basis points for the interest rate on deposits with an agreed maturity of up to one year. Looking at longer-term developments, over the period of increasing money market rates since August 1999 the average rates on deposits with an agreed maturity of up to one year and on

Chart 5 Short-term retail bank interest rates and a comparable market rate

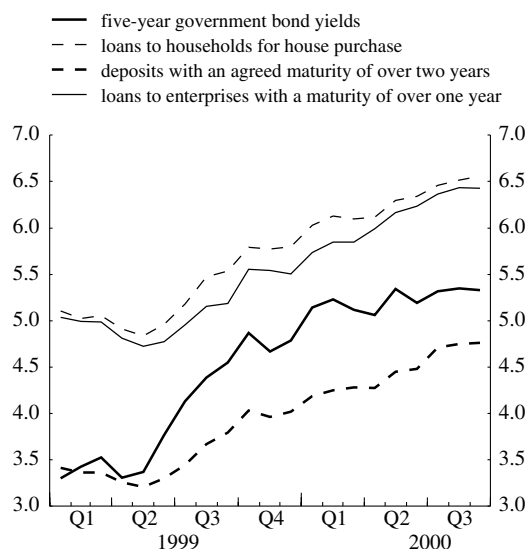
(percentages per annum; monthly averages)



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.

loans to enterprises with a maturity of up to one year have increased by around 155 basis points. By contrast, during the same period, the average rates on deposits redeemable at a period of notice of up to three months and on overnight deposits have risen by only around 35 basis points. These changes in short-term bank rates have been smaller than the increase of 216 basis points in the average three-month money market rates which took place between August 1999 and September 2000.

Long-term retail bank rates remained more or less unchanged in September 2000, in line with broadly stable government bond yields in previous months (see Chart 6). Seen over a longer period, from the start of the rise in government bond yields in May 1999 to September 2000, the increases in long-term retail interest rates varied between 156 basis points for the average rate on deposits with an agreed maturity of over two years and slightly above 170 basis points for the average rate on loans to enterprises with a maturity of over one year and on loans to households for house purchase. During the same period,

the average five-year government bond yield increased by 196 basis points.

Money market interest rates rose moderately in October 2000

The whole money market yield curve shifted upwards in the course of October 2000 (see Chart 7). While preserving its moderately positive slope, a further slight flattening was evident. The three-month EURIBOR implied in futures contracts maturing in late 2000 and in the first half of 2001 also rose somewhat in October, but without fully reversing the decline seen in September.

The overnight interest rate, as measured by the EONIA, increased by around 10 basis points following the decision by the Governing Council on 5 October to increase ECB interest rates by 25 basis points, indicating that the decision was to some extent expected by market participants. During the remainder of the reserve maintenance period ending on 23 October, the EONIA remained fairly close to the new minimum bid rate in the Eurosystem's main refinancing operations of 4.75%, hovering somewhat below the minimum bid rate towards the end of the period (see Box 1). After the start of the new reserve maintenance period on 24 October 2000 the EONIA fluctuated around 4.85%, except on 31 October, when it temporarily increased to 4.97% on account of an end-of-month effect.

In the Eurosystem's main refinancing operations settled on 11 and 18 October 2000 the marginal and average interest rates of allotment were only slightly above the new minimum bid rate of 4.75%. In the two subsequent operations these rates rose moderately, to 4.80% and 4.82% respectively, in the operation settled on 25 October, and to 4.84% and 4.85% respectively in the operation settled on 1 November.

In the longer-term refinancing operation of the Eurosystem settled on 26 October 2000,

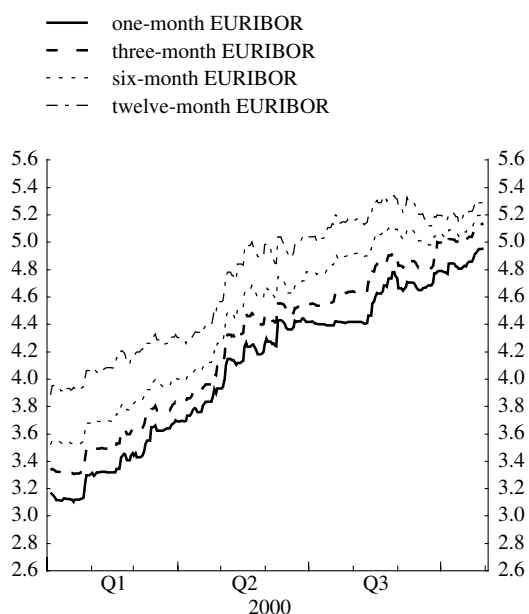
the marginal and average interest rates of allotment were 5.06% and 5.07% respectively. These were 4 and 3 basis points respectively below the three-month EURIBOR prevailing on the day on which the operation was conducted.

The one-month and three-month EURIBOR rose in October, to stand at 4.96% and 5.14% respectively on 31 October, up by 17 and 14 basis points respectively as compared with the levels seen at the end of September. The six-month and twelve-month EURIBOR showed a similar pattern, and stood at 5.20% and 5.29% respectively on 31 October 2000. The slope of the money market yield curve, when measured as the difference between the twelve-month and one-month EURIBOR, fell to around 35 basis points, between the end of September and 31 October 2000.

The expected future path of the three-month EURIBOR in the remainder of 2000 and the first half of 2001, as implied in futures prices on contracts with a delivery date during this

Chart 7
Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

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

During the reserve maintenance period which lasted from 24 September to 23 October 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. In the first two operations the minimum bid rate was 4.50%, while it was 4.75% in the following two operations. The allotted volumes ranged between €76 billion and €99 billion. The ratio of the amounts of bids submitted to the allotted volumes varied between 1.16 and 1.96, with an average of 1.64. In the first and second operations the marginal rate was 4.65% and 4.67% respectively, while it was 4.76% and 4.75% respectively in the third and fourth operations. In the first two operations the weighted average rate was 4.68%, while in the following two operations it was 4.78% and 4.76%. The number of bidders participating in the tenders varied between 517 and 659.

On 27 September 2000, 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 225 bidders participated in this operation and submitted a total amount of bids of €34.0 billion. The marginal rate of the operation was 4.84%, while the weighted average rate was 2 basis points higher, at 4.86%.

At the beginning of the reserve maintenance period, the EONIA fluctuated around the 4.70% level, reflecting expectations of a rise in the main ECB interest rates. Following the decision of the Governing Council of the ECB on 5 October to increase the main ECB rates by 25 basis points, the EONIA increased by 10 basis points to around 4.80%. Towards the end of the maintenance period, possibly as a result of a perception in the money market that liquidity conditions were ample, the EONIA declined gradually from this level, reaching a temporary low of 4.64% on 19 October, before ending the reserve maintenance period at 4.72%.

Use of standing facilities

Compared with the previous reserve maintenance period, the average daily use of the marginal lending facility increased from €0.3 billion to €0.5 billion, while the average use of the deposit facility remained unchanged at €0.2 billion.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 September to 23 October 2000

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	222.6	0.2	+ 222.4
Main refinancing operations	176.5	-	+ 176.5
Longer-term refinancing operations	45.7	-	+ 45.7
Standing facilities	0.5	0.2	+ 0.2
Other operations	0.0	0.0	0.0
(b) Other factors affecting the banking system's liquidity	396.3	504.3	- 108.0
Banknotes in circulation	-	354.5	- 354.5
Government deposits with the Eurosystem	-	47.4	- 47.4
Net foreign assets (including gold)	396.3	-	+ 396.3
Other factors (net)	-	102.5	- 102.5
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			114.4
(d) Required reserves			113.6

Source: ECB.

Totals may not add up due to rounding.

Liquidity factors not related to monetary policy

The net liquidity-absorbing impact of the autonomous factors (i.e. the factors not related to monetary policy) on the banking system's liquidity (item (b) in the table above) was €108.0 billion on average, i.e. €3.0 billion less than in the previous maintenance period. The change was mainly caused by a decrease of €9.2 billion in net government deposits with the Eurosystem, which was partly offset by other autonomous factors. The daily sum of autonomous factors fluctuated between €98.1 billion and €116.6 billion.

The liquidity impact of the concerted foreign exchange intervention that was conducted on 22 September and settled on 26 September 2000 was taken into account in the allotment decisions of the subsequent main refinancing operations conducted during this maintenance period.

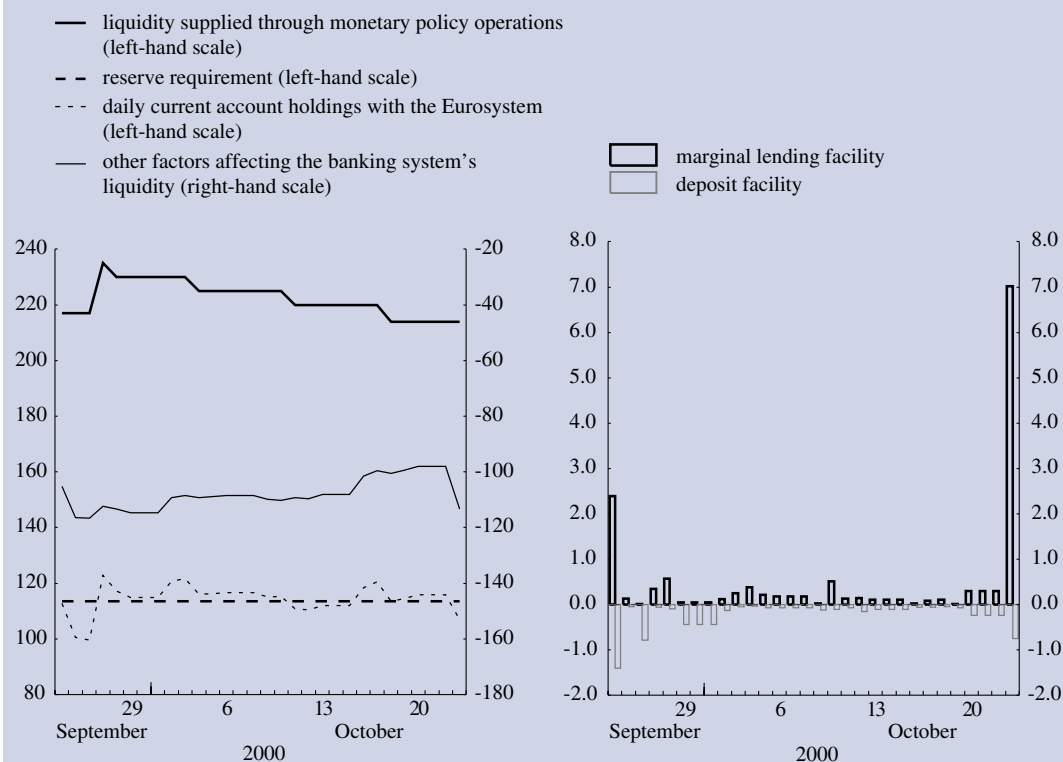
The published estimates of average liquidity needs, stemming from autonomous factors, ranged between €112.7 billion and €100.6 billion. They differed from the ex post figures by an amount ranging from plus €0.8 billion to minus €2.9 billion.

Current account holdings of counterparties

The average current account holdings amounted to €114.4 billion, and reserve requirements to €113.6 billion. The difference between the two amounted to €0.8 billion, which was €0.1 billion more than in the previous maintenance period. This increase was caused by an increase in the excess reserves from €0.5 billion to €0.6 billion. As in the previous 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 October 2000

(EUR billions; daily data)



Source: ECB.

period, rose moderately between the end of September and 31 October 2000. The three-month EURIBOR implied in contracts maturing in December 2000 and in March and June 2001 were 5.22%, 5.22% and 5.20% respectively on 31 October, up by 7, 8 and 5 basis points respectively as compared with the levels at the end of September 2000. However, futures rates maturing in late 2000 and in the first half of 2001 remained at lower levels than in July and August 2000.

Long-term bond yields remained stable in October

In euro area bond markets, long-term interest rates continued to be broadly stable in October. The ten-year government bond yield stood at around 5.4% on 31 October, which was approximately the same level as that prevailing at the end of September. Since, at the same time, comparable US bond yields declined, the ten-year bond yield differential between the United States and the euro area

narrowed by 6 basis points, to stand at around 38 basis points on 31 October (see Chart 8).

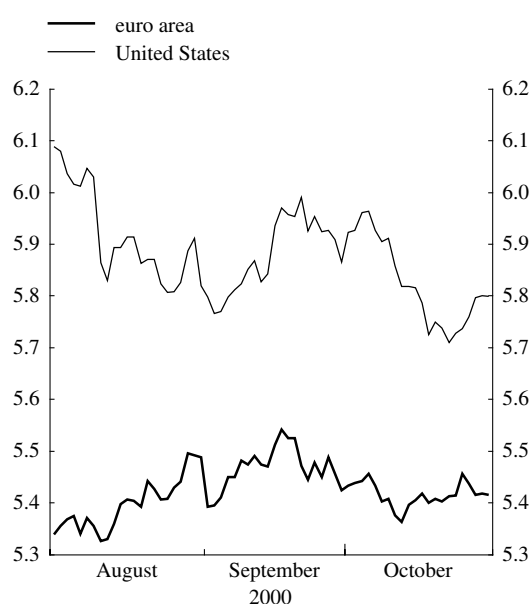
With regard to the international environment for euro area bond markets, ten-year government bond yields in the United States resumed their downward tendency in early October, after a period of continuous yield increases since the beginning of September. On 31 October, the yield of ten-year US Treasury bonds stood at around 5.8%, which was 7 basis points lower than the level observed at end-September. The driving forces behind this yield decline were, first, the fact that, to some extent, market participants considered the government bond market a safe haven following pronounced price declines and higher volatility in US and other major stock markets and, second, strengthened expectations of an economic slowdown in the United States.

In Japan long-term bond yields were stable in October 2000. Between the end of September and the end of October, government bond yields with a maturity of ten years fluctuated within a very narrow range and stood at around 1.8% on 31 October 2000.

Chart 8

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

(percentages per annum; daily data)



Source: Reuters.

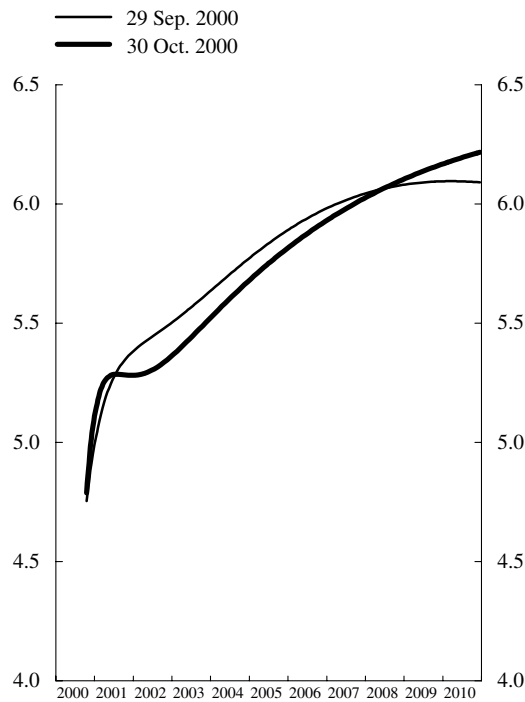
Note: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity.

In the euro area, ten-year government bond yields continued to fluctuate within narrow bounds in October 2000. Despite this overall stability, government bond yields in the euro area were subject to some countervailing influences. On the one hand, ten-year euro area government bond yields were affected by the decline in comparable US Treasury bond yields. On the other hand, there were upward pressures on euro area bond yields emanating from the depreciation of the euro against the US dollar and from the possible impact on market expectations of data releases revealing that inflation in the euro area had been somewhat higher than previously expected over the summer of 2000.

The slope of the yield curve, as measured by the difference between ten-year euro area

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.

bond yields and the three-month EURIBOR, continued to flatten in October, mainly reflecting the rise in money market rates. Between the end of September and 31 October 2000 the slope of the yield curve decreased by 15 basis points to 28 basis points. The implied forward euro area overnight interest rate curve was little changed in October (see Chart 9).

In the market for French inflation-indexed government bonds, the real yield available on ten-year index-linked bonds declined by 11 basis points between the end of September and 31 October 2000, at which time the yield was close to 3.6%. At least part of the decline seen in French real yields during October can be attributed to technical factors. The ten-year “break-even” inflation rate – which

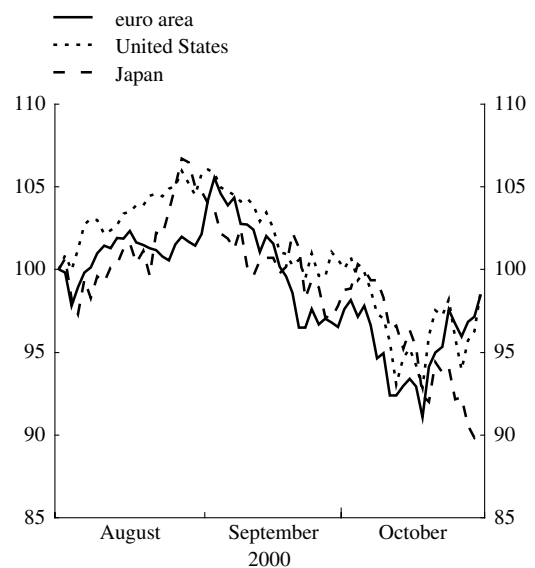
is obtained from the difference between French nominal and index-linked ten-year bond yields – increased by 14 basis points over this period. However, interpretations of price movements in index-linked bonds are always subject to a considerable degree of uncertainty as time-varying risk premia may exist and a number of caveats may apply.

Stock market volatility increased further in October 2000

Stock prices were subject to relatively wide fluctuations and implied stock market volatility increased in major stock markets in October 2000, thus following a pattern which was already apparent in September. Stock prices in the euro area, as measured by the Dow Jones EURO STOXX index, increased by 2% between end-September and 31 October. In the United States, stock prices, as measured by the Standard and Poor’s 500 index, declined by close to 1% over the same period, while in Japan stock

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

(index: 1 August 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.

prices, as measured by the Nikkei 225 index, declined by close to 7% (see Chart 10). In the euro area, the United States and Japan, implied stock market volatility increased in October, albeit remaining lower than the annual peak levels reached in April 2000.

In the United States stock prices were subject to relatively wide swings and, overall, showed a decline in October. This decline brought the Standard and Poor's 500 index to a level which was close to 3% below end-1999 levels on 31 October 2000. The decline in US stock prices in October seemed mainly to reflect relatively weak US corporate earnings in the third quarter of 2000, which could largely be attributed to higher oil prices and the higher effective exchange rate of the US dollar. US stock market implied volatility increased from 19% per annum at end-September to 21% per annum on 31 October, with the main contribution to this increase coming from the US technology sector. In particular, implied volatility on the Nasdaq 100 index, which comprises many US technology stocks, increased from 43% per annum at end-September to 53% per annum on 31 October against the background of wide swings in stock prices on the Nasdaq stock exchange. However, implied volatility on the Nasdaq 100 index remained below the peak levels seen in April 2000.

In Japan, after declining by close to 7% between end-September and 31 October

2000, stock prices, as measured by the Nikkei 225 index, reached a level which was 22% below end-1999 levels. The rapid increase seen in the number of bankruptcies recorded in Japan, which affected firms in the financial sector in particular, contributed to this decline.

In the euro area, stock prices, as measured by the Dow Jones EURO STOXX index, increased by 2% between end-September and 31 October 2000, reaching a level which was 1% above the level seen at end-1999. Against the background of volatile developments in global stock markets, euro area stock prices were subject to countervailing influences in October. In the first half of October, some downward pressures on stock prices seemed to arise largely from the uncertainties perceived by market participants as to whether the expansion of economic activity in the euro area and at the global level will continue at a relatively rapid pace in the future. These downward pressures were counterbalanced by the fact that, in the second half of October, stocks in the euro area telecommunications sector benefited from corporate earnings data which exceeded the levels expected by market participants. Implied volatility on the Dow Jones EURO STOXX 50 index increased from 22% per annum at end-September to 24% per annum on 31 October 2000, a level which was well below the annual peak of 32% per annum reached on 17 April.

2 Price developments

HICP inflation rose to 2.8% in September mainly as a result of energy prices

The year-on-year rate of increase in the overall Harmonised Index of Consumer Prices (HICP) in the euro area increased to 2.8% in September 2000, up from 2.3% in August (see Table 3). Meanwhile, the rate of increase in the HICP, excluding energy and seasonal food prices, stood at 1.4% in September 2000, up from 1.3% in August.

The latest increase in overall HICP inflation was mainly caused by developments in the energy component, which recorded a 16% year-on-year increase in September 2000, up by 3.7 percentage points compared with

August (see Chart 11). This latest increase reflected the further depreciation of the euro vis-à-vis the US dollar as well as higher world market oil prices, which resulted in an increase in the euro price of oil from €33.6 per barrel in August 2000 to €37.4 per barrel in September. In view of the more recent developments in oil prices and the euro exchange rate, no substantial decline in the energy price contribution to overall inflation should be expected in October 2000. In particular, the price of oil remained high – standing at, on average, €36.8 per barrel in October 2000 – and there was no strong negative base effect arising from energy price developments in October 1999. In this context of continued high oil prices, Box 2

Table 3
Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1997	1998	1999	1999 Q4	2000 Q1	2000 Q2	2000 Q3	2000 May	2000 June	2000 July	2000 Aug.	2000 Sep.	2000 Oct.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	1.6	1.1	1.1	1.5	2.0	2.1	2.5	1.9	2.4	2.4	2.3	2.8	.
<i>of which:</i>													
Goods	1.2	0.6	0.8	1.5	2.3	2.4	3.1	2.3	2.8	2.9	2.8	3.5	.
Food	1.4	1.6	0.5	0.4	0.4	0.9	1.9	0.8	1.2	1.6	2.0	2.1	.
Processed food	1.4	1.4	0.9	0.9	1.0	1.0	1.2	1.0	1.0	1.0	1.1	1.3	.
Unprocessed food	1.4	1.9	0.0	-0.3	-0.3	0.8	3.1	0.6	1.5	2.6	3.4	3.4	.
Industrial goods	1.0	0.1	1.0	2.1	3.4	3.2	3.6	3.1	3.7	3.5	3.2	4.2	.
Non-energy industrial goods	0.5	0.9	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.8	.
Energy	2.8	-2.6	2.2	7.8	13.6	12.5	14.0	12.2	14.7	13.7	12.3	16.0	.
Services	2.4	2.0	1.5	1.4	1.6	1.7	1.8	1.6	1.7	1.7	1.8	1.8	.
Other price and cost indicators													
Industrial producer prices ¹⁾	1.1	-0.7	-0.4	2.1	4.3	5.2	.	5.3	5.6	5.6	5.6	.	.
Unit labour costs ²⁾	0.7	0.2	1.2	0.3	0.5	0.5	.	-	-	-	-	-	-
Labour productivity ²⁾	1.6	1.2	0.7	1.4	1.7	1.2	.	-	-	-	-	-	-
Compensation per employee ²⁾	2.3	1.4	1.9	1.7	2.3	1.8	.	-	-	-	-	-	-
Total hourly labour costs ³⁾	2.5	1.8	2.2	2.4	3.6	3.7	.	-	-	-	-	-	-
Oil prices (EUR per barrel) ⁴⁾	17.1	12.0	17.1	23.0	27.1	29.1	33.9	30.4	31.5	30.6	33.6	37.4	36.8
Commodity prices ⁵⁾	12.9	-12.5	-3.1	14.0	19.9	18.3	18.0	22.8	12.9	14.3	18.3	21.4	22.7

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

1) Excluding construction.

2) Whole economy.

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

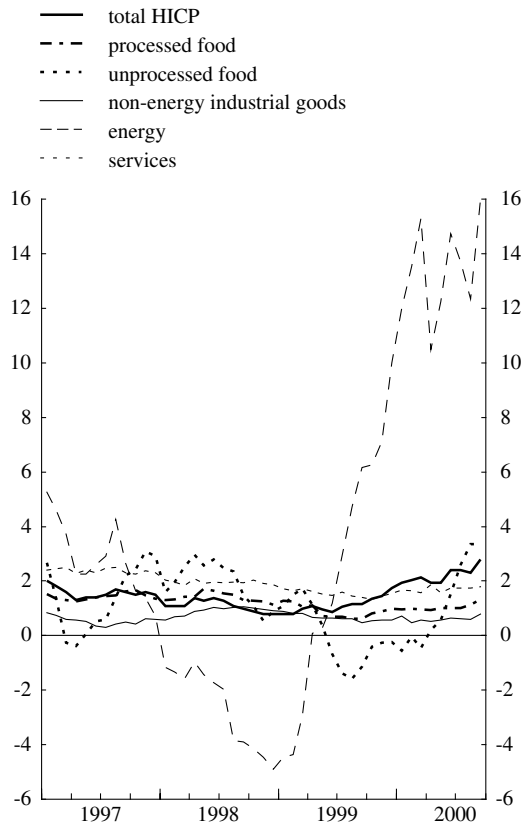
4) Brent Blend (for one-month forward delivery). In ECU up to December 1998.

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

Chart 11

Breakdown of HICP inflation in the euro area by components

(annual percentage changes; monthly data)



Source: Eurostat.

analyses and assesses the lessons which can be drawn from the oil price shocks of the 1970s and early 1980s.

By contrast with the upward impact from energy prices, developments in unprocessed food prices did not contribute to the latest rise in overall inflation. In year-on-year terms, unprocessed food prices were up 3.4% in September 2000, which represents an unchanged rate of increase compared with August. This development is to be seen against the background of the significantly increased contribution from unprocessed food prices to overall inflation in the months prior to September 2000.

Non-energy industrial goods and processed food prices also contributed to the latest increase in inflation, but to a significantly lesser extent

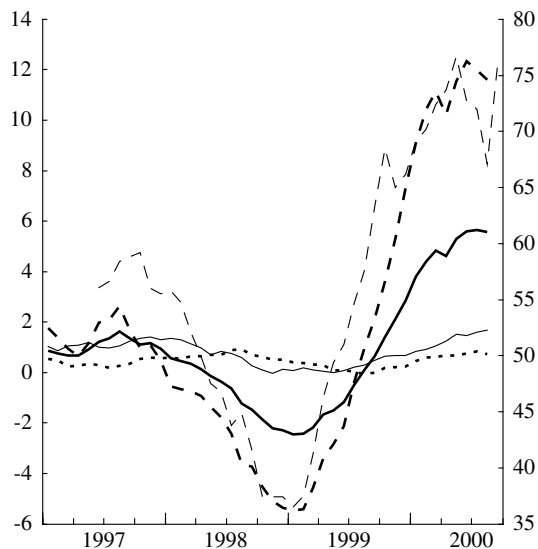
Non-energy industrial goods and processed food prices made a small positive contribution to the latest increase in overall HICP inflation. With regard to non-energy industrial goods prices, the annual rate of change of which rose to 0.8% in September 2000 (up by 0.2 percentage point compared with August), a higher rate of increase was to some extent expected owing to a pass-through associated with producer price increases at earlier stages in the production process. Nonetheless, the overall rate of change in this component remains quite moderate. In the case of processed food

Chart 12

Producer prices and manufacturing input prices for the euro area

(monthly data)

- PPI (left-hand scale) ¹⁾
- - - intermediate goods (left-hand scale)
- · · · capital goods (left-hand scale)
- consumer goods (left-hand scale)
- - - EPI (right-hand scale) ²⁾



Sources: Eurostat and Reuters.

1) Industrial producer prices; 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.

prices, the year-on-year change increased to 1.3% in September 2000, up from 1.1% in August. Meanwhile, the annual rate of increase in services prices was unchanged at 1.8% in September 2000.

Producer price increases remained high in August 2000

The latest information on euro area producer prices relates to August 2000, when the annual rate of change was 5.6% – the same rate of increase as in the previous two months. As regards developments in producer prices since August 2000, the significant rise in the euro price of oil in September is likely to have exerted further upward pressure on the Producer Price Index (PPI). Adding to this upward pressure have been increases in the euro price of non-oil commodities resulting from the depreciation of the euro exchange rate (abstracting from the effect of the exchange rate, non-oil commodity prices have been subject to downward pressure throughout most of 2000). The expectation of upward pressure on the PPI is consistent with recent developments in the Eurozone Price Index (EPI), which measures manufacturers' input prices in the euro area. In September 2000 the EPI rose to 75.9 and thus continues to point to upward pressure on overall producer prices in the euro area (see Chart 12).

Growth in total hourly labour costs increased slightly in the second quarter of 2000

The latest data indicate an increase in hourly labour cost growth in the first half of 2000 compared with developments throughout 1999. In the second quarter of 2000, annual growth in total hourly labour costs is estimated to have risen to 3.7%, up 0.1 percentage point compared with the rate recorded in the first quarter. This conflicted somewhat with expectations of a decline in labour cost growth in the second quarter compared with the first, reflecting the anticipated unwinding of certain one-off payments in a number of euro area economies. A significant factor behind the sustained rise in hourly labour costs growth in the first half of this year was the impact of the reduction in weekly hours worked in France.

Somewhat in contrast with these developments in hourly labour costs, the growth rate in compensation per employee was more moderate and declined to 1.8% in the second quarter of 2000 (compared with an increase of 2.3% in the first quarter). Moreover, although labour productivity growth declined by 0.5 percentage point to 1.2% in the second quarter of 2000, unit labour cost growth (which is based on compensation per employee) remained subdued at 0.5% year-on-year.

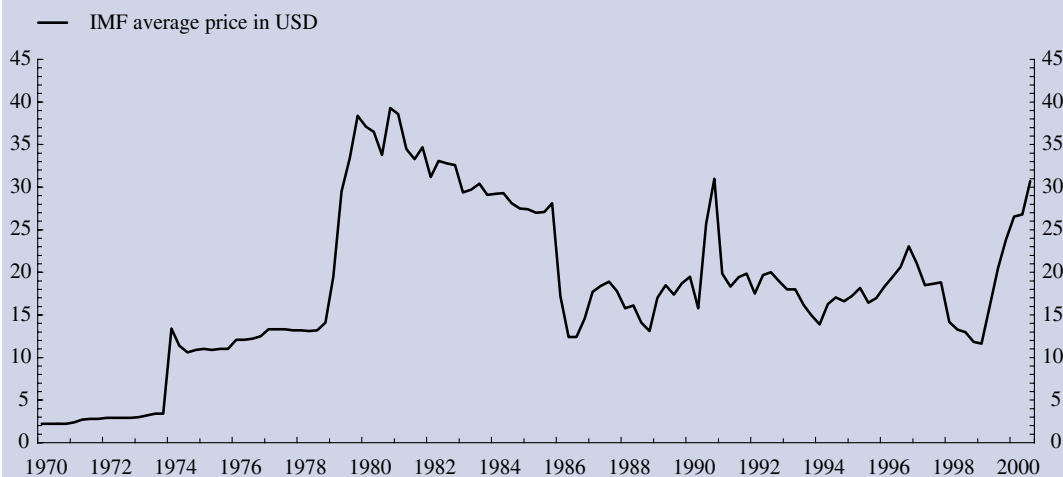
Box 2

Lessons to be drawn from the oil price shocks of the 1970s and early 1980s

Since January 1999, i.e. in little more than a year and a half, the price of crude oil has more than tripled in US dollar terms (see Chart A). Since oil price increases of a similar magnitude also occurred in the 1970s, this box analyses what lessons can be drawn from these previous oil price shocks. Although any interpretation of aggregated euro area data for the 1970s and 1980s must be made with caution, for reasons of comparison the attention in this box is focused mainly upon the stylised average response of the 11 countries which currently form the euro area (Euro 11) to the shocks.

Chart A: Oil price developments

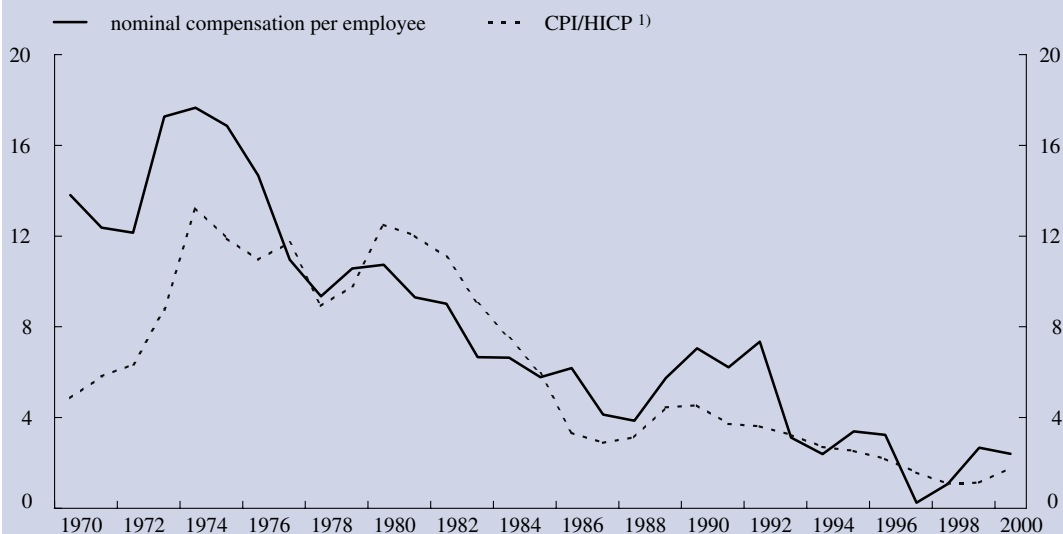
(per barrel; quarterly data)



Source: IMF.

Chart B: Wage and price developments in the Euro 11

(annual percentage changes; annual data)



Source: European Commission.

Note: European Commission spring 2000 estimate/forecast for nominal compensation per employee for 1999 and 2000, and HICP forecast for 2000.

1) HICP series starts in 1990.

The first oil price shock

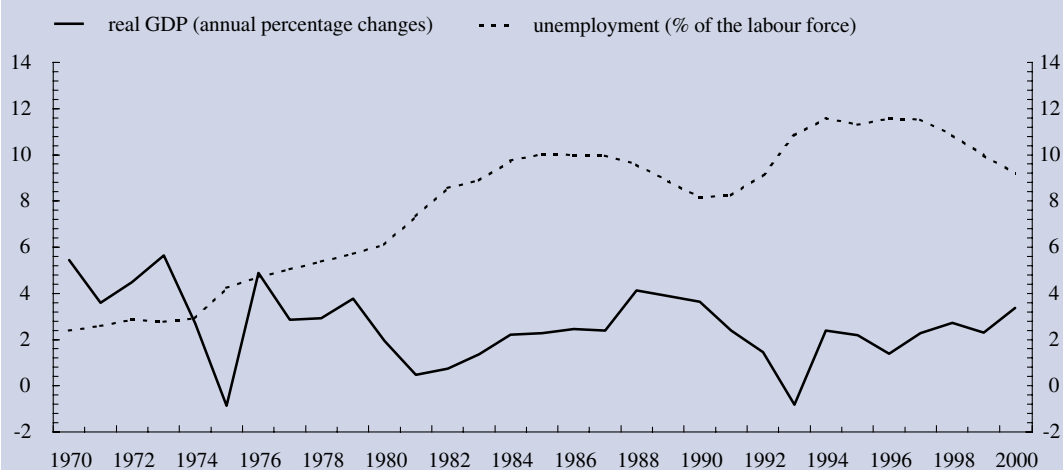
Between 1974 and 1978 the average crude oil price per barrel, according to the average crude oil price series computed by the International Monetary Fund (IMF) was in the range of USD 10 to USD 15. This increase, on average, represented an approximate fivefold rise in respect of the range observed between January 1971 and September 1973.

In the period following the first oil price shock, the annual rate of change in the Consumer Price Index (CPI), as an average for the Euro 11, increased from 6.3% in 1972 to 8.7% in 1973 and 13.2% in 1974. Thereafter, it only fell back gradually and remained high throughout the 1970s (see Chart B). All Euro 11 countries experienced an increase in consumer price inflation, but the impact differed significantly between them.

On average, the oil price increase in the early 1970s had strong negative inflationary consequences, as it occurred in an environment of overheated economic activity in which consumer price inflation and wages were already rising. First, at the outset of the first oil price crisis, real GDP in the Euro 11 increased by 5.7% in 1973 following an average rate of growth of 4.5% in the years 1970 to 1972 (see Chart C). Second, wage growth stood at very high levels, as the annual rate of increase in compensation per employee was 12.2% in 1972 and rose to 17.3% in 1973 (see Chart B). Moreover, after the oil price rise, wage rounds tried to compensate for the loss in disposable income resulting from rising oil prices. In 1974 the year-on-year rate of nominal wage increases remained very high, at 17.7%, and only declined slowly thereafter. In real terms, wages in the Euro 11 increased by 4.2% on average in 1974 and 1975.

Chart C: Real GDP growth and unemployment in the Euro 11

(annual data)



Source: European Commission.

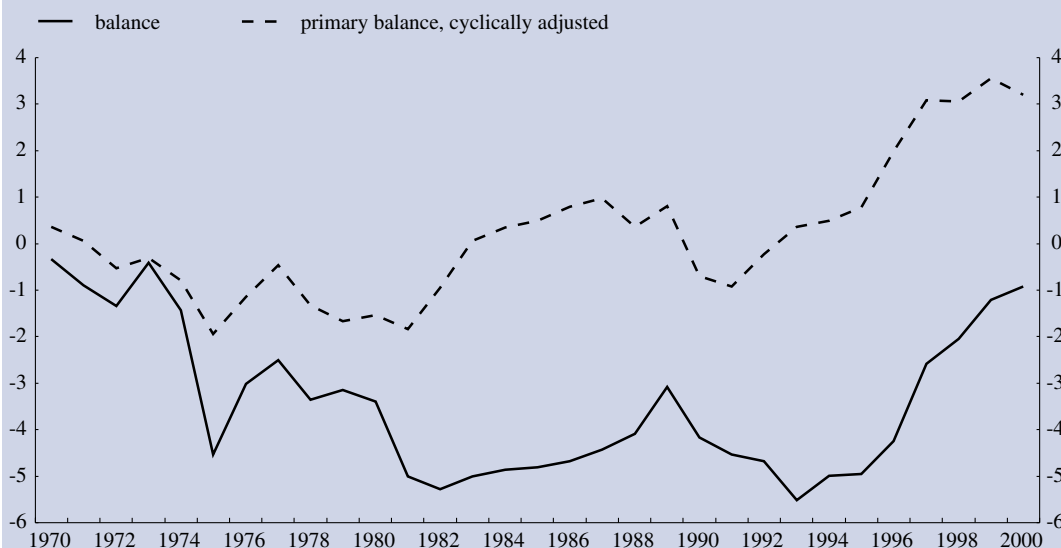
Note: European Commission spring 2000 estimate/forecast for 1999 and 2000.

Against this background of fast increases in consumer prices and wages, the reaction of fiscal and monetary policy was, in most of the countries which now form the euro area, inadequate.

Looking first at fiscal policy, budgetary policies attempted, on average, to cushion the negative income effects of the increase in oil prices. This led to a significant increase in the average general government deficit in the Euro 11, from a position of near balance in 1973 to a deficit of more than 4% of GDP in 1975. Although the economy recovered after a contraction in 1974 and real GDP growth in the Euro 11 reached an annual average of 3.6% over the period 1976-78, fiscal deficits remained sizeable, since policy measures aimed at reducing fiscal imbalances were partly offset by higher interest payments (see Chart D).

Chart D: Fiscal balances in the Euro 11 excluding Luxembourg

(as a percentage of GDP)



Source: European Commission.

Note: Data from 1995 onwards according to the ESA 95. European Commission spring 2000 estimate/forecast for 1999 and 2000.

Turning to monetary policy, as oil prices rose sharply towards the end of 1973 within an environment of growing inflationary pressures, a strong monetary policy response was needed. However, despite some increases in nominal short-term interest rates in 1973 (see Chart E), the monetary policy response was insufficient to keep the rise in inflation rates in check. While policy reactions differed significantly across countries, it can be noted that on average ex post “real” interest rates became negative in the second quarter of 1974 and remained so for 16 quarters.

The second oil price shock

The IMF average oil price per barrel first exceeded USD 30 in mid-1979, at which level it remained until early 1983, reaching almost USD 40 in early 1981. As a result, between 1979 and 1983 the average IMF oil price in US dollar terms was almost three times higher than in 1974-78.

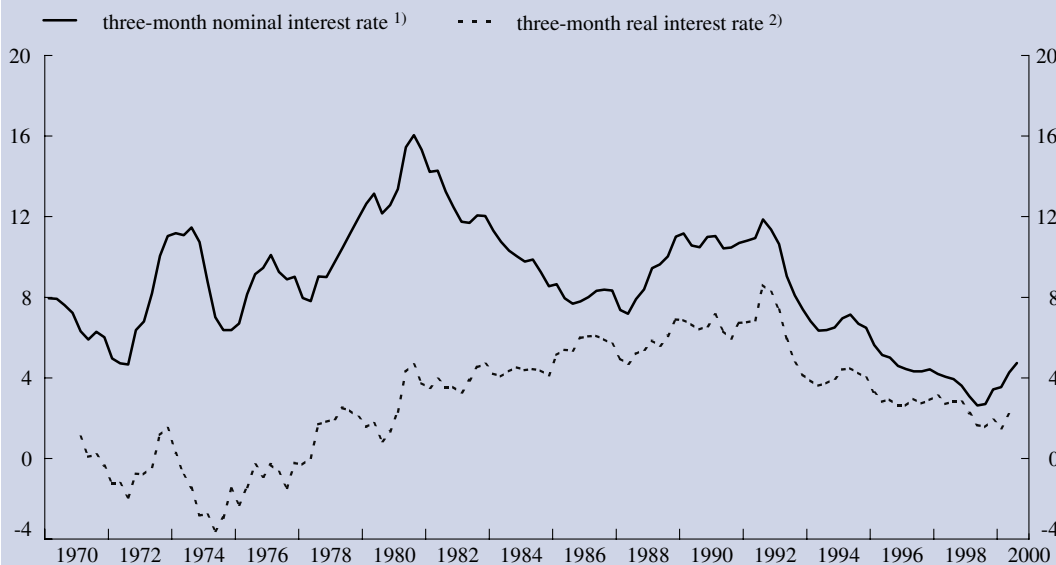
Owing to the policy mistakes made in the early 1970s, by the time the world economy was hit by the new increase in oil prices in the late 1970s, the average Euro 11 unemployment rate had risen from 2.8% in 1973 to 5.7% in 1979 and inflation was still hovering at a high level. This time, after the oil price shock, the average CPI in the Euro 11 increased by 2.7 percentage points between 1979 and 1980, to stand at 12.5% on average in 1980. Inflation remained at double-digit rates in the period 1981-82 but, by contrast with the previous shock, it fell significantly in the subsequent years.

One reason for the somewhat better inflation performance after the second oil price shock was that in view of the high level of unemployment, the annual rate of increase in nominal compensation per employee remained almost unchanged between 1979 and 1980. Real wages actually declined by 1.1% on average between 1979 and 1981.

However, following the deterioration which occurred in the mid-1970s, the total general government budget deficit peaked at more than 5% of GDP in 1982. In some euro area countries, fiscal deficits were higher still and gave rise to the very high public debt burdens from which some countries are still suffering.

Chart E: Real and nominal short-term interest rates in the Euro 11

(percentage per annum, quarterly data)



Source: ECB.

1) Based on national three-month interbank interest rates or, where these are not available, other short-term money market interest rates. From January 1999, the three-month EURIBOR.

2) Deflated by the Euro 11 HICP/CPI inflation rate.

The initial monetary policy response to the second oil price shock differed significantly across countries. On average, short-term nominal interest rates rose in 1980 but ex post “real” interest rates declined slightly in 1980. Only the subsequent steady rise in average nominal (and real) interest rates contributed to the decline in consumer price inflation throughout the 1980s and beyond. However, the need to curb inflation expectations and re-establish price stability after the experience of the early 1970s was costly in terms of growth and employment, and real GDP growth remained extremely subdued until the mid-1980s.

Lessons for the euro area today

Although the increase in oil prices since February 1999 has been sizeable, the recent rise comes after the price of oil reached its minimum level in more than two decades in February 1999. Oil prices are currently, in US dollar terms, below the peaks reached in the early 1980s.

The euro area is clearly in a better position today to withstand an oil price shock and to avoid a recurrence of the consequences of the previous oil price shocks. First, the ratio of oil imports to GDP has declined significantly since the 1970s. Second, while the increase in oil prices occurred in an inflationary environment in the early 1970s, monetary policy in the euro area is committed to guaranteeing the maintenance of price stability, and fiscal policies are subject to compliance with the obligations spelled out in the Stability and Growth Pact. Third, some changes in product and labour markets which occurred in the 1990s, due in part to the environment of price stability, have made the economy of the euro area more resilient to this kind of shock than in the past. (In the 1970s and early 1980s wage indexation was present in several of the countries which now form the euro area, and this contributed to an automatic response of wages to external shocks, which, in turn, contributed to creating a difficult environment for monetary policy.)

It is important, however, that past mistakes are not forgotten. There is no scope for the euro area as a whole to escape the terms-of-trade loss which is associated with the oil price increase. Furthermore, struggles within the

economy on how to distribute this terms-of-trade loss would not be helpful. They would only increase the risk of output losses and spillovers from current oil price increases to future inflation. For these reasons in particular, a continuation of wage-setting compatible with the maintenance of price stability is called for at the present juncture, especially given the still high level of unemployment. Furthermore, fiscal policy should avoid trying to accommodate negative economic effects associated with the oil price increases by a deterioration in the fiscal position and adhere to the overall budget objectives set for 2000 and beyond. At the current juncture it would be problematic to give a pro-cyclical stimulus to the economy. Fiscal budgets are on average still not close to balance or in surplus and debt ratios are high. A proper response by fiscal policies at this stage would help to curb the emergence of inflation expectations which could otherwise affect the medium-term inflation outlook.

An appropriate wage and fiscal policy reaction to the oil price shock will contribute significantly to strengthening the economic prospects for the euro area as a whole and facilitate the conduct of a monetary policy aiming at the maintenance of price stability. The oil price shock as such implies a one-off shift in the price level. Provided that wage developments remain moderate and fiscal policy stays on its consolidation course, the recent oil price increases should not be expected to lead to protracted deviations from price stability and losses in terms of output growth in the euro area in the coming years.

3 Output, demand and labour market developments

Confirmation of strong real GDP growth in the second quarter of 2000

According to Eurostat's second estimate, euro area real GDP growth in the second quarter of 2000 was 0.9% quarter-on-quarter, unchanged from the first estimate (see Table 4). Real GDP growth has been strong, at 0.9% quarter-on-quarter, for four consecutive quarters. When compared with the same period of the previous year, real GDP was 3.7% higher in the second quarter of 2000 (compared with 3.8% in Eurostat's first estimate) and 3.6% higher on average in the first half of this year. This supports the view presented in various forecasts that real GDP growth in the euro area is likely to be well above 3% this year.

The respective contributions to growth from the components of GDP in the second quarter of 2000 have been revised slightly. The most significant revisions, by 0.2 percentage point of GDP, consisted of a downward revision of the contribution from changes in inventories to real GDP growth and an upward revision of the contribution

from net trade. Robust growth in private consumption, at 0.9% quarter-on-quarter, continued to underpin strong GDP growth in the second quarter of 2000. Since the beginning of 1998, growth in private consumption has been one of the main factors behind GDP growth. Investment rose by 0.5% quarter-on-quarter in the second quarter of 2000, while government consumption remained unchanged from the previous quarter. Changes in inventories, however, contributed 0.3 percentage point to growth in the second quarter of 2000. With regard to trade, strong domestic demand underpinned a 3.3% quarter-on-quarter increase in imports (including intra-euro area trade) in the second quarter of this year, the fastest quarter-on-quarter growth rate recorded since the first quarter of 1998. However, this strong growth in imports was offset by a rapid increase in exports, which rose by 3.1% quarter-on-quarter, up from 2.6% in the first quarter of this year. The contribution from net trade to real GDP growth is estimated to have been zero in the second quarter of 2000.

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	1999	2000	2000	1999	1999	1999	2000	2000
				Q2	Q3	Q4	Q1	Q2	Q2	Q3	Q4	Q1	Q2
Real gross domestic product of which:	2.3	2.7	2.4	2.1	2.5	3.2	3.4	3.7	0.5	0.9	0.9	0.9	0.9
Domestic demand	1.7	3.4	2.9	3.0	2.9	2.9	2.7	3.1	0.5	0.5	0.9	0.7	0.9
Private consumption	1.5	2.9	2.7	2.7	2.6	2.6	2.4	3.0	0.3	0.7	0.6	0.8	0.9
Government consumption	1.0	1.1	1.4	1.4	1.5	1.5	1.7	1.4	0.3	0.3	0.4	0.6	0.0
Gross fixed capital formation	2.2	4.9	5.3	5.6	5.8	5.6	5.7	4.8	1.4	1.9	0.3	1.9	0.5
Changes in inventories ^{3) 4)}	0.1	0.4	0.0	-0.1	-0.2	-0.1	-0.3	0.0	-0.1	-0.3	0.4	-0.3	0.3
Net exports ³⁾	0.6	-0.6	-0.4	-0.8	-0.3	0.4	0.8	0.7	0.1	0.4	0.0	0.2	0.0
Exports ⁵⁾	10.4	7.1	4.5	2.2	5.7	9.7	12.3	12.8	2.7	3.7	2.8	2.6	3.1
Imports ⁵⁾	9.0	9.6	6.1	4.8	7.0	9.0	10.5	11.3	2.6	2.6	2.9	2.0	3.3

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.

Further evidence of a levelling-off in the rate of growth in industrial activity

The industrial sector contributed to robust growth in real GDP in the first half of 2000. Since then, industrial output has increased further, albeit at a slower pace. In the three-month period from June to August 2000,

industrial production excluding construction rose by 0.4% compared with the previous three-month period (i.e. from March to May 2000), after rising 1.1% in the three-month period up to July 2000 (see Table 5). However, following rapid growth in the first half of this year, the year-on-year growth rate in industrial production remained high at

Table 5
Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	1998	1999	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
			June	July	Aug.	June	July	Aug.	Mar.	Apr.	May	June	July
						month-on-month			three-month moving averages				
Total industry excl. construct.	4.2	1.8	3.8	5.3	6.2	-0.5	0.4	0.1	1.6	1.9	1.6	1.1	0.4
Manufacturing	4.7	1.8	4.1	5.6	6.8	-1.6	1.3	1.6	1.8	2.0	1.8	1.3	1.0
by main industrial groupings:													
Intermediate goods	3.9	2.2	4.2	4.9	6.2	-2.0	0.9	0.3	1.6	2.0	1.4	1.0	0.0
Capital goods	6.5	1.4	6.0	7.5	10.4	-0.2	0.6	1.6	2.7	2.9	2.5	2.0	1.7
Consumer goods	5.3	2.8	4.3	6.8	9.0	-1.9	2.0	2.6	2.5	2.7	2.4	1.7	1.6
Durable consumer goods	5.9	3.0	4.8	7.6	11.1	-2.3	2.2	3.0	3.0	2.8	2.3	1.6	1.6
Non-durable consumer goods	2.0	1.6	1.5	1.7	1.0	0.5	0.2	0.2	-0.1	1.7	3.0	2.1	1.4

Sources: Eurostat and ECB calculations.

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

Table 6**Results from EC Business and Consumer Surveys for the euro area***(seasonally adjusted data)*

	1997	1998	1999	1999	2000	2000	2000	2000	2000	2000	2000	2000	2000
				Q4	Q1	Q2	Q3	Apr.	May	June	July	Aug.	Sep.
Economic sentiment index ¹⁾	2.4	2.9	-0.1	1.0	1.0	0.2	-0.4	0.0	0.0	-0.1	0.1	-0.1	-1.0
Consumer confidence indicator ²⁾	-4	6	9	10	11	11	10	11	12	10	11	12	8
Industrial confidence indicator ²⁾	3	6	0	6	10	13	13	12	12	15	14	13	13
Construction confidence indicator ²⁾	-12	2	14	18	21	23	23	23	22	24	23	26	20
Retail confidence indicator ²⁾	-4	2	0	-2	5	8	3	2	9	12	2	2	4
Capacity utilisation (%) ³⁾	81.4	82.9	82.0	82.5	83.4	83.8	.	83.7	-	-	83.8	-	-

Source: European Commission Business and Consumer Surveys.

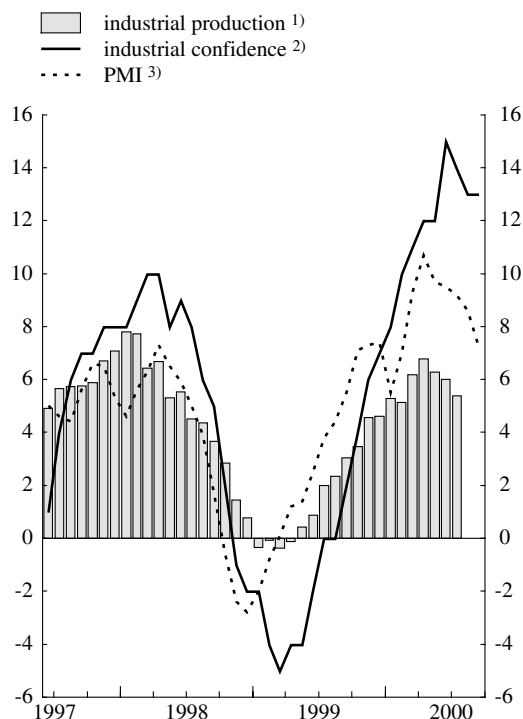
1) Percentage changes compared with the previous period.

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

3) 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.

6.2% in August 2000. Manufacturing production rose by 1% in the three months leading up to August 2000 compared with the previous three months. As has been seen over the past few months, the fastest growth rates were recorded in the capital and durable consumer goods sectors, at 1.7% and 1.6% respectively as a three-month moving average. In both sectors, the level of output in August 2000 was more than 10% higher than in August of last year. Production of non-durable consumer goods increased by 1.4% in the three months up to August 2000 compared with the previous three-month period, while output in the intermediate goods sector remained unchanged.

The overall picture of developments in the industrial sector provided by various surveys is mixed, although on the whole, current survey indicators remain at high levels by historical standards. This supports the view suggested by data on industrial output that the rate of growth in this sector may have levelled off in the third quarter of this year, whilst remaining at a high level. In the third quarter of 2000, business confidence in both the manufacturing and the construction sectors was unchanged from the previous quarter according to the European Commission Business and Consumer Surveys (see Table 6). In September 2000 euro

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 of 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.

area-wide manufacturing confidence was only slightly down from its record high reached in June. The order book and the production expectations components have also remained broadly stable at high levels over the past few months, thereby pointing to continuing strength in activity in the manufacturing sector. With regard to the construction sector, confidence declined in September 2000 from August's record high, but remained well above its historical average.

By contrast with the results of the industrial confidence indicator presented in the European Commission Business and Consumer Surveys, the Purchasing Managers' Index (PMI) for the euro area manufacturing sector declined to 58.3 in the third quarter of this year, compared with 60.0 in the previous quarter. However, current levels of the PMI remain well above the benchmark of 50, which would correspond to zero growth (see Chart 13).

Consumer confidence fell in September, albeit remaining at high levels

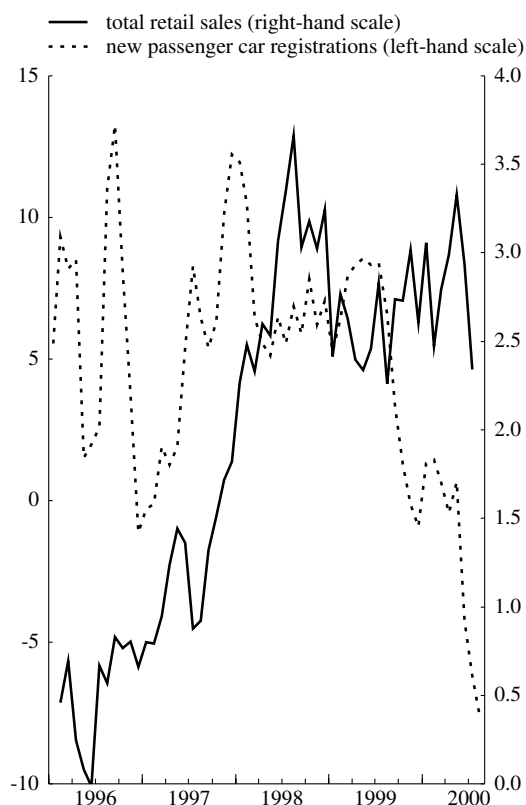
In line with what was expected in the October issue of the ECB Monthly Bulletin, consumer confidence fell sharply in September 2000 according to the European Commission Business and Consumer Surveys. This decline may have been attributable to the increase in oil prices and the related disruptions seen in the euro area in early September. The Survey's overall results were mainly affected by a sharp downward revision of households' sentiment about the future general economic situation. However, the level of consumer confidence recorded in September 2000 remained well above its historical average and, for the third quarter as a whole, it remained near its record high. Lastly, robust economic activity and the continuous improvement in the labour market over the past few months should support consumer spending in the second half of 2000.

It is currently too early to assess whether the fall in confidence in September 2000 has

had an impact on consumer spending. In the three-month period from July to September 2000, new passenger car registrations fell by 5.8% compared with the previous three-month period, and by 7.1% compared with the same three-month period in 1999, essentially reflecting a large decline recorded in July 2000 (see Chart 14). Compared with a year earlier, new passenger car registrations decreased slightly in September 2000. However, since specific factors may be influencing new passenger car registrations, this provides only a limited guide to developments in total consumer spending. In the three months to August 2000, retail sales rose by 2.3% compared with the same three months a year earlier. This is slightly slower than the rate of growth observed in the second quarter of 2000, but in line with the

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).

average pace of growth seen in 1998 and 1999.

Overall, the latest information confirms that growth was stable at high levels throughout the second half of 1999 and the first half of 2000. While some indicators suggest that activity may have risen at a slower pace over the past few months, they are consistent with expectations of continued strong, though more moderate, growth rates.

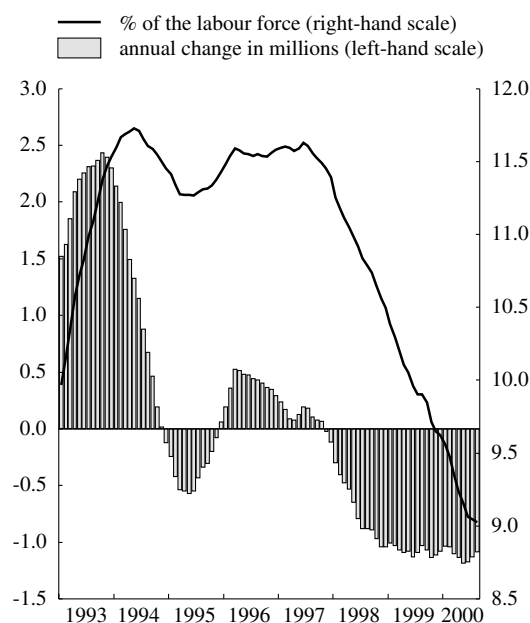
Unemployment rate unchanged in August 2000

As already reported in the October issue of the ECB Monthly Bulletin, the standardised rate of unemployment for the euro area in August 2000 was 9.0%, unchanged from the rate recorded in July 2000 (see Chart 15). As a similar development occurred in August last year, the decline in unemployment is expected to continue, in line with sustained growth in economic activity and favourable employment expectations. The rate of unemployment in July and August 2000 was the lowest since June 1992. In year-on-year terms, unemployment decreased by 1.1 million in August 2000, representing one of the largest annual declines of the past ten years.

In terms of the breakdown by age, the unemployment rate for those over 25 years of age remained unchanged in August 2000, as compared with July 2000, at 7.9%

Chart 15 Unemployment in the euro area

(monthly data; seasonally adjusted)



Source: Eurostat.

(see Table 7). At the same time, the unemployment rate for young people (those aged 24 and below) increased slightly from 17.4% in July to 17.5% in August 2000.

Vigorous employment growth continued in the second quarter of 2000

In line with the substantial reduction in unemployment in the second quarter of 2000, employment growth continued to be strong.

Table 7 Unemployment in the euro area

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

	1997	1998	1999	1999	1999	2000	2000	2000	2000	2000	2000	2000	2000
				Q3	Q4	Q1	Q2	Mar.	Apr.	May	June	July	Aug.
Total	11.6	10.9	10.0	9.9	9.7	9.5	9.2	9.4	9.2	9.2	9.1	9.0	9.0
Under 25 years ¹⁾	23.2	21.3	19.1	18.9	18.2	18.0	17.5	17.9	17.7	17.5	17.3	17.4	17.5
25 years and over ²⁾	9.9	9.4	8.7	8.6	8.5	8.3	8.0	8.2	8.1	8.0	8.0	7.9	7.9

Source: Eurostat.

Note: According to ILO recommendations.

1) In 1999 this category represented 23.3% of total unemployment.

2) In 1999 this category represented 76.7% 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	Apr.	May	June
	Quarterly rates ¹⁾												
Whole economy ²⁾	1.6	1.8	1.8	1.8	1.8	2.1	0.5	0.4	0.6	0.6	-	-	-
Total industry excl. construct.	0.2	-0.7	-1.0	-0.7	-0.4	-0.1	-0.2	0.0	0.1	0.1	-0.2	-0.1	0.1
Manufacturing	0.5	-0.5	-0.8	-0.5	-0.1	0.4	-0.1	0.1	0.2	0.2	0.2	0.3	0.6

*Sources: National data and Eurostat (Short-term Business Statistics).**1) Quarterly rates: percentage change compared with the previous quarter.**2) Excluding Belgium and Ireland.*

Total employment in the euro area is estimated to have risen at a quarter-on-quarter rate of 0.6% in the second quarter of 2000, unchanged from the rate registered in the previous quarter (see Table 8). In annual terms, employment rose by 2.1% in the second quarter, significantly higher than the average growth rate recorded in 1999 and the year-on-year growth rate registered in the previous quarter. These increases in employment in both annual and quarterly terms, which are greater than any recorded since the start of the 1990s, in large part reflect the expansion in economic activity.

In the second quarter of 2000, all the main sectors of the economy contributed to the increase in employment, albeit to differing degrees. Employment in industry excluding construction showed a quarter-on-quarter growth rate of 0.1% in the second quarter,

confirming the improvement observed in the previous quarter. This improvement is largely the result of employment in the manufacturing sector, which is estimated to have risen at a quarter-on-quarter rate of 0.2% in the second quarter of 2000. Employment growth in construction, according to the favourable expectations of the European Commission Business and Consumer Surveys, is expected to have continued at a relatively fast pace in the second quarter. Employment developments in the economy as a whole suggest that employment in the services sector increased sharply in the second quarter of 2000, in line with the expectations of the European Commission Business and Consumer Surveys for the retail sector for the period up to August 2000 and the expectations of the Purchasing Managers' Survey for the services sector for the period up to September 2000.

4 Exchange rate and balance of payments developments

Euro declined in October following an initially tranquil period in the foreign exchange markets

In the early part of October 2000 the foreign exchange markets were relatively calm. Subsequently, however, the euro came under renewed downward pressure, in parallel with the intensifying political tensions in the Middle East, before such pressures eased towards

the end of the month. The potential implications of the movements of the euro exchange rate – which remains out of line with economic fundamentals (see Box 3) – continue to be a cause for concern for the world economy.

Against the US dollar the euro traded between USD 0.86 and USD 0.89 in the first half of October. This period saw the release

Box 3

Determinants of the “equilibrium” value of a currency

Developments in foreign exchange markets have been characterised, particularly over the past two years, by a general tendency of the US dollar and the Japanese yen to appreciate and of the euro to depreciate markedly in nominal effective terms. These divergent exchange rate movements have given rise to concerns, as expressed in statements issued by the International Monetary Fund (IMF) and the G7, about the risks these movements pose to the world economy. In this context, the ECB has repeatedly pointed out that it considers the exchange rate of the euro at present levels to be out of line with economic fundamentals. This assessment is firmly corroborated by current empirical research on the long-run exchange rate determination conducted by international organisations, central banks and prominent academics.

There is an established and comprehensive body of literature in the field of applied economics relating to the determination of the “equilibrium” value of a currency over the long (or medium) term, which is based on a variety of theoretical and empirical concepts. The theory of purchasing power parity (PPP) – which states in its relative form that exchange rate movements reflect in the longer term the difference between the respective inflation rates – constitutes one possible starting-point for analysing the appropriateness of exchange rate movements. However, it is well known that the PPP concept has a number of shortcomings, notably: (i) it is very sensitive to the base period chosen for assessment purposes; and (ii) the adjustment speed of the exchange rate to its equilibrium path mapped out by inflation differentials is very slow, so that prolonged deviations of the exchange rate from its equilibrium cannot be explained on the basis of this concept.

Owing to these limitations, the majority of recent studies on equilibrium exchange rates rely on the macroeconomic balance approach. According to this approach, the exchange rate is influenced over the medium term by a number of real economic variables, the so-called fundamentals. In this context, one school of thought, known as the “fundamental equilibrium exchange rate (FEER) approach”, concentrates on the derivation of exchange rates that are consistent with internal and external balance.¹ An economy is said to be in internal balance if it operates at the level of output that is consistent with full employment (i.e. potential output) and price stability, while external balance corresponds to a sustainable current account position, as reflected in underlying and desired net capital flows. The FEER approach, which is a rather normative concept, allows for the equilibrium value of the exchange rate to vary over time, reflecting changes in the underlying economic fundamentals, with the variation in this value typically being very smooth and gradual.

Another related school of thought places a less normative structure on the computation of the long-term (or medium-term) path of the exchange rate. The focus in this type of study is on explaining the behaviour of exchange rates by means of relevant economic variables (the “behavioural equilibrium exchange rate (BEER) approach”).² In this context, long-term (or medium-term) movements in the real exchange rate are assumed to be explained mainly by relative sectoral productivity differentials and the outstanding stock of net foreign assets. Owing to data limitations, net foreign assets are occasionally substituted by fiscal variables, such as the ratio of government spending to GDP. Moreover, variables accounting for terms of trade shocks as well as real interest rate differentials (given the uncovered interest rate parity condition) have also been introduced as additional determinants of the real exchange rate. In this framework – and by contrast with the FEER approach – the equilibrium exchange rate is computed using the current levels of the fundamental factors, but in some studies they are also broken down into permanent and transitory components. In all of these studies, the

¹ See R. L. Driver and S. Wren-Lewis (1999), *Real Exchange Rates for the Year 2000*, Institute for International Economics; D. Borowski and C. Couharde (1999), *Compétitivité et taux de change d'équilibre de long terme*, CAE: Architecture financière internationale, Rapport du Conseil D'Analyse Economique, 18, pp. 197-204.

² See Alberola et al. (1999), *Global Equilibrium Exchange Rates: Euro, Dollar, “Ins”, “Outs”, and Other Major Currencies in a Panel Cointegration Framework*, IMF Working Paper No. 99/175; J. Hansen and W. Roeger (2000), *Estimation of Real Equilibrium Exchange Rates*, European Commission Economic Paper No. 144; J. Clostermann and B. Schnatz (2000), *The determinants of the euro-dollar exchange rate*, Discussion Paper 2/00, Economic Research Group of the Deutsche Bundesbank; R. MacDonald (2000), *Concepts to Calculate Equilibrium Exchange Rates: An Overview*, Discussion Paper 3/00, Economic Research Group of the Deutsche Bundesbank.

equilibrium exchange rate is assessed in terms of the evolution of the fundamentals in the home country, the euro area, for example, relative to that country's major competitor countries. As mentioned above, other approaches exist for evaluating the "fair" value of a currency, such as the "natural real exchange rate (NATREX)" or by means of fully specified macroeconomic models. However, these approaches are not acknowledged here, mainly because of the lack of recently published research applying these approaches to the euro exchange rate.

Overall, the studies on equilibrium exchange rates based on the macroeconomic balance approach (see footnotes 1 and 2) all point to the conclusion that the euro is significantly undervalued with regard to developments in economic fundamentals. Although great caution has to be exercised in interpreting the estimates reported as representing the equilibrium value of the euro over a long-term (or medium-term) horizon – considering the degree of uncertainty surrounding these estimates and the observed differences in the estimated equilibrium values across studies – there is currently little doubt that the euro is substantially undervalued. These results underscore the shared concerns of the G7 nations about the potential implications of recent exchange rate movements for the world economy.

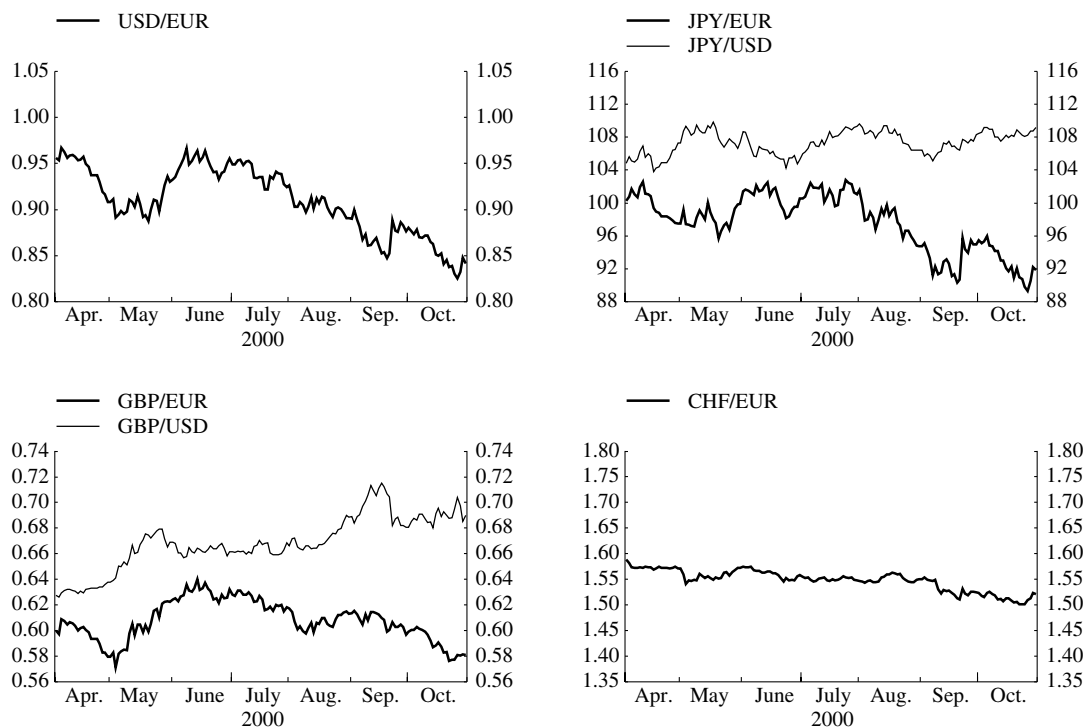
of favourable US factory order and labour market data, while profit warnings by several large US companies – which supported the view that economic growth in the United States may be slowing down over the medium term – received less attention. In the face of evidence of moderating aggregate demand, the Federal Reserve decided at its meeting on 3 October to leave its target for the

federal funds rate unchanged at 6.5%, although it signalled that "the risks continue to be weighted mainly toward conditions that may generate heightened inflation pressures in the future". In the second half of the month, notably at the time of heightened tensions in the Middle East, the euro declined against the US dollar to reach USD 0.82 on 26 October, before recovering somewhat

Chart 16

Patterns in exchange rates

(daily data)



Source: ECB.

following the release in the United States of weaker than expected growth data for the third quarter of 2000. On 31 October the euro was quoted at USD 0.84, almost 4½% lower than at the beginning of the month and around 16½% lower than at the start of the year (see Chart 16).

Vis-à-vis the Japanese yen, the euro remained broadly stable at around JPY 95 in the first part of October. In the second part of the month, however, the euro also declined against the yen. This further strengthening of the yen occurred at a time when there were indications of a gradual economic recovery in Japan. However, new data releases continued to suggest that consumption remains weak, while a sharp rise in bankruptcies in Japan as well as the recent failure of medium-sized Japanese life insurers were also made public. On 31 October the euro was recorded at JPY 91.9, more than 3½% lower than at the beginning of the month and 10½% lower than at the beginning of the year.

For most of the first half of October the euro also remained stable against the pound sterling. At its meeting on 5 October 2000, the Monetary Policy Committee of the Bank of England decided to leave the Bank's repo rate unchanged at 6.0%. Towards mid-October, however, the pound regained some strength. The pound sterling may also have been supported by the rising oil prices, as the United Kingdom is a net oil exporter. On 31 October the euro stood at GBP 0.58, 7% lower than at the beginning of the year.

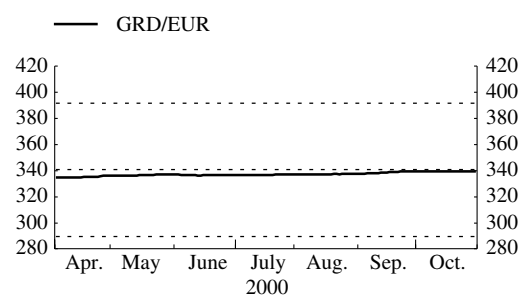
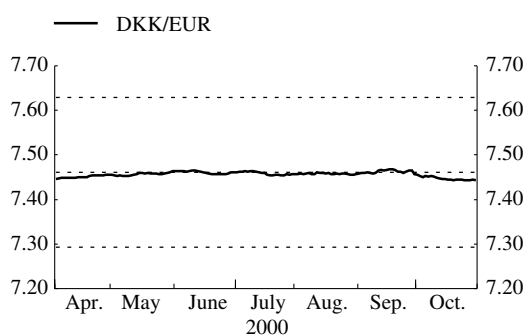
Within ERM II, the Danish krone remained broadly stable. Underscoring Denmark's commitment to maintain its currency within the framework of the narrow band of the exchange rate mechanism, Denmark's Nationalbank operated actively on its policy rates. In early October it raised its discount rate following the ECB's decision on interest rates, and went on to reduce its lending rate by a total of 20 basis points later in the month. On 31 October the euro was recorded at DKK 7.44, close to its central parity. The Greek drachma remained very

stable and was also close to its central parity. On 31 October it was quoted at GRD 339.7 against the euro (see Chart 17).

With regard to other major currencies, the euro initially continued to depreciate against the Swiss franc in October, reaching CHF 1.50 on 23 October, but recovered later to settle at CHF 1.52 on 31 October. Against the Swedish krona the euro appreciated in the first half of October, following the decision of Sveriges Riksbank to leave interest rates unchanged. Subsequently, however, the euro reverted to the levels seen in the previous month.

In nominal effective terms, the euro traded within a narrow range in the first half of October, but depreciated during the second half of the month, mainly mirroring its decline against the currencies of the euro area's

Chart 17
Patterns of exchange rates within ERM II
(daily data)

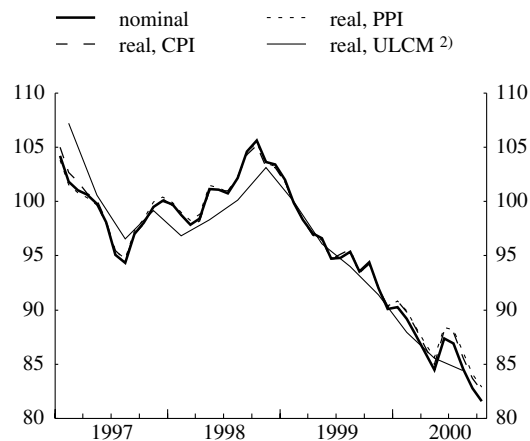


Source: ECB.
 Note: The horizontal lines indicate the central parities (DKK 7.46; GRD 340.75, with the latter effective from 17 January 2000) and the respective fluctuation bands ($\pm 2.25\%$ for DKK and $\pm 15\%$ for GRD).

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 October 2000 and for the ULCM-based REER for the third quarter of 2000.
- 2) Unit Labour Costs in Manufacturing.

largest trading partners. On 31 October the euro was almost 3% lower than at the beginning of the month and 10% lower than at the beginning of the year. Movements in the CPI, the PPI and the ULCM-deflated effective exchange rate indices continued to track fairly closely those of the nominal index, remaining significantly below their long-term averages (see Chart 18).

Current account deficit persisted in August

In August 2000 the current account of the euro area recorded a deficit of €2.2 billion (compared with a deficit of €1.8 billion in August 1999). This was mostly the result of small increases in the deficits for income and current transfers, which were only partially offset by a marginal improvement in the balance for services; the balance for goods remained unchanged. On a cumulative basis, the current account recorded a deficit of €18.9 billion for the first eight months of 2000, compared with a revised surplus (see below) of €3.9 billion for the corresponding

months of 1999. A decrease in the goods surplus (from €57.6 billion to €37.0 billion) accounts for most of the decline, in addition to an increase of €4.2 billion in the current transfers deficit, while the deficits for services and income showed small declines (see Table 9).

The decline in the surplus of the goods balance in the period from January to August 2000 as compared with the same period last year was due to a strong increase in the value of imports, which outweighed the significant rise in exports. As in previous months, this was mainly attributable to higher import prices – resulting from a depreciated euro and higher oil prices – as well as strong economic activity in the euro area.

Portfolio investment equity account on balance in August

In August 2000 combined net direct and portfolio investment recorded an outflow of €30.4 billion. The main determinants were direct investment net outflows of €45.7 billion in August 2000 – reflecting direct investment abroad by euro area residents of €53.7 billion, and inward direct investments of €8.0 billion – which more than offset net portfolio investment inflows of €15.3 billion, the latter being entirely due to net inflows in debt instruments, mostly bonds and notes. By contrast with the previous months of the year, portfolio equity flows were on balance in August, partly because some direct investments abroad were financed by the take-up of shares by non-residents, recorded in the balance of payments as an equity inflow, in the investing companies.

Despite the substantial net outflows in August, combined net direct and portfolio investment outflows in the first eight months of 2000 declined to €58.6 billion, less than half the amount recorded in the same period of 1999 (€125.1 billion). In particular, debt instruments recorded net inflows between January and August 2000 (€107.6 billion),

Table 9**Balance of payments of the euro area***(EUR billions; not seasonally adjusted)*

	1999 Jan. - Aug.	1999 Aug.	2000 Jan. - Aug.	2000 June	2000 July	2000 Aug.
Current account balance	3.9	-1.8	-18.9	-0.6	-2.2	-2.2
Credits	865.5	100.6	1,000.2	133.9	132.2	120.8
Debits	861.5	102.4	1,019.1	134.5	134.4	123.0
Goods balance	57.6	4.6	37.0	5.9	8.4	4.6
Exports	516.6	60.4	619.6	82.0	83.9	75.5
Imports	459.1	55.7	582.6	76.1	75.5	70.9
Services balance	-6.5	-0.7	-5.9	0.2	0.6	0.3
Exports	157.5	20.8	173.5	23.5	24.8	23.4
Imports	164.0	21.5	179.4	23.2	24.2	23.1
Income balance	-21.2	-0.8	-19.9	-1.5	-5.7	-1.6
Current transfers balance	-25.9	-5.0	-30.1	-5.3	-5.5	-5.6
Capital account balance	7.5	0.6	5.7	0.2	0.5	0.1
Financial account balance	35.3	15.8	48.0	-16.2	7.0	-3.9
Direct investment	-74.0	-9.2	72.8	-10.6	-11.3	-45.7
Abroad	-135.3	-13.6	-198.8	-22.1	-9.9	-53.7
Equity capital and reinvested earnings	-77.8	-11.8	-154.4	-22.2	-21.2	-55.3
Other capital, mostly intercompany loans	-57.5	-1.8	-44.4	0.2	11.3	1.6
In the euro area	61.2	4.4	271.6	11.5	-1.5	8.0
Equity capital and reinvested earnings	30.3	3.3	223.3	2.7	9.2	3.6
Other capital, mostly intercompany loans	30.9	1.1	48.3	8.8	-10.7	4.4
Portfolio investment	-51.1	3.1	-131.4	55.8	-5.9	15.3
Equity	-38.4	-9.1	-239.0	28.8	-14.5	-0.0
Assets	-89.4	-14.3	-210.9	-18.2	-22.2	-17.5
Liabilities	51.0	5.3	-28.1	47.0	7.7	17.5
Debt instruments	-12.7	12.2	107.6	27.0	8.6	15.3
Assets	-117.3	-9.9	-80.6	-10.9	-8.6	-4.2
Liabilities	104.6	22.1	188.2	38.0	17.2	19.4
Memo item:						
Combined net direct and portfolio investment	-125.1	-6.1	-58.6	45.3	-17.3	-30.4
Financial derivatives	6.9	3.0	3.5	2.3	-3.2	-0.6
Other investment	143.4	18.6	100.0	-66.1	28.0	25.9
Reserve assets	10.1	0.4	3.1	2.3	-0.5	1.2
Errors and omissions	-46.7	-14.6	-34.8	16.5	-5.3	6.1

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 Section 8 of the "Euro area statistics" part of this issue of the ECB Monthly Bulletin.

as compared with net outflows in the corresponding months of 1999 (€12.7 billion). Moreover, direct investment registered a swing from net outflows in the first eight months of 1999 (€74.0 billion)

to net inflows (€72.8 billion) in the corresponding months of 2000, mainly related to a large transaction, the settlement of which considerably influenced equity net outflows.

ECB revised data for 1997-99 and the second quarter of 2000

In the light of new information, the ECB has revised b.o.p. data for 1997-99 and for the second quarter of 2000. In particular, the goods balance has incorporated the result of a methodological change implemented by one Member State concerning the treatment of transit trade. This is the main contributor to the revision of the net goods surplus

which amounted to ECU 9.1 billion for 1997, ECU 9.5 billion for 1998 and €16.1 billion for 1999. Overall, after revisions, the current account surplus for 1997 and 1998 is now ECU 61.5 billion and ECU 31.1 billion respectively (compared with ECU 76.2 billion and ECU 43.3 billion as previously reported). For 1999 the current account now shows a deficit of €5.8 billion (compared with the previously reported surplus of €22.8 billion).

The two pillars of the ECB's monetary policy strategy

The maintenance of price stability in the euro area is the primary objective of the ECB's monetary policy. Given the time-lags in the transmission of monetary policy impulses to the price level, the ECB must be forward-looking. Therefore, the ECB must regularly assess the nature and magnitude of economic shocks and the resulting risks to future price stability. In this respect, the ECB's strategy foresees, first, a prominent role for money (signalled by the announcement of a reference value for monetary growth) and, second, an analysis of a wide range of other economic and financial indicators in order to form a broadly based assessment of the risks to price stability. These two elements have been called the two pillars of the ECB's monetary policy strategy. Taken together, the two pillars form a framework which is used to organise the analysis and the presentation of the information relevant for monetary policy-making in order to maintain price stability.

The two-pillar presentation differs in some respects from the strategies pursued by other central banks. It is, therefore, not surprising that the announcement and explanation of the ECB's monetary policy strategy (see the article entitled "The monetary policy strategy of the Eurosystem" in the January 1999 issue of the ECB Monthly Bulletin) not only triggered an extensive debate, but was also followed by occasional misunderstandings of the ECB's policy framework. In the light of this discussion and of experience gained with the strategy in practice, this article describes and reviews the two pillars and the main arguments for the adoption of a two-pillar framework for the ECB's strategy.

In the presence of considerable uncertainties surrounding the structure of the economy and the transmission mechanism of monetary policy within this structure, when formulating monetary policy central banks should not rely on any single indicator, single model or simple policy rule to take policy decisions. Rather, a diversified approach to the analysis of the information underlying monetary policy decisions is desirable. In accordance with standard economic thinking, the ECB's strategy organises the main approaches to assessing risks to price stability into two groups – on the one hand, approaches which assign a central role to money and, on the other, a variety of other models of the inflation process, predominantly those which focus on the interplay between supply and demand and on cost pressures in the goods and labour markets. The diversified approach prompted by the two pillars of the ECB's strategy is consistent with an awareness of the uncertainties faced by the central bank and stimulates cross-checking between analyses focusing on monetary developments and those concentrating mainly on non-monetary indicators, thereby helping to ensure the robustness of monetary policy decisions.

I Introduction

In October 1998 the Governing Council of the ECB announced its monetary policy strategy (see Box 1). Most importantly, the ECB provided a quantitative definition of the primary objective of monetary policy in the euro area, namely price stability. Price stability was defined as an annual increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%. It was emphasised that price stability is to be maintained over the medium term. The ECB affirmed that, in line with its Treaty mandate, monetary policy decisions would focus on this overriding objective.

Moreover, the Governing Council announced that its strategy would use two forms of analysis to support the assessment of risks to price stability.

First, in recognition of the fundamentally monetary origins of inflation over the medium term, the ECB assigned a prominent role to money in the formulation of a monetary policy aimed at achieving its primary objective. This prominent role – the so-called first pillar of the strategy – was signalled by the announcement of a quantitative reference value for monetary growth. The first pillar consists of a detailed analysis of potential

Box I

The ECB's monetary policy strategy

ECB press release entitled “*A stability-oriented monetary policy strategy for the ESCB*”, 13 October 1998.

“At its meeting on 13 October 1998 the Governing Council of the ECB agreed on the main elements of the stability-oriented monetary policy strategy of the ESCB. These elements concern: the quantitative definition of the primary objective of the single monetary policy, price stability; a prominent role for money with a reference value for the growth of a monetary aggregate; and a broadly based assessment of the outlook for future price developments.

As mandated by the Treaty establishing the European Community, the maintenance of price stability will be the primary objective of the ESCB. Therefore, the ESCB's monetary policy strategy will focus strictly on this objective. In this context, the Governing Council of the ECB has adopted the following definition: ‘Price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%’. Price stability is to be maintained over the medium term. (...)

Three features of this definition should be highlighted. (1) The HICP is the most appropriate price measure for the ESCB's definition of price stability. It is the only price index that will be sufficiently harmonised across the euro area at the start of Stage Three. (2) By focusing on the HICP ‘for the euro area’, the Governing Council of the ECB makes it clear that it will base its decisions on monetary, economic and financial developments in the euro area as a whole. The single monetary policy will adopt a euro area-wide perspective; it will not react to specific regional or national developments. (3) An ‘increase (...) of below 2%’ is very much in line with most current definitions adopted by national central banks in the euro area.

Furthermore, the statement that ‘price stability is to be maintained over the medium term’ reflects the need for monetary policy to have a forward-looking, medium-term orientation. It also acknowledges the existence of short-term volatility in prices which cannot be controlled by monetary policy.

In order to maintain price stability, the Governing Council of the ECB agreed to adopt a monetary policy strategy which will consist of two key elements. (1) Money will be assigned a prominent role. This role will be signalled by the announcement of a quantitative reference value for the growth of a broad monetary aggregate. (...) (2) In parallel with the analysis of monetary growth in relation to the reference value, a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area will play a major role in the ESCB's strategy. This assessment will be made using a wide range of economic and financial variables as indicators for future price developments.

This strategy underlines the strong commitment of the Governing Council of the ECB to its primary objective and should facilitate the achievement of this overriding goal. It will also ensure the transparency of the ESCB's decision-making and its accountability. Based on its strategy, the Governing Council of the ECB will inform the public regularly and in detail about its assessment of the monetary, economic and financial situation in the euro area and the reasoning behind its specific policy decisions.”

deviations of monetary growth from the reference value, supported and complemented by an examination of the information content of monetary aggregates and their components and counterparts (in particular, credit) for future price developments.

Second, recognising the important information relevant for monetary policy decisions contained in other indicators, the ECB announced that, in addition to a thorough analysis of monetary developments, a broadly based assessment of a wide range of other indicator variables (including

macroeconomic projections and forecasts) would also be carried out and would constitute a further basis for monetary policy

decisions. This broadly based assessment has been labelled the second pillar.

2 A description of the two pillars and their role in the strategy

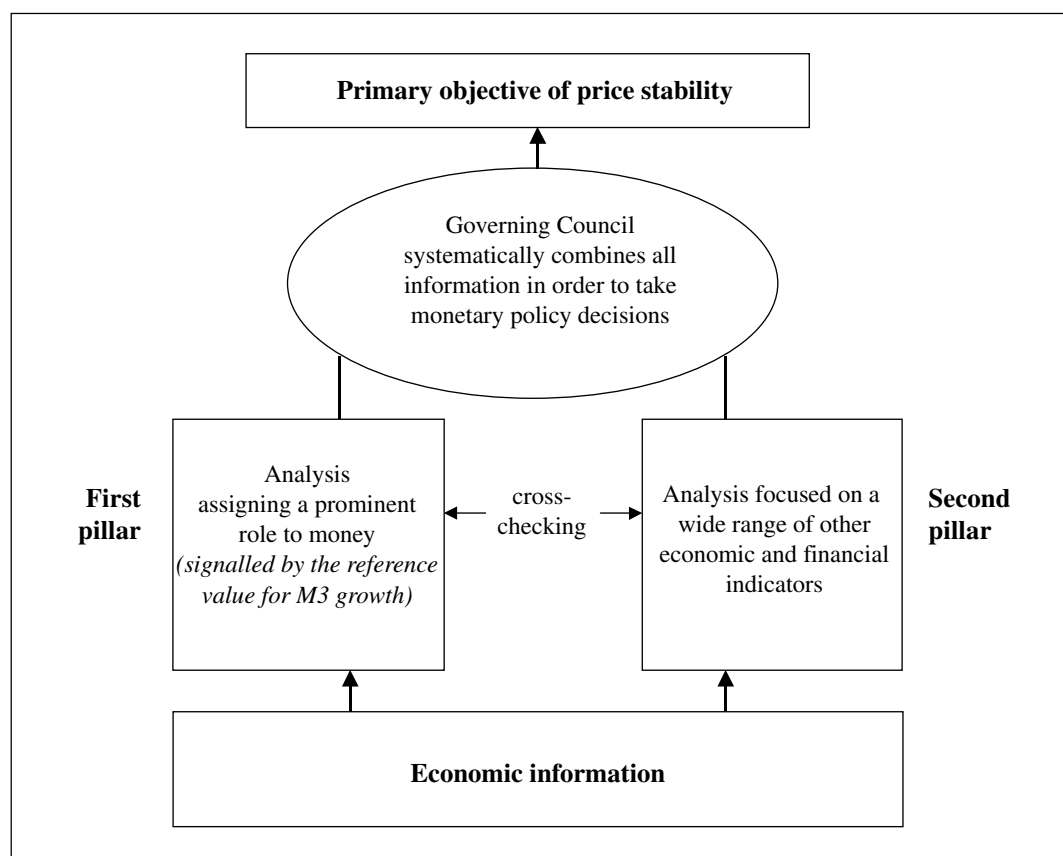
The two pillars of the ECB's strategy are embedded in a broader strategic framework, which is described schematically in the chart below. As is illustrated in the chart, the role of the two pillars is to provide a framework for organising, analysing and cross-checking the large amount of economic information available to policy-makers in a manner that helps the Governing Council to take policy decisions which serve the maintenance of price stability in accordance with the ECB's published definition.

implying multiple targets for monetary policy, with the two pillars representing competing and potentially conflicting objectives. This interpretation fails to recognise that the maintenance of price stability in the euro area is the only "target" (more formally, it is the "primary objective") of the ECB's monetary policy strategy. Both pillars of the strategy should be understood as instrumental in conducting the analysis needed to guide monetary policy decisions in order to achieve this ultimate objective, rather than as distinct targets in themselves. Therefore, it has been clearly stated from the outset that the first pillar is not a

The ECB's strategy is sometimes misunderstood by external observers as

Chart

Schematic presentation of the ECB's monetary policy strategy



“monetary target” and the second pillar is not an “inflation target”. Taken together, the two pillars of the strategy form a framework which organises the analysis and the presentation of the information relevant for monetary policy-making, in order to guide decisions which aim to maintain price stability.

The distinction between the two pillars of the strategy is mainly a distinction between economic models or approaches to the analysis of the inflation process. The first pillar can be seen as representing approaches which assign a prominent role to money in explaining the future evolution of price developments. The second pillar comprises analyses of a broad range of factors and captures models of inflation which focus mainly on real economic variables, such as the interplay of supply and demand in the goods and labour markets. Against this background, in practice, the strategy implies focusing on monetary indicators under the first pillar, while concentrating on conjunctural and mainly non-monetary indicators under the second pillar.

However, as is also indicated in the chart, the strategy does not imply a partition of the information used for the analysis under the two pillars. For example, since the demand for money depends on price developments, real GDP and interest rates, the analysis of monetary developments must always take place in the context of developments in these non-monetary variables. Similarly, the analysis of some monetary variables, e.g. sectoral credit developments, can be of assistance in the assessment of real consumption and investment demand. Thus, analysis under *both* pillars aims at examining the available information in the best possible manner. The difference in emphasis placed on specific variables reflects their role in the framework for the analysis or economic interpretation underlying each pillar and is, therefore, one of degree.

The first pillar

Taking the experience of other central banks into account, the ECB chose to assign a prominent role to money as the first pillar of its monetary policy strategy, in reflection of the fundamentally monetary origins of inflation over the medium to longer term. One of the most remarkable empirical regularities in macroeconomics is the ubiquitous long-run relationship between the price level and the money stock. The monetary origins of inflation are the subject of widespread consensus in the economics profession.

Unlike other countries where monetary developments have been rather erratic during recent decades, available evidence for the euro area continues to point to the existence of a stable relationship between broad monetary aggregates – in particular, M3 – and price developments at horizons relevant to monetary policy-making. Moreover, M3 and other monetary and credit aggregates appear to possess good leading indicator properties for future price developments, especially in the medium term. On the basis of these results, the analysis under the first pillar offers particularly useful guidance over a medium-term horizon.

Furthermore, compared with alternative indicators of future price developments, money has a number of desirable features. Monetary data are measured relatively more accurately than many other economic indicators and are typically available in a more timely fashion.

The prominent role of money has been signalled by the announcement of a reference value for the broad monetary aggregate M3 (see Box 2). The announcement of the reference value represents a visible public commitment on the part of the Governing Council to analyse and explain monetary developments and their implications for the risks to price stability in detail. This explanation appears regularly in the President’s introductory statement at the

ECB's monthly press conference and in the editorial and commentary of the ECB Monthly Bulletin.

However, as noted above, the reference value for M3 is not an intermediate monetary target. The ECB does not attempt to control monetary growth so as to reach the reference value at a specific point in time. Rather, the reference value acts as an analytical and presentational tool which constitutes an important benchmark for assessing risks to price stability.

Moreover, analysis under the first pillar goes beyond the evaluation of deviations of M3 growth from the reference value. The first pillar involves an analysis of the components and counterparts of M3, in particular credit, and other key aspects of the balance sheet position of financial intermediaries. Such analysis helps to provide both a better insight into the behaviour of M3 in relation to the reference value and a broad picture of the

liquidity conditions in the economy and their consequences with regard to the risks to price stability.

This broader analysis of monetary and credit developments is particularly important when evaluating the magnitude of monetary impulses in the economy and assessing their potential impact on future economic developments. In addition, such analysis may help to assess the possible existence and the potential effects of bubbles in financial markets. Historically, booms and busts in asset markets have been closely associated with large movements in monetary and, especially, credit aggregates, and their implications for the economy may depend on the strength of the balance sheet position of the financial sector. This is another reason for the ECB to give a special status within its strategy to the analysis of monetary and credit aggregates and financial intermediaries' balance sheets.

Box 2

The reference value for monetary growth

In December 1998 the Governing Council of the ECB announced the first reference value for monetary growth, namely an annual growth rate of 4½% for the broad monetary aggregate M3. This reference value was confirmed in December 1999. It was also announced then that the reference value would henceforth be reviewed on an annual basis.

The reference value is an analytical and presentational tool which facilitates the formulation and explanation of monetary policy decisions aimed at the maintenance of price stability. To this end, the concept of a reference value has two key features. First, the reference value must be consistent with – and serve the achievement and maintenance of – price stability. This means that the monetary aggregate used to define the reference value should exhibit a stable relationship with the price level over the medium term. Second, substantial or prolonged deviations of monetary growth from the reference value would, under normal circumstances, signal risks to price stability. This means that the monetary aggregate used to define the reference value should possess leading indicator properties for future inflation.

The derivation of the reference value was based on the standard relationship between money, prices, real activity and the velocity of circulation. Using the Eurosystem's definition of price stability (annual increases in the HICP for the euro area of below 2%) and assumptions for trend real GDP growth (2% to 2½% per annum) and the development of M3 income velocity (a trend decline of between ½% and 1% per annum), a reference value of 4½% was derived. By using the Eurosystem's definition of price stability and assumptions for trend real GDP and velocity, the derivation of the reference value emphasises the medium-term orientation of monetary policy. The next review of the reference value will take place in December 2000.

The second pillar

As noted, inflation is ultimately a monetary phenomenon. This notwithstanding, monetary developments cannot be the only guide for assessing risks to price stability. In order to be able to take appropriate decisions, the Governing Council needs to have a comprehensive understanding of the prevailing economic situation and be aware of the specific nature and magnitude of the economic disturbances which threaten price stability. For example, in order to assess risks to price stability it is important to know whether shocks originate on the supply or the demand side, have an external or domestic origin or are temporary or permanent. This information is not revealed in the analysis conducted under the first pillar alone. Therefore, in parallel with the analysis of monetary developments, the ECB also evaluates a wide range of other economic and financial indicators within its broadly based assessment of the risks to price stability in the euro area.

The analysis conducted under the second pillar focuses on revealing the influence of a host of factors, some of which influence price developments in the shorter term. Such short-term developments are nevertheless relevant for monetary policy since their effects may become entrenched and may, therefore, jeopardise prospects for price stability in the medium run. Other indicators considered under the second pillar can also signal threats to price stability in the medium term in a more direct manner. For example, growing shortages in the labour market tend to result in upward pressure on labour costs which may in turn, with a time-lag, have a

gradual and quite persistent impact on consumer prices.

In line with standard models of the business cycle, this analysis is often centred on the effects of the interplay between supply and demand and/or cost pressures on pricing behaviour in the goods, services and labour markets. In this respect, developments in overall output, demand and labour market conditions, in a broad range of price and cost indicators as well as in the exchange rate and the balance of payments for the euro area are regularly reviewed by the ECB (see also the articles entitled “The role of short-term economic indicators in the analysis of price developments in the euro area” in the April 1999 issue of the ECB Monthly Bulletin and “Price and cost indicators for the euro area: An overview” in the August 2000 issue of the ECB Monthly Bulletin).

Moreover, developments in financial market indicators and asset prices are also closely monitored. Movements in asset prices may affect price developments via income and wealth effects. Furthermore, asset prices and financial yields can be used to derive information on the expectations of financial markets, including information on expected future price developments (see the article entitled “The information content of interest rates and their derivatives for monetary policy” published in the May 2000 issue of the ECB Monthly Bulletin).

Under the second pillar, macroeconomic projections based on conventional models and economic experts’ knowledge produced both inside and outside the Eurosystem also play an important role as a tool for summarising existing information (see Box 3).

Box 3

The role of macroeconomic forecasts and projections under the second pillar

By contrast with the forecasts produced by international organisations and other institutions, the Eurosystem itself does not produce “forecasts” in the sense of best predictions of future developments. Rather, it produces a “projection” for future developments based on the assumption of unchanged interest rates (and exchange rates). In order to understand the role of the Eurosystem’s projections in the ECB’s strategy, this distinction must be borne in mind.

Since macroeconomic projections produced within the Eurosystem and the forecasts of other institutions are typically produced on the basis of models of the inflation process which do not accord a prominent role to money, they form part of the second pillar of the ECB’s strategy. Given that the range of relevant indicators under the second pillar is potentially very broad, there is a need to structure and summarise this information so as to facilitate the analysis of risks to price stability. Forecasts and projections offer a convenient analytical tool for organising a large amount of information and help to create a consistent picture of possible future developments.

Within the Eurosystem two macroeconomic projection exercises for the euro area are performed every year which bring together experts from both the ECB and the national central banks (NCBs). These are not the only projections produced within the Eurosystem, but they are the projections which involve the greatest interaction between ECB and NCB staff experts.

The Eurosystem’s main macroeconomic projections aim to deliver a coherent and consistent assessment of the outlook for short and medium-term economic prospects in the euro area. The projections are constructed by combining econometric model-based projections with non-model-based judgemental assessments. A number of different econometric models are used by both ECB and NCB staff experts in the projection exercises, including a variety of national and euro area-wide structural macroeconometric models. These tools have the advantage of being able to provide a detailed global structure. Based on this structure, the final projections seek to be coherent both with past experience and with economic theory, as well as being consistent with the national accounts identities. Judgemental assessments based upon recent conjunctural information and leading indicators constitute another key input into the Eurosystem projections. Such assessments are produced by sectoral and national experts who have a thorough knowledge of both recent economic developments and the institutional context.

Despite the considerable care taken in producing the projections, it is important to realise that it is not possible to incorporate the entire analysis conducted under the second pillar into these projections. This is because macroeconomic forecasts and projections are inevitably subject to a number of conceptual and practical limitations which need to be taken into account when assessing their information content. First, projections and forecasts can vary significantly, depending on the underlying conceptual framework or the set of techniques employed. For this reason, it is not appropriate to rely solely on any single projection. Any forecast or projection needs to be cross-checked with information derived on the basis of other techniques and/or market expectations of future developments. Second, forecasts and projections are always based on assumptions for the path of some exogenous variables which may be volatile and the future path of which is difficult to predict. Such variables include, for example, exchange rates and commodity price developments. The forecast or projection for future inflation may depend significantly on the assumptions chosen for such variables. In addition, as discussed in the opening paragraph of this box, forecasts and projections need to be made conditional on an assumed path for monetary policy. Within central banks, such assumptions are typically represented as unchanged short-term interest rates in order to allow the projection to be meaningful when assessing the risks to price stability which might arise from current (and unchanged) monetary policy interest rates. In practice, these monetary policy assumptions may often lead to problems of internal consistency, since

the expectations and decisions of forward-looking investors, firms and consumers may incorporate different expectations of future monetary policy actions. Third, the production of detailed forecasts or projections is inevitably time-consuming. This implies that forecasts and projections are only produced periodically and, therefore, may not always include all the latest information. Fourth, by their very nature, econometric models provide only a summary description of the economy, consisting of the main relationships governing economic developments and thus do not include all relevant information. Finally, whichever techniques are used, forecasts and projections always need to be adjusted on the basis of informed judgement and practical experience. However, the impact of judgemental adjustments may not be easy to make explicit. Consequently, such judgemental adjustments can complicate the interpretation of the results. This means that a discussion of the developments in indicators underlying the forecasts or projections needs to be made transparent.

For all these reasons, the analysis under the second pillar of the strategy is not limited to the Eurosystem's own macroeconomic projections. The second pillar encompasses a broader set of analyses, which range from the monitoring of timely indicators and more sectoral and structural analyses to the use of small-scale econometric models embodying a different view, estimated with different methodologies or focused on revealing information at specific horizons. Furthermore, these projections are always cross-checked against forecasts produced elsewhere and against forward-looking information derived from financial market prices. Such analyses allow timely information, which is not easily fed into formal forecasting and projection exercises, to be used in the policy discussion, reveal the information in individual indicators and sectors on threats to price stability and help to provide an insight into how developments in specific variables influence the overall inflation outlook.

It should be emphasised that the macroeconomic projections of the Eurosystem are based on the staff's technical expertise. These macroeconomic projections do not embody the view or judgement of the Governing Council of the ECB. The Governing Council itself has to make an overall assessment of the economic situation and of the risks to price stability using *all* the information available, including, in particular, the information derived from the analysis under the first pillar of the strategy, but also information other than the Eurosystem's projection under the second pillar. Any publication of macroeconomic projections by the ECB would have to reflect the (limited) role that forecasts play in the monetary policy decision-making process.

3 Rationales for the two pillar approach

The need for robustness in a world of uncertainty

Central banks operate in an environment of considerable uncertainty. This uncertainty takes on many forms. One form of uncertainty is related to the partial predictability of economic outcomes. This becomes manifest in the form of so-called shocks to individual variables which cannot be predicted in advance. Other, arguably more profound, forms of uncertainty include the inevitably imperfect measurement, interpretation and understanding of the available information, of economic behaviour and, in particular, of the way in which the economy functions. A monetary policy strategy will be successful in such an environment only if it

leads to policy decisions which take the prevailing uncertainty into account in an appropriate manner.

Given the considerable uncertainties faced by monetary policy – exacerbated in the case of the ECB by the potential for behavioural and institutional changes associated with the introduction of the euro – monetary policy would be unwise to rely on one specific model, indicator or forecast to the exclusion of alternatives. Furthermore, the possibility of imperfections in the data and the uncertainty associated with the reliability of the economic information available to central banks also call for a continuous cross-checking of information and analyses. By

implication, it would be unwise for central banks mechanistically to use simple “policy rules” which link interest rate changes to developments in a small number of indicators and/or forecasts. On the contrary, central banks should cross-check and compare the signals given by different indicators and evaluate the available information and the consequences of their actions in the light of a range of plausible models of the economy. In this context, a policy that performs reasonably well under many plausible models and in a range of possible circumstances is often the best choice over the medium term.

The ECB’s strategy embodies a “full information” approach in a broad sense, i.e. it is a framework that not only encompasses all relevant information, but also takes into account various, possibly different interpretations of this information. Against this background, the strategy adopted by the ECB represents a framework that reduces the risks of policy errors caused by over-reliance on a single indicator or model. Since it adopts a diversified approach to the interpretation of economic conditions, the ECB’s strategy may be regarded as facilitating the adoption of a robust monetary policy in an uncertain environment.

Competing paradigms of the inflation process

A reflection of the uncertainties about, and the imperfect understanding of, the economy is the large range of models of the inflation process proposed in economics literature, which incorporates a multiplicity of views on the structure of monetary economies and the transmission mechanism of monetary policy within them. Many of these models capture important elements of reality, but none of them appear to be able to describe reality in its entirety. Therefore, any single model is necessarily incomplete.

As the set of plausible models is very broad, any policy analysis needs to be organised within a simplifying framework. The ECB has

chosen to organise its analysis under two pillars. In this respect, the ECB took account of the fact that it has proven extremely difficult to integrate an active role for money into conventional real economy models, such as those normally used in macroeconomic forecasting exercises, despite the general consensus that inflation is ultimately a monetary phenomenon. Therefore, the first pillar can be seen as representing a group of models which embody a view of price level determination that accords an important role to money. The second pillar encompasses a range of alternative models of the inflation process, predominantly those which emphasise the interplay between supply and demand and/or cost pressures.

Of course, neither pillar in itself represents a single monolithic approach. Within both pillars – and especially under the second – a variety of models and specifications exist. Moreover, these sets of models are undergoing continuous evolution as new empirical and analytical tools are developed.

Quite naturally, occasions may arise when the indications emerging from the two pillars give conflicting signals for monetary policy-making. This potential tension should not be seen as a limitation of the strategy. On the contrary, it actually constitutes the essence of a robust strategy, in the sense explained above. It is only by revealing and confronting such tension between the information revealed under the two pillars that a robust monetary policy response can be formulated. In general, the need to reconcile the potentially conflicting signals represents, in itself, an important source of insight and an additional stimulus for achieving a deeper understanding of the economic situation.

Problems involved when relying entirely on either the first or the second pillar

There are two main arguments against relying solely on the first pillar for the analysis underlying monetary policy decisions. First,

owing to the volatility in the velocity of circulation of money, it may, on occasion, be difficult to interpret monetary developments in the shorter term and extract the signals which they contain regarding risks to price stability. Distortions to the information content of M3 (and its components and counterparts) may be caused by special factors, such as changes in the taxation of interest income on deposits, regulatory changes, etc. Financial innovation, in particular if not anticipated, can also cause difficulty in understanding the indicator properties of money for future price developments.

Second, relying solely on the first pillar entails the danger that insufficient attention is paid to risks to medium-term price stability that arise from developments in variables other than money. For example, excessive increases in nominal wages or other costs may become entrenched and self-perpetuating, and may, therefore, have implications for medium-term developments in the price level. Such threats to price stability are not necessarily signalled immediately by the monetary data. Although sustained inflation is ultimately associated with more rapid monetary growth, threats to price stability of this kind can be identified more promptly by conducting an analysis of wage and cost data and undertaking a thorough assessment of developments in labour and other markets.

At the same time, relying solely on the second pillar would be equally ill-advised. Insofar as the second pillar focuses on indicators of shorter-term price dynamics, the danger exists of a short-term bias being imparted to monetary policy, which would conflict with the medium-term orientation.

The fact that the second pillar also includes projections and forecasts with a horizon of longer than one year does not change this interpretation. Conventional macroeconomic projections and forecasts are always surrounded by considerable uncertainty and this uncertainty becomes greater the longer the horizon of the forecast. This creates difficulties in relying solely on such second

pillar projections and forecasts in the context of a medium-term oriented monetary policy.

In addition, the fundamentally monetary nature of inflation – as shown in many studies – implies that relying entirely on the second pillar is misguided. Furthermore, risks to medium-term price stability identified by analysis under the second pillar may be deemed to be of limited importance for monetary policy decisions if – at the same time – analysis under the first pillar indicates that these inflationary pressures will not be accommodated by more rapid monetary growth. One purpose of the first pillar is to ensure and signal a commitment to the thorough analysis of monetary developments.

Problems of combining the two pillars in a single analytical approach in a transparent manner

While the above discussion has made it clear that analysis should always be conducted under both pillars, it should also be apparent that it is not practically feasible to combine these two forms of analysis in a transparent manner in a single analytical approach. In practice, monetary policy-making is too complex and the environment in which central banks operate too uncertain to rely on a single model or approach.

Although the internal procedures of central banks pursuing a stability-oriented policy may not, therefore, differ fundamentally in this respect, differences between central bank strategies arise in the presentation of the analysis underlying monetary policy decisions to the public. In this context, some trade-off between simplicity and openness may exist. Adopting a simple form of presentation may, at first sight, help to make the description of monetary policy easier to comprehend, but it will not honestly convey the complexity of the analysis which central banks have to conduct.

The ECB's two-pillar approach represents a balance between the requirements of clarity

and simplicity, on the one hand, and openness and honesty, on the other. The two-pillar structure recognises the need for central banks to organise the presentation of a wide range of information and an array of models and analytical tools in a clear manner within a consistent framework. At the same time, the two pillars of the ECB's strategy represent the diverse modes of analysis conducted within the ECB and the need to cross-check the results of these analyses in order to make an overall assessment upon which monetary policy decisions aimed at price stability are based.

4 Concluding remarks

The maintenance of price stability in the euro area is the primary objective of the single monetary policy. All aspects of the ECB's monetary policy strategy serve the achievement of this primary objective.

The centre of the ECB's strategy is the announcement of a quantitative definition of its primary objective, price stability. By virtue of this announcement, the ECB provides a clear yardstick against which the public can judge the performance of monetary policy. The two pillars are instruments which facilitate the achievement of this primary objective – they do not represent independent policy objectives which have a value in their own right. The two pillars constitute a framework within which to organise and structure the diverse and extensive analyses underlying monetary policy decisions.

Given the time-lags in the transmission process of monetary policy, central banks need to be forward-looking and have a medium-term orientation. At the same time, the ECB faces considerable uncertainties with regard to, inter alia, the reliability of available economic indicators, the structure of the euro area economy and the transmission mechanism of the single monetary policy. Monetary policy decisions must take these uncertainties into account.

The two-pillar framework within which policy decisions are presented to the public corresponds closely to the framework used to organise the analysis underlying monetary policy decisions within the ECB. If one defines transparency as the extent to which explanations of policy decisions presented to the public correspond to the actual internal procedures on which these decisions are based, then the ECB's approach to the presentation of monetary policy can only be rated as one of the most transparent in the world.

In this context, relying on any single indicator or on a single framework of analysis would entail too high a risk. A well-designed monetary policy must be capable of maintaining price stability across a range of plausible interpretations of the economy. By diversifying across different indicators and analytical frameworks rather than relying on a single, inevitably incomplete approach, the risk of policy errors is reduced.

The strategy adopted by the ECB constitutes a framework which provides for such a diversified approach. The prominent role assigned to money in the ECB's strategy (the first pillar) ensures that monetary developments are thoroughly analysed, taking into account the ultimately monetary nature of inflation. At the same time, the second pillar of the strategy ensures that other forms of analysis, such as investigations of the interplay between supply and demand or cost pressures, are also incorporated into the policy process. In this way, shorter-term developments and risks to price stability are also taken into account, given the fact that such short-term price dynamics may spill over to medium-term price developments. The two-pillar structure of the strategy helps to ensure that information and analyses produced on the basis of one methodological perspective are always cross-checked against information and analyses produced on the

basis of the other perspective. This discipline is imposed not only on the internal analysis, but also on external communication, highlighting the transparency of the ECB's approach.

The experience of using the ECB's monetary policy strategy since January 1999 has illustrated how these elements have disciplined the implementation of the single monetary policy. In particular, in presenting and explaining its monetary policy decisions to the public over almost two years, the ECB has always had: (i) to justify how a decision has served the prospects for the maintenance of price stability; (ii) to explain the role of monetary developments in the decision; (iii) to explain the role of developments in other indicators, projections and forecasts in the decision; and (iv) to account, whenever potential discrepancies have emerged, for the different signals emerging from the two pillars and explain how these have been reconciled in the final decision. Having to address these

issues on an ongoing basis has, together with the clear overriding focus on the primary objective, imposed a strict discipline on the ECB's decisions, while eschewing any mechanistic application of simplistic, textbook policy rules.

In its public presentation, the ECB's strategy appears to be more complex than some alternatives. However, this complexity reflects the environment in which policy decisions are made. Furthermore, the ECB has adopted a new – and therefore unfamiliar – strategy, which differs from those pursued by other central banks prior to the introduction of the single monetary policy. A process of learning and familiarisation with the new regime has, therefore, been required. There are indications that understanding of the ECB's strategy is improving. This article is a contribution towards consolidating this process.

Issues arising from the emergence of electronic money

Although its use has been very limited in the euro area so far, electronic money has the potential to become an attractive means of payment. This article reviews the development of electronic money and its implications for monetary policy, the oversight of payment systems and the prudential supervision of financial intermediaries. Particular reference is made to the recently adopted European Parliament and Council Directives relating to electronic money.

Overall, with regard to monetary policy, the development of electronic money should not be expected to endanger the capacity of the ECB to pursue its primary objective, price stability. Concerning payment systems oversight, the Eurosystem pays particular attention to both the technical security of electronic money schemes and their interoperability within the euro area. As to prudential supervision, the recently formulated regulatory and supervisory framework is adequate to promote a prudent attitude to risk on the part of electronic money issuers.

I What is electronic money?

Definition

Electronic money is a payment instrument whereby monetary value is electronically stored on a technical device in the possession of the customer. The amount of stored monetary value is decreased or increased, as appropriate, whenever the owner of the device uses it to make a purchase, sale, loading or unloading transaction.

A distinguishing feature of transactions carried out with electronic money is that they do not necessarily involve a bank account. This is a fundamental difference between electronic money and access products. With access products, such as debit

cards, payments are settled by means of transfers between bank accounts.

More precise definitions of electronic money are provided in Box I. These definitions recognise that *single-purpose electronic payment instruments*, which are accepted as payment only by their issuers, do not fall under the concept of electronic money. Such single-purpose payments can be considered as down payments for goods or services which the issuer is expected to deliver at a later stage. An example of a single-purpose payment instrument is a pre-paid telephone card, which is accepted only by the issuing telecommunications operator as payment for telephone calls.

Box I

Definitions of electronic money

According to the "Report on electronic money" published by the ECB in August 1998, "electronic money is broadly defined as an electronic store of monetary value on a technical device that may be widely used for making payments to undertakings other than the issuer without necessarily involving bank accounts in the transaction, but acting as a prepaid bearer instrument".

A legal definition of electronic money has recently been provided in Article 1 of the European Parliament and Council Directive 2000/46/EC on the taking-up, pursuit of and prudential supervision of the business of electronic money institutions. According to this definition, "electronic money shall mean monetary value as represented by a claim on the issuer which is: (i) stored on an electronic device; (ii) issued on receipt of funds of an amount not less in value than the monetary value issued; (iii) accepted as means of payment by undertakings other than the issuer".

The definitions proposed by the ECB and used in Directive 2000/46/EC recognise that electronic money refers to products widely used for making payments to undertakings other than the issuer, implicitly introducing the different concepts of *multi-purpose* electronic money and *limited-purpose* electronic payment instruments. In the former case, the purchasing power can be widely used in making payments. By contrast, in the latter case, the use of purchasing power is limited to a small number of clearly identified points of sale within a well-defined location. An example of this would be electronic payment instruments accepted only as payment for public transportation where the latter is provided by several companies within one city.

The legal definition set out in Directive 2000/46/EC introduces the concept of a claim on the electronic money issuer. This clarifies the concept of the *issuer*, i.e. the undertaking that has ultimate financial responsibility towards the holders of electronic money. This distinction is necessary because in some electronic money schemes the tasks of issuing and administering electronic money are the responsibility of different entities.

Technological features

On a technological level, electronic money products can be further divided into *hardware-based* and *software-based products*, depending upon the storage device. In the case of hardware-based products, purchasing power resides in a device containing hardware-based security features (generally a chip, which is usually embedded in a plastic card). By contrast, software-based products employ specialised software on a personal computer, typically allowing electronic value to be transferred via telecommunications networks, such as the internet.

Hardware-based products have the potential to be used not only for face-to-face payments, but also for payments via telecommunications networks, for example by means of a card-

reading machine and a personal computer connected to the internet. Whenever electronic money is transferred via telecommunications networks, the term "*network money*" is used, regardless of whether the electronic money is hardware-based or software-based.

In addition, the following characteristics of electronic money should be emphasised. First, at the present juncture, electronic money received by the beneficiary cannot, in most cases, be used again, but has to be forwarded to the issuer for redemption (closed circulation of electronic money). However, in certain cases, features facilitating the re-usability of electronic money have been introduced (open circulation of electronic money). With open circulation, electronic money functions in much the same way as banknotes and coins, which allow for a number of transactions to be carried out without the involvement of the issuer. Despite the current predominance of closed circulation, it is possible that open circulation could become more popular in the future, depending on the evolution of its security features. Open circulation could be more cost-effective for electronic money schemes than closed circulation, and it might be more convenient for electronic money users.

Second, electronic money can provide varying degrees of anonymity, from total anonymity to full disclosure of the identity of the user, depending on the technical features of the individual scheme. By contrast, with access products such as debit cards, the processing of payments requires the identification of both parties to the transaction, since their bank accounts need to be debited and credited.

Third, in comparison with banknotes and coins, which use physical security features, electronic money products also typically employ electronic cryptography. Electronic cryptography is used to ensure the authentication, confidentiality and integrity of the data processed in electronic money transactions.

2 Development of electronic money in the euro area

Electronic money as a means of payment

The role of electronic money in the economy derives from its function as a retail payment instrument. In this regard, electronic money is analogous to banknotes and coins, cheques, bank transfers or credit and debit cards. Each of the existing retail payment instruments offers certain specific services which make that payment instrument particularly attractive to certain customers or for certain types of transactions. Nonetheless, there is scope for competition between them. For example, following their introduction, credit and debit cards competed with cheques. Apart from the range of services offered by retail payment systems, the key factor in determining competitive outcomes is the cost associated with the use of each retail payment instrument. For banknotes and coins, as well as for cheques, handling costs are sizeable. For credit and debit cards, the main costs arise from the bookkeeping in relation to bank accounts, including the verification of accounts and transfers between accounts.

With electronic money, transaction costs can be lower than with banknotes and coins. For example, when payments at vending machines are made with electronic money, there is no need for the merchant to handle banknotes and coins stored in the machine and to spend resources on the physical safety of the vending machine. Furthermore, with electronic money, transaction costs may also be lower than with debit cards, because the settlement process generally requires fewer data exchanges and there is usually no need for any online authorisation of electronic money transactions.

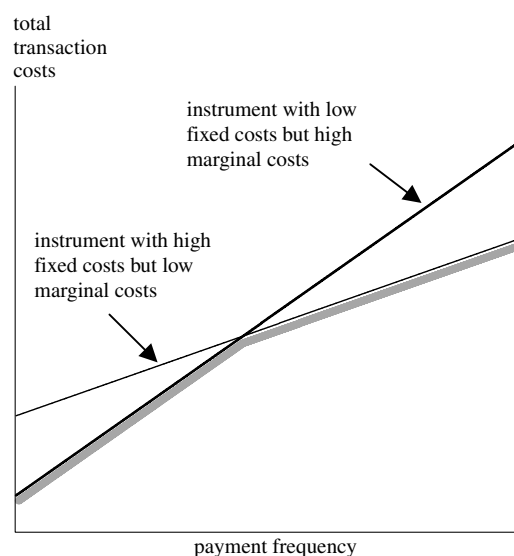
Scope for the development of electronic money usage

The development of electronic money will depend on the decisions made by customers and merchants as to whether or not to use electronic money as a payment instrument.

From the point of view of the merchant, it is useful to distinguish between the fixed costs and the marginal costs of using payment instruments at a particular point of sale. In the case of electronic money, fixed costs include the costs associated with the purchase and maintenance of electronic money cards and software or dedicated merchant terminals. By contrast, the marginal costs are those relating to the processing of a single transaction, including in particular the costs incurred for telecommunications. To the extent that electronic money systems need to rely on new technologies or new standards, which may remain relatively expensive in the early stages of their development, fixed costs are likely to be relatively high, at least during an initial phase. However, the marginal costs of using electronic money may be lower than those of using alternative payment instruments.

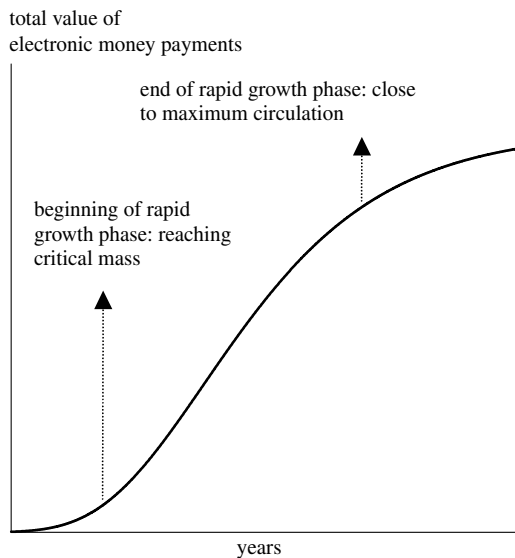
All in all, it can be expected that, given the low marginal costs of electronic money,

Chart I
Competition between payment instruments: fixed costs versus marginal costs



Note: The thick grey line shows which of the two instruments involves the lowest total transaction costs (vertical axis) for any payment frequency (horizontal axis).

Chart 2
Increased usage of electronic money over time



merchants whose business involves relatively frequent payments will be attracted to the use of electronic money (see Chart 1). At the same time, customers who need to carry out relatively small and frequent payments, such as daily purchases of newspapers or urban transport services, may see benefits in using electronic money for these transactions.

Owing to the existence of fixed costs, there is a preference for using a minimum number of retail payment instruments and for selecting the most widely accepted ones. This could deter the development of alternative payment instruments, unless there is sufficient confidence that the reduction in costs will, in the long term, be enough to offset the cost

of change. However, once a new payment instrument reaches a certain critical mass, the costs of acquiring the new payment technology are offset by the expected future savings on transaction costs, since the latter can be achieved over a shorter period of time with a greater number of transactions. As a result, once the critical mass is reached, a new payment instrument is likely to develop more quickly. There will be a network effect, whereby the broad acceptance of electronic money by merchants and the widespread usage of electronic money by customers reinforce each other (see Chart 2). Such a development would be in line with the pattern of diffusion of new technologies observed in various instances, including that of the increased usage of new payment instruments such as credit and debit cards in recent decades.

Review of the evidence available so far

The development of electronic money has been subdued so far, both in the euro area and in other economies. There are a number of schemes under development or already in operation. As a result of the differences both in the marketing approaches followed by the various schemes and in customers' acceptance of electronic money, the number of electronic money devices available differs widely from country to country. However, in the euro area and in the United States the volume and value of payments carried out using electronic money remain small (see Table 1).

Table 1
Statistics on electronic money in euro area countries and in the United States

	(millions)	Number of devices ¹⁾ (percentage of the population)	Number of merchant terminals (thousands)	Volume of daily transactions (thousands)	Value of daily transactions (EUR thousands)	Average value per transaction (EUR)	Reporting period
Belgium	7.0 ²⁾	69% ²⁾	64	149	563	3.8	Dec. 1999
Germany	60.0 ³⁾	73% ³⁾	60	58	197	3.4	Aug. 1999
France ⁴⁾	0.02	0.0%	0	0.3	0.3	1.1	Nov. 1999
Spain	8.1	20%	131	6	16	2.2	Jan.-Dec. 1999
Ireland ⁵⁾	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	–
Italy	0.03 ²⁾	0.1% ²⁾	4 ⁶⁾	1	3	2.7	Jan.-Dec. 1999
Luxembourg	0.3	60%	1	1.6	6	3.6	Dec. 1999
Netherlands	20.0	128%	150	n.a.	n.a.	7.5	Apr.-Nov. 1999
Austria	4.8	60%	30	6	32	5.3	Jan.-Dec. 1999
Portugal	3.4 ⁷⁾	34% ⁷⁾	59	14	17	1.2	Jan.-Sep. 1999
Finland	0.5	10%	1	1	2	1.7	Jan.-Dec. 1999
United States	0.1	0.0%	1	n.a.	n.a.	n.a.	Oct. 1997-Dec. 1998

Sources: Committee on Payment and Settlement Systems, "Survey of electronic money developments", published by the Bank for International Settlements, May 2000; national data; Eurostat (population).

1) Unless indicated otherwise, this includes all devices, even those which had never been loaded as at the reporting date.

2) Includes only those devices which had been loaded at least once as at December 1999.

3) Includes chips available on debit cards. These chips are able to carry out electronic money functions which may not, however, be used in practice.

4) Schemes are in a pilot phase.

5) Only two small pilot schemes were in operation as at September 2000.

6) As at 31 December 1998.

7) Around 261,000 devices had been loaded as at September 1999.

Another observation is that electronic money schemes are generally not *interoperable* at present. Interoperability means that payment instruments belonging to a given scheme can be used in systems installed by other schemes, for example in foreign countries. The lack of interoperability is not unusual for innovations in their early stages. If electronic money schemes are to be successful, it appears important that they become interoperable.

As outlined in Box 2, the ECB has started to collect data on euro-denominated electronic money in circulation in the euro area (see Table 2). Starting from a negligible level in

1994, the total amount outstanding of electronic money in circulation has increased over recent years and had reached a level of €140 million at the end of June 2000. In this respect, the usage of software-based electronic money remained negligible. As at the end of June 2000, electronic money still represented a very small fraction of total money: 0.04% of banknotes and coins in circulation and 0.003% of the monetary aggregate M3. The practical relevance of electronic money to current economic analysis therefore remains very limited at the present juncture.

Table 2
Euro-denominated electronic money in circulation in the euro area
(amount outstanding, end-of-period data, EUR millions)

	1994	1995	1996	1997	1998	1999	June 2000
Hardware-based	0	2	9	75	116	135	140
Software-based	0	0	0	0	0	0	0

Source: ECB.

Box 2

Statistical treatment of electronic money in the ECB's money and banking statistics

The ECB collects statistics in accordance with Council Regulation (EC) 2533/98. The collection of money and banking statistics in accordance with the ECB's requirements is specifically established in Regulation ECB/1998/16. The ECB's money and banking statistics capture the electronic money that is issued by Monetary Financial Institutions (MFIs) located within the euro area. In accordance with Regulation ECB/1998/16, the amount outstanding of electronic money issued by euro area MFIs is classified as deposit liabilities within the MFI balance sheet statistics, indistinguishably included within the item "overnight deposits". Overnight deposits issued by euro area MFIs and held by non-MFI euro area residents are included in the definition of the euro area monetary aggregates. Furthermore, overnight deposits issued by euro area MFIs (irrespective of the residency of the holder) are included in the reserve base for the calculation of the Eurosystem's minimum reserve requirement. Hence, electronic money issued by euro area MFIs is fully taken into account in the calculation of both euro area monetary aggregates and the reserve requirement.

The collection of separate data on electronic money from euro area MFIs is not currently a legal requirement of the ECB. Nevertheless, almost all euro area national central banks (NCBs) and the NCBs of the non-participating EU Member States collect separate data on the amounts outstanding of electronic money issued by MFIs. The ECB receives data from the NCBs on amounts outstanding of electronic money issued by MFIs, broken down into hardware-based and software-based electronic money and also by currency, with a split between balances in euro (including the legacy currencies) and other currencies. However, MFIs located in the euro area have only issued euro-denominated electronic money for the time being. Data are compiled by NCBs at the available frequency, monthly in many cases, and submitted to the ECB at least twice a year. The ECB intends to publish these data regularly from now on.

In the euro area, almost all electronic money is issued by MFIs. In a few euro area countries, electronic money is also issued by non-MFIs, although the amounts involved are very small. The ECB receives data from the NCBs on the amounts outstanding issued by non-MFIs in those cases in which the issuance is relevant at the national level and the data are available.

3 Electronic money and monetary policy

Implications of electronic money for monetary policy

The impact of electronic money on monetary policy has been a widely debated issue since the developments in technology made the widespread use of electronic money a feasible scenario. Some observers were quick to predict that monetary policy would become ineffective in the future. Others remained unconvinced that electronic money would ever gain popularity among users and – even if it did – envisaged only a limited impact on monetary policy.

The importance of electronic money for monetary policy stems from the fact that

electronic money may become a very close substitute for banknotes and coins. If electronic money were to be remunerated, it might also become an attractive alternative to holding short-term bank deposits. Over the long run, developments in consumer prices are closely related to developments in money. The primary objective of the monetary policy of the ECB is to maintain price stability. With regard to this objective, the development of electronic money raises three different issues:

- First, there is a need to safeguard the role of money as the *unit of account* for economic transactions. Society reaps substantial benefits from using a single,

well-defined and stable unit of account, or “numéraire”, for conducting transactions, irrespective of the issuer or the form in which money is issued.

- Second, the effectiveness of monetary policy instruments might be affected by a widespread adoption of electronic money. This relates mainly to effects on central bank balance sheets and the ability of central banks to steer short-term interest rates.
- Third, the emergence of electronic money might have repercussions on the information content of monetary indicator variables with regard to the primary objective of price stability.

Preserving the unit of account

There is a risk that electronic money might lead to the emergence of multiple units of account in the economy. In the absence of any regulation of the issuance of electronic money, electronic money issuers might be tempted to issue excessive amounts of electronic money in an attempt to profit from the placement of these funds. Over time, there may be a change in market views about the creditworthiness of electronic money issuers engaging in excessively risky investment activities, which could lead to electronic money instruments being traded at variable exchange rates. This would undermine the role of money in providing a single unit of account as a common financial denominator for the whole economy.

These problems can be addressed by imposing an obligatory redeemability requirement on issuers of electronic money. If privately issued electronic money always has to be redeemed at par value with central bank money, this creates a tight link between electronic money and central bank money.

Preserving central banks' ability to steer money market interest rates

A widespread substitution of privately issued electronic money for central bank money could reduce the size of central banks' balance sheets, which in turn might have an impact on the implementation of monetary policy. Central banks normally steer the interest rates prevailing in the money market by setting the terms on which they inject liquidity into, or withdraw liquidity from, the money market (see the article entitled “The operational framework of the Eurosystem: description and first assessment” in the May 1999 issue of the ECB Monthly Bulletin). Some observers have argued that electronic money could reduce the control central banks have over very short-term interest rates. In their view, a replacement of currency in circulation could reduce central banks' balance sheets to a level at which it would no longer be possible for them to steer the interest rates prevailing in the money market.

The potential shrinking of central banks' balance sheets might also put downward pressure on their profits through a reduction in seigniorage income. In the extreme, the budgetary independence of central banks could be affected. Ultimately, this could call into question the political independence of central banks, particularly in cases where a strong constitutional underpinning of central bank independence is lacking.

In order to retain the potential to steer money market interest rates, central banks could, on the one hand, take measures to broadly maintain the size of their balance sheets by replacing currency in circulation with other types of liabilities. One particular type of liability on central banks' balance sheets is minimum reserves, and central banks could consider imposing minimum reserves on electronic money. In addition, it would also be possible for central banks to issue electronic money themselves.

However, the potential implications of a rapid growth in electronic money for the control

of money market conditions at the short end should not be overstated. There should always be a high degree of confidence in central bank money, by virtue of the fact that it is either issued or backed by a public institution. Central bank money can thus be expected to retain its appeal as a risk-free means of settlement among private agents. As long as some form of ultimate market recourse to central banks remains, the ability of central banks to influence money market interest rates will be preserved.

Ensuring the continued effectiveness of the monetary policy strategy

Electronic money may also have implications for the information content of indicators used by central banks to assess current economic developments and the associated risks to price stability. In this regard, the ECB is equipped to take into account any potential

increase in electronic money in circulation. In its money and banking statistics, electronic money issued by Monetary Financial Institutions (MFIs) is part of monetary aggregates, which are the focus of analysis under the first pillar of the ECB's monetary policy strategy. If electronic money issuance by non-MFIs were to develop in the future, the ECB would also be in a position to collect statistics from these issuers and thus integrate such issuance into its analysis.

A rapid development of electronic money could have repercussions on different components of monetary aggregates and on the velocity of money. For example, if electronic money were to contribute to a more efficient payment structure in the economy, it could boost the velocity of circulation of monetary aggregates. Such effects – if they were to materialise – would have to be taken into account in the analysis and interpretation of monetary developments.

4 Electronic money oversight, supervision and the Community regulatory framework

The Eurosystem's interest in electronic money

As the amounts outstanding of electronic money in circulation are still very low, they do not have a material impact on monetary policy at present. However, given the potential for the rapid growth of electronic money, the ECB regarded it as important to design a regulatory framework for the issuance of electronic money with a view to ensuring that the needs of monetary policy are appropriately taken into account.

The Eurosystem's interest in electronic money stems not only from the monetary policy concerns reviewed in the previous section. It also relates to the Eurosystem's basic task of promoting the smooth functioning of payment systems, as well as to its role in contributing to the smooth conduct of policies pursued by the competent authorities in relation to the prudential

supervision of credit institutions and the stability of the financial system.

Although electronic money creates opportunities for efficiency gains in retail payments, it is important that its development should not jeopardise either the smooth functioning of payment systems or the stability of the financial system. Furthermore, efficiency gains can only be realised if sufficient safeguards are put in place to ensure that the general public has confidence in electronic money, i.e. that it is seen to be a reliable way of making payments. A number of risks can be identified. In particular, the intrusion of counterfeit value, major technical failures, float mismanagement and, ultimately, failure on the part of issuers of electronic money could have a negative impact on the credibility of various electronic money products and possibly even on other electronic payment products.

Box 3

The Eurosystem's policy on electronic money

The Eurosystem's policy on electronic money is explained in the ECB's "Report on electronic money" (August 1998) and further elaborated in the official opinion of the ECB on draft Community legislation on electronic money.¹ On the basis of monetary policy, payment systems policy and supervisory concerns, the report sets out seven minimum requirements for electronic money schemes to fulfil, as well as two desirable objectives.

The requirements are as follows:

- i) issuers of electronic money must be subject to prudential supervision;
- ii) electronic money schemes must have solid and transparent legal arrangements;
- iii) electronic money schemes must maintain adequate technical, organisational and procedural safeguards to prevent, contain and detect threats to the security of the scheme, particularly the threat of counterfeits;
- iv) protection against criminal abuse must be taken into account when designing and implementing electronic money schemes;
- v) electronic money schemes must supply the central bank with whatever information may be required for the purpose of monetary policy;
- vi) issuers of electronic money must be legally obliged to redeem it at par value; and
- vii) the possibility must exist for the ECB to impose reserve requirements on all issuers of electronic money.

The desirable objectives, which relate mainly to the smooth functioning of payment systems, the prudential supervision of credit institutions and the stability of the financial system, are:

- i) the interoperability of electronic money schemes; and
- ii) the adoption of adequate guarantee, insurance or loss-sharing schemes.

1 The Opinion of the European Central Bank of 18 January 1999 at the request of the Council of the European Union under Article 105 (4) of the Treaty establishing the European Community and Article 4 (a) of the Statute of the European System of Central Banks and of the European Central Bank on (1) a Commission proposal for a European Parliament and Council Directive on the taking-up, pursuit of and prudential supervision of the business of electronic money institutions, and (2) a Commission proposal for a European Parliament and Council Directive amending Directive 77/780/EEC on the coordination of laws, regulations and administrative provisions relating to the taking-up and pursuit of the business of credit institutions (ECB/1999/1, published in the Official Journal of the European Communities, OJ C 189, 6 July 1999, pp. 7-10).

Hence a framework is needed to ensure that electronic money schemes are safe and efficient and that electronic money issuers are sound. The regulatory framework also needs to ensure that there is a level playing-field across the different types of electronic money providers. In addition, in view of the possible expansion of electronic money schemes, such a framework should help to protect the stability of the financial system. The Eurosystem's policy on electronic money is outlined in more detail in Box 3.

Electronic money and payment systems oversight

The requirements and desirable objectives outlined in Box 3 serve, inter alia, as the

common policy line for the Eurosystem central banks when they oversee electronic money schemes. In particular, the oversight of payment systems pursues the twofold objective of soundness and efficiency.

As part of its oversight duties regarding electronic money schemes, the Eurosystem is currently paying specific attention to the technical security of electronic money schemes. The technical security of electronic money schemes is important for the reliable functioning of systems and for protection against criminal abuse. Adequate security would also contribute to the achievement of interoperability, thus promoting efficiency. The Eurosystem is studying technical security approaches adopted by electronic money schemes and market initiatives in this area.

Box 4

Main elements of the new regulatory framework for electronic money institutions

The new regulatory framework for electronic money institutions (ELMIs) is defined in two recently adopted Directives: European Parliament and Council Directive 2000/46/EC on the taking-up, pursuit of and prudential supervision of the business of electronic money institutions and European Parliament and Council Directive 2000/28/EC amending Directive 2000/12/EC relating to the taking-up and pursuit of the business of credit institutions.

According to European Parliament and Council Directive 2000/46/EC on the taking-up, pursuit of and prudential supervision of the business of electronic money institutions, the main elements of the new regulatory framework for ELMIs include the following:

- i) *The limitation of activities* – Article 1 limits the business activities of ELMIs to the issuance of electronic money, the provision of closely related financial and non-financial services and the issuance and administration of other means of payment, but excluding the granting of any form of credit. The ELMIs' business activities also include the storage of data on the electronic device on behalf of other undertakings or public institutions.
- ii) *The scope of application of banking Directives* – Article 2 stipulates that only two EU Directives, if not otherwise expressly provided for, will apply to ELMIs, namely a number of provisions of Directive 2000/12/EC relating to the taking-up and pursuit of the business of credit institutions and Directive 91/308/EEC on money laundering.
- iii) *Redeemability* – Article 3 stipulates that the bearer of electronic money may, during the period of validity, ask the issuer to redeem it at par value in coins and banknotes or by a transfer to an account free of charges other than those strictly necessary to carry out that operation. The contract between the issuer and the bearer must clearly state the conditions of redemption and may stipulate a minimum threshold. This threshold may not exceed €10.
- iv) *Initial capital and ongoing own funds requirements* – The initial capital and minimum ongoing capital requirement for ELMIs is €1,000,000, while capital requirements are also set on an ongoing basis (Article 4).
- v) *The limitation of investments* – Article 5 requires that ELMIs invest an amount not less than their outstanding financial liabilities related to electronic money in highly liquid assets which attract a 0% or, subject to quantitative limitations, a 20% credit risk weighting.¹ Limitations also apply to ELMIs' activities in derivatives. These activities can be undertaken only for the purpose of hedging market risks. The imposition of appropriate limitations on market risks inherent in electronic money activities is left to the Member States.
- vi) *The verification of the specific prudential requirements for initial and ongoing capital, limitations on investments and market risks by the competent authorities* not less than twice per year (Article 6).
- vii) *Sound and prudent operation in respect of management, administrative and accounting procedures and adequate internal control mechanisms* (Article 7).
- viii) *The application of a waiver* of the provisions of electronic money Directives 2000/46/EC and 2000/12/EC (Article 8). National authorities may grant a waiver if the storage device cannot hold more than €150 and one of the following conditions is fulfilled: (a) the total amount of financial liabilities related to outstanding electronic money does not normally exceed €5 million and never exceeds

¹ Investments in assets other than those attracting a 0% credit risk weighting may not exceed 20 times the own funds of the ELMI and these include items such as sight deposits with zone A credit institutions and other sufficiently liquid debt instruments recognised by the competent authorities as qualifying items in accordance with Article 2 (12) of Directive 93/6/EEC (i.e. assets subject to a 20% credit risk weighting according to the Solvency Ratio Directive, debt instruments issued by EU or recognised third-country investment firms as well as debt instruments that are listed on at least one regulated market in the EU or on a recognised stock exchange in a third country provided that they are sufficiently liquid and the solvency of the issuer is subject to a degree of default risk which is comparable to or lower than that of the assets carrying a 20% credit risk weighting in the context of the Solvency Ratio Directive).

€6 million; (b) the exchange of electronic money takes place solely within the group to which the ELMI belongs; or (c) the electronic money business is limited to local areas or it is accepted only by undertakings that have a close financial or business relationship with the ELMI, such as a common marketing or distribution scheme. The ELMIs eligible for the waiver will not benefit from the European passport provisions.

The Directive recognises that there may be a need for a revision of the waiver. Other potential revisions concern, for example, measures to protect the bearers of electronic money, such as the introduction of a guarantee scheme. The Directive stipulates that the Commission should present a report on these issues to the European Parliament and the European Council, together with a proposal for any necessary revisions, within 54 months of the date of publication of the Directive.

The European Parliament and Council Directive 2000/28/EC amending Directive 2000/12/EC relating to the taking-up and pursuit of the business of credit institutions

- i) amends the definition of a credit institution by including ELMIs, thus implying, in conjunction with both Article 19.1 of the Statute of the ESCB, which entitles the ECB to require “credit institutions” established in Member States to hold minimum reserves, and the restriction of issuance of electronic money to credit institutions as stipulated by Article 1 of the above-mentioned Directive 2000/46/EC, that the ECB can impose minimum reserves on all issuers of electronic money; and
- ii) stipulates that the redeemability requirement will also apply to traditional credit institutions issuing electronic money.

On the basis of this review, the Eurosystem will evaluate the feasibility and desirability of a common approach to the technical security of electronic money.

The objective of efficient payment systems has traditionally involved balancing economies of scale against competition. This is also pertinent with regard to electronic money schemes. The normal remedy is co-operation between service providers, in order to avoid any unnecessary duplication of investments, and interoperability, in particular through the use of common standards. The degree of interoperability should be sufficient to widen the choice for customers, avoid unnecessary costs to merchants and enhance overall efficiency. The compatibility of standards and the resulting interoperability could provide greater freedom for customers and merchants to switch from one service provider to another, thus enhancing competition and promoting product innovation.

The new regulatory framework for electronic money institutions

The legal and regulatory regime for electronic money in place in the countries of the European Union (EU) has, until recently, been characterised by a low degree of harmonisation. The recently adopted Community legislation on electronic money provides a comprehensive and harmonised regulatory framework for electronic money schemes. It is consistent with the Eurosystem’s views in almost all areas.

The framework limits the issuance of electronic money to traditional credit institutions and to a new type of credit institution known as an electronic money institution (ELMI). ELMIs are institutions which specialise in the electronic money business. The particular nature of their activity and of the risks that they incur has led to the definition of a specific supervisory framework. In addition, the application of provisions of the Directive relating to the taking-up and pursuit of the business of credit institutions will allow ELMIs to benefit from a

European passport, which will enable them to carry out their activities throughout the EU.

The other main elements of the new regulatory framework for ELMs as provided for in the electronic money Directives are outlined in Box 4.

The new regulatory framework meets the concerns of the ECB to a very large extent. However, Directive 2000/46/EC specifies that, under certain conditions and within certain limits, national authorities may grant

a waiver for some of the obligations imposed on issuers of electronic money. The ECB regards it as important for there to be a prudent implementation of the waiver in national legislation and a restrictive granting of waivers to electronic money issuers. Furthermore, the ECB would welcome a minimum level of harmonisation pertaining to the imposition of limitations on market risks. In this regard, the application of Directive 93/6/EEC on the capital adequacy of investment firms and credit institutions might be a viable approach.

5 Conclusions

Electronic money has the potential to become an important element of the euro area financial system. The development of electronic money in the euro area will be determined by market forces and reflect competition between electronic money and existing retail payment instruments, as well as among the various issuers of electronic money. As a result, it is difficult to predict whether electronic money will develop in the future, and what form its development will take. ECB statistics show that electronic money usage in the euro area has so far remained subdued. However, based on the experience of other payment instruments, the possibility cannot be ruled out that growth in electronic money will quicken once a critical mass has been reached.

The development of electronic money raises issues relating to monetary policy, payment systems oversight and the prudential supervision of financial intermediaries. In general, the regulatory framework currently being implemented in the EU provides adequate safeguards in these three areas. However, for this framework to become effective, it is important that the waiving of regulatory requirements as foreseen as a possibility in the Directives on electronic money is implemented in a restrictive manner in the Member States.

From the point of view of monetary policy, the redeemability requirement on electronic money is important to ensure that the development of electronic money does not endanger the unit of account function of money. As the common unit of account in which prices are expressed, money greatly facilitates the price formation mechanism. Furthermore, the ECB has the ability to collect statistics on electronic money and to impose reserve requirements on issuers of electronic money. Taking all this into account, the ECB does not expect its capacity to pursue its primary objective, price stability, to be endangered by the development of electronic money.

From the point of view of prudential supervision, the main element in relation to the potential development of electronic money is that the recently formulated regulatory and supervisory framework is adequate to promote a prudent attitude to risk on the part of electronic money issuers.

Whereas the electronic money Directives focus on the soundness of electronic money issuers, payment systems oversight by the Eurosystem focuses on the sound and efficient functioning of electronic money schemes. The Eurosystem pays particular attention to the technical security of electronic money schemes and to their interoperability within the euro area.



Euro area statistics



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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	.	2.96	4.66
1999 Q2	11.8	6.5	5.4	-	9.9	.	2.63	4.26
Q3	13.0	7.1	5.8	-	10.1	.	2.70	5.05
Q4	12.0	6.5	5.9	-	10.0	.	3.43	5.32
2000 Q1	10.0	4.8	5.9	-	9.2	23.0	3.55	5.61
Q2	9.5	4.9	6.2	-	10.1	20.7	4.27	5.43
Q3	6.9	4.1	5.4	-	9.4	.	4.74	5.44
2000 May	8.7	4.6	6.0	6.0	10.2	22.1	4.35	5.52
June	7.1	4.2	5.4	5.5	9.4	18.2	4.50	5.35
July	6.9	3.7	5.2	5.4	9.1	18.6	4.58	5.45
Aug.	7.1	4.2	5.6	5.4	9.5	19.7	4.78	5.40
Sep.	6.6	4.3	5.5	.	9.8	.	4.85	5.47
Oct.	.	.	.	.	.	.	5.04	5.42

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	2.4	1.8	81.8	1.7	10.0
1999 Q2	1.0	-1.4	2.1	2.1	0.6	81.8	1.6	10.0
Q3	1.1	0.1	2.3	2.5	2.4	81.6	1.7	9.9
Q4	1.5	2.1	2.4	3.2	4.1	81.9	1.7	9.7
2000 Q1	2.0	4.3	3.6	3.4	4.8	83.0	1.9	9.5
Q2	2.1	5.2	3.7	3.7	6.0	83.7	2.1	9.2
Q3	2.5	.	.	.	.	83.8	.	.
2000 May	1.9	5.3	-	-	8.2	-	-	9.2
June	2.4	5.6	-	-	3.8	-	-	9.1
July	2.4	5.6	-	-	5.3	-	-	9.0
Aug.	2.3	5.6	-	-	6.2	-	-	9.0
Sep.	2.8	.	-	-	.	-	-	.
Oct.	.	.	-	-	.	-	-	.

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)	
1999	7.7	83.4	-120.6	-41.7	372.3	96.6	95.8	1.066
1999 Q2	8.1	22.6	-43.8	1.1	.	96.5	96.0	1.057
Q3	-1.2	23.2	-12.2	21.7	.	95.5	94.6	1.049
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	.	.	.	.	408.1	87.3	85.2	0.905
2000 May	0.5	4.4	-8.7	1.9	388.9	86.9	85.0	0.906
June	-0.4	5.9	-10.6	55.8	385.8	89.9	88.1	0.949
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	85.0	0.904
Sep.	.	.	.	.	408.1	85.3	83.1	0.872
Oct.	.	.	.	.	.	84.4	82.0	0.855

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	2 June	115,677	265,353	19,344	4,850	201,957	140,340	59,905	0
	9	115,677	264,791	18,333	4,722	198,214	136,728	59,905	0
	16	115,677	264,177	18,138	4,717	204,375	142,783	59,905	0
	23	115,677	263,531	18,262	4,529	206,453	142,020	59,905	0
	30	121,188	263,926	18,325	4,130	234,528	172,961	59,907	0
	7 July	120,911	262,183	18,311	4,299	218,320	157,001	59,907	0
	14	120,911	261,515	18,115	4,425	217,434	157,002	59,907	0
	21	120,911	262,887	17,539	4,020	212,425	152,004	59,907	0
	28	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

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	2 June	355,498	114,669	114,637	25	0	0	7	6,265
	9	357,130	109,696	109,665	25	0	0	6	6,265
	16	354,702	116,117	116,072	33	0	0	12	6,265
	23	353,587	109,841	108,429	1,400	0	0	12	6,265
	30	355,726	120,417	120,316	91	0	0	10	6,265
	7 July	359,442	112,936	112,782	151	0	0	3	6,265
	14	359,514	109,930	109,883	45	0	0	2	6,265
	21	357,627	114,910	111,113	3,794	0	0	3	6,265
	28	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

Source: ECB.

Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims	Securities of euro area residents in euro	General government debt in euro	Other assets	Total		
							9	10	11	12	13	14	15	16
0	330	81	1,301	25,030	59,026	83,657	774,894	2000	2 June
0	163	56	1,362	25,163	59,026	84,056	769,982		9
0	80	49	1,558	24,852	58,986	83,897	774,819		16
0	3,050	53	1,425	25,171	58,986	84,159	776,768		23
0	145	89	1,426	25,086	58,986	86,299	812,468		30
0	362	86	964	25,149	58,986	85,321	793,480		7 July
0	61	15	449	25,083	58,986	84,710	791,179		14
0	156	9	349	25,310	58,986	84,613	786,691		21
0	1	25	341	25,435	58,986	84,559	800,725		28
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

Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves	Total		
								9	10	11	12	13	14	15	16	17
40,153	7,242	842	14,362	6,763	56,112	118,007	54,981	774,894	2000	2 June
39,480	7,842	817	13,204	6,763	55,664	118,007	55,114	769,982		9
41,339	7,081	815	12,578	6,763	56,037	118,007	55,115	774,819		16
50,836	7,131	819	12,281	6,763	56,123	118,007	55,115	776,768		23
65,224	7,305	814	13,272	6,691	60,749	120,893	55,112	812,468		30
53,038	7,353	821	11,701	6,691	59,208	120,895	55,130	793,480		7 July
54,117	7,206	812	11,300	6,691	59,319	120,895	55,130	791,179		14
45,923	7,364	812	11,181	6,691	59,892	120,895	55,131	786,691		21
60,120	7,296	814	11,784	6,691	59,738	120,895	55,131	800,725		28
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

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 4 May	4,624,944	64,000	3.75	-	-	-	13
10	6,352,776	72,000	3.75	-	-	-	14
17	6,574,441	66,000	3.75	-	-	-	14
24	7,057,234	78,000	3.75	-	-	-	14
31	7,127,001	62,000	3.75	-	-	-	15
7 June	8,491,195	75,000	3.75	-	-	-	14
15	3,544,808	68,000	4.25	-	-	-	13
21	1,867,673	74,000	4.25	-	-	-	14
28 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

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

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 Sep.	8,969.1	4,912.7	120.6	170.0	1,166.5	537.2	2,062.1
Oct.	9,083.7	4,967.3	129.0	178.5	1,180.3	554.2	2,074.5
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. ^(p)	9,760.9	5,457.7	123.5	193.6	1,270.0	501.7	2,214.4

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.

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
1999 Nov.	103.4	104.0	0.5	0.0	2.73
Dec.	104.9	105.4	0.5	0.0	3.00
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. ^(p)	114.9	-	-	-	-

Source: ECB.

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

Table 1.5**Banking system's liquidity position 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

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			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	MFIs	General government		MFIs	General government	Other euro area residents	MFIs	Other euro area residents	Other euro area residents					
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 Q3	303.6	282.3	21.1	0.2	82.7	1.0	81.0	0.7	4.8	2.0	2.8	328.6	8.0	50.0	777.6
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
1999 Sep.	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
Oct.	567.0	546.4	20.4	0.2	92.4	1.9	89.4	1.2	8.6	4.3	4.3	432.6	9.9	54.2	1,164.6
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.	442.3	422.1	19.7	0.5	89.1	1.9	86.1	1.1	14.1	4.3	9.8	400.6	9.9	56.2	1,012.2
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.	443.2	424.3	18.4	0.5	96.2	2.4	92.7	1.1	14.4	4.3	10.1	439.1	9.8	49.0	1,051.7
Apr.	465.5	446.6	18.4	0.5	96.7	2.6	93.0	1.1	14.4	4.3	10.1	438.0	9.9	51.4	1,075.9
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	453.5	10.0	52.2	1,208.4
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. ^(p)	493.1	474.4	18.2	0.5	98.5	2.9	94.6	1.0	14.6	4.4	10.2	459.0	10.2	54.4	1,129.8

2. Liabilities

	Currency in circulation	Deposits of euro area residents	Other general government/other euro area residents			Money market paper	Debt securities issued	Capital and reserves	External liabilities ²⁾	Remaining liabilities	Total
			MFIs	Central government	Other general government/other euro area residents						
1997	354.9	147.0	91.9	51.7	3.4	13.4	14.8	106.0	33.4	67.2	736.7
1998 Q3	341.5	211.8	140.2	66.4	5.2	11.9	12.0	109.6	23.2	67.6	777.6
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
1999 Sep.	359.7	390.5	332.9	50.1	7.6	3.3	5.3	146.3	88.8	50.1	1,044.0
Oct.	361.5	500.6	440.8	50.2	9.5	3.3	5.3	150.6	93.8	49.4	1,164.6
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	339.3	277.1	53.4	8.8	3.3	4.6	175.1	49.8	46.9	1,012.2
2000 Jan.	366.2	388.9	333.4	47.1	8.4	3.3	4.6	175.7	72.6	44.7	1,056.1
Feb.	363.8	311.8	246.7	56.7	8.4	3.3	4.6	175.1	64.4	46.3	969.3
Mar.	366.2	372.0	319.6	43.3	9.1	1.7	4.6	186.9	75.1	45.3	1,051.7
Apr.	372.7	388.3	334.5	43.4	10.3	1.7	4.6	189.7	75.2	43.8	1,075.9
May	371.8	390.7	345.1	34.1	11.5	1.7	4.6	188.7	82.4	44.6	1,084.5
June	374.3	498.4	432.8	53.1	12.5	1.7	4.6	193.8	92.0	43.6	1,208.4
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. ^(p)	373.5	404.2	346.1	45.6	12.5	0.0	4.6	222.1	75.0	50.6	1,129.8

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) From January 1999 including temporary gross positions of the Eurosystem with the national central banks of Member States not participating in the euro area related to the operation of the TARGET system. These positions amounted to approximately EUR 46 billion at end-January 2000, EUR 40 billion at end-February, EUR 51 billion at end-March, EUR 47 billion at end-April, EUR 53 billion at end-May, EUR 65 billion at end-June, EUR 59 billion at end-July, EUR 41 billion at end-August, EUR 47 billion at end-September and EUR 41 billion at end-October. For positions at end-months in 1999 see the corresponding footnote in the February 2000 issue.

Table 2.2

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

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

1. Assets

	Loans to euro area residents			Other euro area residents	Holdings of securities other than shares issued by euro area residents	Holdings of securities other than shares issued by euro area residents			Money market paper	Holdings of shares/other equity issued by euro area residents	External assets		Fixed assets	Remaining assets	Total	
	MFIs	General government	Other euro area residents			MFIs	General government	Other euro area residents			External assets	Fixed assets				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1997	8,436.1	2,905.6	821.4	4,709.1	1,868.4	635.5	1,050.6	182.3	99.7	329.8	94.2	235.6	1,594.8	238.9	796.9	13,364.7
1998 Q3	8,844.1	3,073.7	809.8	4,960.5	2,040.0	705.5	1,137.2	197.3	105.8	381.2	109.8	271.4	1,650.8	237.0	785.8	14,044.4
Q4	9,098.4	3,181.5	821.2	5,095.8	2,012.3	721.3	1,102.3	188.7	107.1	424.2	123.3	300.8	1,579.9	243.9	777.4	14,243.2
1999 Q1	9,252.2	3,277.4	816.8	5,158.0	2,087.8	761.4	1,131.7	194.7	99.1	469.2	126.0	343.2	1,627.5	244.6	876.2	14,656.5
Q2	9,450.5	3,328.7	816.5	5,305.3	2,138.7	800.6	1,125.8	212.3	101.9	484.6	124.7	359.8	1,646.0	250.0	866.2	14,937.8
1999 Sep.	9,568.3	3,384.1	809.4	5,374.7	2,180.0	828.3	1,134.4	217.3	111.1	481.7	129.8	352.0	1,653.3	258.9	813.1	15,066.5
Oct.	9,697.3	3,457.5	818.7	5,421.2	2,203.1	840.9	1,147.2	215.1	115.0	484.6	131.2	353.4	1,686.1	261.1	850.9	15,298.2
Nov.	9,859.3	3,541.9	831.7	5,485.8	2,218.0	850.0	1,145.0	223.0	128.1	497.6	129.9	367.7	1,764.4	265.3	898.9	15,631.6
Dec.	9,764.2	3,420.2	827.5	5,516.6	2,175.6	827.5	1,121.6	226.5	129.9	521.4	138.0	383.4	1,702.2	281.2	917.7	15,492.3
2000 Jan.	9,832.8	3,450.8	819.5	5,562.5	2,193.4	834.8	1,131.1	227.5	121.1	528.7	141.5	387.1	1,723.7	282.5	935.9	15,618.1
Feb.	9,836.7	3,425.3	814.9	5,596.5	2,216.1	845.4	1,137.2	233.5	130.8	546.2	144.7	401.5	1,768.3	282.1	952.1	15,732.4
Mar.	10,002.5	3,515.2	820.3	5,667.0	2,221.3	868.9	1,124.8	227.6	131.9	594.3	155.1	439.2	1,804.3	287.5	976.1	16,017.6
Apr.	10,049.6	3,499.6	822.4	5,727.6	2,216.0	877.8	1,102.5	235.7	149.1	609.4	157.1	452.3	1,904.4	288.9	1,017.1	16,234.4
May	10,126.8	3,554.7	816.0	5,756.1	2,228.4	894.5	1,091.2	242.7	157.4	628.6	162.1	466.5	1,888.5	288.8	1,016.5	16,334.9
June	10,107.8	3,468.8	816.3	5,822.7	2,206.8	894.3	1,069.7	242.8	155.2	588.1	157.4	430.7	1,868.5	270.9	1,019.3	16,216.6
July	10,061.0	3,395.9	813.9	5,851.2	2,213.7	920.0	1,042.8	250.8	152.7	586.2	149.7	436.4	1,897.8	272.7	1,068.2	16,252.1
Aug.	10,120.4	3,447.4	802.2	5,870.8	2,212.5	926.6	1,031.0	255.0	152.9	586.8	150.3	436.5	1,958.5	275.2	1,106.3	16,412.5
Sep. ^(p)	10,187.3	3,457.5	794.3	5,935.5	2,221.6	935.6	1,024.6	261.4	146.0	589.3	150.9	438.4	1,972.8	276.4	1,055.0	16,448.4

2. Liabilities

	Currency in circulation	Deposits of euro area residents			Other general government/other euro area residents	Other general government/other euro area residents			Repurchase agreements	Money market fund shares/units	Debt securities issued	Money market paper	Capital and reserves	External liabilities	Remaining liabilities	Total
		MFIs	Central government	Other general government/other euro area residents		Overnight	With agreed maturity	Redeemable at notice								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1997	0.4	7,773.9	3,009.3	102.1	4,662.5	1,229.6	1,901.2	1,326.3	205.4	252.0	1,924.8	138.8	687.5	1,373.5	1,213.9	13,364.7
1998 Q3	0.4	8,043.6	3,227.5	90.0	4,726.2	1,268.8	1,901.0	1,345.4	211.0	260.4	2,093.2	154.1	725.9	1,482.8	1,284.0	14,044.4
Q4	0.4	8,279.3	3,311.7	95.3	4,872.3	1,382.7	1,924.1	1,388.8	176.7	241.2	2,116.0	160.8	742.4	1,500.4	1,202.7	14,243.2
1999 Q1	0.5	8,330.3	3,390.5	78.9	4,860.8	1,387.1	1,984.9	1,310.6	178.3	279.8	2,194.0	180.5	759.3	1,618.0	1,294.1	14,656.5
Q2	0.5	8,445.6	3,437.3	81.9	4,926.5	1,479.6	1,961.2	1,319.1	166.4	305.3	2,268.9	183.2	781.9	1,666.6	1,285.7	14,937.8
1999 Sep.	0.6	8,508.2	3,503.8	83.1	4,921.3	1,466.9	1,976.7	1,317.1	160.6	307.1	2,329.3	204.1	795.0	1,688.5	1,233.6	15,066.5
Oct.	0.6	8,605.0	3,584.7	84.8	4,935.5	1,467.4	1,996.7	1,314.0	157.5	307.6	2,355.7	214.6	801.2	1,753.8	1,259.7	15,298.2
Nov.	0.7	8,735.1	3,679.7	81.9	4,973.5	1,501.1	2,005.0	1,308.7	158.6	310.2	2,376.8	243.5	805.2	1,839.5	1,320.7	15,631.6
Dec.	0.7	8,709.1	3,579.4	88.6	5,041.0	1,532.3	2,037.4	1,327.1	144.2	309.8	2,364.7	242.1	836.3	1,774.7	1,255.0	15,492.3
2000 Jan.	0.7	8,708.7	3,555.5	86.5	5,066.7	1,561.7	2,023.0	1,327.1	154.9	326.3	2,370.7	221.6	856.6	1,837.0	1,296.5	15,618.1
Feb.	0.7	8,706.9	3,548.0	87.7	5,071.2	1,554.6	2,040.3	1,316.9	159.4	343.6	2,396.3	233.0	864.2	1,874.7	1,313.0	15,732.4
Mar.	0.7	8,785.1	3,604.4	86.9	5,093.8	1,562.7	2,047.0	1,307.0	177.1	343.1	2,423.3	248.8	878.9	1,991.2	1,346.6	16,017.6
Apr.	0.7	8,797.8	3,578.4	88.2	5,131.2	1,597.1	2,055.3	1,299.4	179.5	409.7	2,452.2	248.1	888.0	2,068.3	1,369.7	16,234.4
May	0.6	8,847.7	3,640.7	79.8	5,127.2	1,580.6	2,074.6	1,291.3	180.8	412.7	2,470.7	260.0	895.2	2,066.4	1,381.5	16,334.9
June	0.6	8,824.4	3,615.3	93.3	5,115.8	1,590.5	2,072.0	1,285.9	167.3	410.3	2,479.6	261.1	886.9	1,956.7	1,397.0	16,216.6
July	0.6	8,744.0	3,536.6	84.9	5,122.6	1,588.9	2,082.3	1,279.3	172.0	408.9	2,503.6	272.6	892.2	1,998.5	1,431.7	16,252.1
Aug.	0.0	8,776.3	3,570.6	86.6	5,119.0	1,561.2	2,113.8	1,274.6	169.4	419.1	2,530.8	276.1	895.3	2,059.1	1,455.7	16,412.5
Sep. ^(p)	0.0	8,806.3	3,566.9	102.0	5,137.4	1,578.1	2,120.3	1,267.1	171.9	412.3	2,544.7	271.1	900.9	2,105.0	1,408.2	16,448.4

Source: ECB.

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

	Loans to euro area residents			Holdings of securities other than shares issued by euro area residents			Holdings of shares/ other equity issued by other euro area residents	External assets ³⁾	Fixed assets	Remaining assets	Total
	1	2	3	4	5	6					
1999 Feb.	5,951.0	839.7	5,111.3	1,409.8	1,207.8	202.0	326.7	1,958.7	252.7	978.9	10,877.8
Mar.	5,995.4	837.2	5,158.2	1,418.9	1,223.7	195.2	347.3	2,054.8	253.9	897.3	10,967.7
Apr.	6,009.5	830.0	5,179.5	1,421.8	1,219.3	202.4	359.9	2,058.4	255.9	864.0	10,969.6
May	6,042.1	830.2	5,211.9	1,444.8	1,236.1	208.7	372.9	2,009.2	257.1	850.0	10,976.1
June	6,142.3	836.9	5,305.5	1,429.0	1,215.8	213.2	364.1	2,144.6	259.7	880.9	11,220.5
July	6,169.0	828.8	5,340.2	1,420.6	1,204.0	216.6	361.6	2,081.9	264.4	863.2	11,160.7
Aug.	6,160.1	824.8	5,335.3	1,433.1	1,208.3	224.8	360.4	2,055.8	265.2	844.5	11,119.1
Sep.	6,204.8	829.8	5,374.9	1,442.7	1,224.3	218.4	356.4	2,081.2	268.7	828.4	11,182.2
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	847.2	5,517.1	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	838.7	5,667.5	1,446.2	1,217.5	228.6	449.3	2,243.3	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	834.7	5,823.1	1,407.3	1,163.3	244.0	441.1	2,321.9	280.8	1,037.8	12,146.8
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. ^(p)	6,748.5	812.6	5,936.0	1,381.6	1,119.2	262.4	448.6	2,431.9	286.6	1,074.9	12,372.1

2. Liabilities: levels outstanding

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities ³⁾	Re-remaining liabilities	Excess of inter-MFI liabilities	Total
1999 Feb.	313.1	141.2	4,866.6	1,388.8	1,980.8	1,313.4	183.7	355.4	1,433.4	753.5	1,643.0	1,378.8	-7.2	10,877.8
Mar.	317.7	133.4	4,869.3	1,395.6	1,984.9	1,310.6	178.3	366.1	1,436.4	767.2	1,715.9	1,350.0	11.7	10,967.7
Apr.	319.8	115.8	4,883.7	1,411.1	1,986.9	1,314.0	171.7	387.6	1,453.1	778.0	1,731.0	1,300.1	0.4	10,969.6
May	321.5	120.7	4,904.6	1,442.8	1,974.7	1,314.7	172.4	389.1	1,463.5	782.6	1,720.7	1,257.8	15.5	10,976.1
June	324.0	125.0	4,935.3	1,488.5	1,961.2	1,319.1	166.4	391.5	1,472.1	793.3	1,837.9	1,328.7	12.6	11,220.5
July	332.0	134.9	4,938.7	1,474.7	1,979.1	1,321.3	163.7	383.3	1,476.5	797.9	1,770.4	1,313.2	13.7	11,160.7
Aug.	326.5	137.8	4,916.7	1,445.7	1,988.1	1,320.2	162.6	396.6	1,484.5	796.6	1,776.9	1,282.4	1.0	11,119.1
Sep.	327.4	133.2	4,928.8	1,474.4	1,976.7	1,317.1	160.6	403.5	1,504.9	807.1	1,777.3	1,283.7	16.2	11,182.2
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	869.2	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	1,341.2	-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	1,359.3	7.6	11,754.3
Mar.	334.6	130.2	5,102.9	1,571.8	2,047.0	1,307.0	177.1	461.7	1,556.6	906.3	2,066.3	1,391.9	-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	916.3	2,143.6	1,413.4	-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	146.5	5,128.3	1,603.0	2,072.0	1,285.9	167.3	517.9	1,587.2	918.9	2,048.7	1,440.6	17.5	12,146.8
July	343.1	134.6	5,133.0	1,599.4	2,082.3	1,279.3	172.0	530.4	1,585.7	934.7	2,083.0	1,477.3	12.9	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. ^(p)	339.0	147.5	5,149.9	1,590.6	2,120.3	1,267.1	171.9	537.4	1,610.8	967.6	2,180.0	1,458.8	-18.9	12,372.1

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		Holdings of shares/ other equity issued by other euro area residents	External assets ³⁾	Fixed assets	Remaining assets	Total	
	General government			General government	Other euro area residents						
	1	2	3	4	5	6	7	8	9	10	11
1999 Mar.	39.1	-3.2	42.3	36.0	34.1	1.9	18.9	53.2	1.2	-92.2	56.2
Apr.	12.7	-8.7	21.4	2.8	-4.4	7.2	11.9	-8.9	2.0	-33.4	-12.9
May	31.6	0.1	31.5	21.1	14.7	6.4	11.8	-60.4	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	238.2
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	-44.0	0.8	-18.8	-54.1
Sep.	46.2	5.1	41.1	16.8	24.1	-7.3	-5.4	19.8	3.5	-9.3	71.7
Oct.	54.2	9.1	45.1	19.8	22.5	-2.7	1.2	20.8	2.2	44.3	142.7
Nov.	74.0	12.7	61.2	11.6	4.1	7.5	9.0	20.9	4.3	48.8	168.6
Dec.	29.9	-5.2	35.1	-28.5	-31.8	3.2	15.8	-77.5	16.0	5.2	-39.0
2000 Jan.	33.5	-8.0	41.6	15.1	13.9	1.2	3.4	23.0	1.4	24.6	101.1
Feb.	30.0	-4.6	34.7	15.3	9.1	6.2	12.9	32.8	-0.5	16.8	107.3
Mar.	71.5	5.0	66.6	-13.6	-6.9	-6.8	36.3	32.8	5.4	22.2	154.7
Apr.	55.6	1.7	53.8	-16.4	-21.4	5.0	12.3	12.7	1.5	33.3	99.1
May	21.0	-6.2	27.2	-0.4	-7.8	7.4	13.1	11.1	-0.1	0.5	45.2
June	60.3	0.0	60.2	-17.0	-18.0	1.0	-35.6	7.7	-17.6	4.6	2.3
July	22.1	-2.0	24.0	-19.2	-26.7	7.5	4.6	-4.6	2.0	46.5	51.4
Aug.	8.5	-8.4	16.9	-5.8	-9.4	3.7	0.4	3.9	2.5	38.6	48.3
Sep. ^(p)	54.1	-8.2	62.3	2.1	-3.9	6.0	2.1	18.2	1.2	-49.0	28.7

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-maining 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 Mar.	4.7	-7.7	-0.5	5.4	2.4	-2.8	-5.4	6.4	4.9	14.4	55.4	-34.0	12.7	56.2
Apr.	2.1	-17.6	13.2	15.1	1.3	3.4	-6.6	20.9	15.6	11.5	6.7	-54.3	-11.0	-12.9
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	1.3	7.4	13.9	109.4	74.4	-4.2	238.2
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	6.6	10.9	7.7	54.8	39.4	5.5	142.7
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	168.6
Dec.	19.5	-4.0	65.7	29.4	32.3	18.5	-14.4	-14.7	10.6	31.2	-87.8	-59.5	0.0	-39.0
2000 Jan.	-16.9	-8.4	22.9	28.1	-15.7	-0.2	10.7	0.8	-3.0	18.6	67.8	42.8	-23.5	101.1
Feb.	-1.8	10.8	4.1	-7.2	17.0	-10.2	4.5	19.0	14.8	5.3	25.1	16.1	14.1	107.3
Mar.	3.4	-14.3	20.2	7.5	5.0	-9.9	17.6	12.0	1.3	16.9	106.4	31.9	-23.1	154.7
Apr.	3.3	1.4	33.0	33.4	4.9	-7.7	2.3	2.3	14.6	9.7	35.2	14.8	-15.1	99.1
May	-0.2	-17.7	0.1	-11.9	19.9	-9.2	1.4	9.8	5.6	3.1	26.2	12.0	6.2	45.2
June	3.6	32.6	-7.4	12.2	-0.8	-5.3	-13.5	-3.7	15.7	-3.2	-78.6	17.6	25.5	2.3
July	1.9	-11.8	1.1	-5.0	7.4	-6.0	4.7	12.0	-7.4	15.7	7.7	39.5	-7.2	51.4
Aug.	-5.1	5.8	-7.2	-28.9	29.2	-4.8	-2.7	12.6	12.2	7.0	5.5	32.7	-15.2	48.3
Sep. ^(p)	1.0	7.1	17.8	17.5	5.3	-7.5	2.5	-7.1	2.7	25.5	39.7	-43.4	-14.6	28.7

Table 2.4
Monetary aggregates ¹⁾
(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		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	9				10	11
1999 Feb.	313.1	1,453.0	1,766.1	99.42	875.1	1,252.3	3,893.4	99.74	183.7	355.4	55.5	
Mar.	317.7	1,469.1	1,786.8	100.51	874.0	1,250.1	3,910.9	100.11	178.3	366.1	48.9	
Apr.	319.8	1,481.4	1,801.2	101.29	874.3	1,255.1	3,930.7	100.59	171.7	387.6	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	389.1	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	391.5	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	383.3	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	396.6	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	403.5	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	4,109.7	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	1,666.6	2,009.7	112.78	919.4	1,231.1	4,160.2	106.15	172.0	530.4	75.9	
Aug.	338.0	1,637.8	1,975.8	110.77	948.5	1,225.0	4,149.3	105.78	169.4	544.1	78.7	
Sep. ^(p)	339.0	1,655.5	1,994.4	111.77	956.3	1,214.8	4,165.6	106.16	171.9	537.4	80.2	

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		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	9				10	11
1999 Mar.	4.7	14.7	19.4	11.8	-2.4	-2.4	14.7	6.8	-5.4	6.4	0.0	
Apr.	2.1	11.9	14.0	11.5	-0.3	5.0	18.7	6.4	-6.6	20.9	1.1	
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	1.3	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	6.6	-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.	3.4	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	37.3	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	-3.2	-1.3	6.9	8.2	-7.4	-0.4	3.7	4.7	12.0	-10.8	
Aug.	-5.1	-30.7	-35.8	7.1	27.5	-6.2	-14.5	4.2	-2.7	12.6	1.7	
Sep. ^(p)	1.0	16.9	17.9	6.6	7.1	-10.3	14.7	4.3	2.5	-7.1	1.1	

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		
4,488.1	100.55		1,106.4	121.8	1,377.9	753.5	2,047.5	5,640.0	5,111.3	101.48	315.7	1999 Feb.	
4,504.2	100.90		1,111.6	120.9	1,387.5	767.2	2,060.9	5,700.7	5,158.2	102.32	338.9	Mar.	
4,542.7	101.67		1,113.6	118.7	1,400.3	778.0	2,049.4	5,741.9	5,179.5	102.75	327.4	Apr.	
4,575.7	102.37		1,111.2	115.1	1,405.9	782.6	2,066.3	5,793.5	5,211.9	103.37	288.6	May	
4,599.5	102.85		1,120.7	114.2	1,412.9	793.3	2,052.7	5,882.7	5,305.5	105.25	306.6	June	
4,608.9	103.14		1,125.4	111.9	1,414.9	797.9	2,032.7	5,918.4	5,340.2	105.99	311.5	July	
4,589.9	102.66		1,131.5	111.0	1,421.5	796.6	2,033.1	5,920.5	5,335.3	105.88	278.9	Aug.	
4,615.6	102.98		1,133.6	111.2	1,429.5	807.1	2,054.2	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	869.2	2,054.9	6,138.0	5,517.1	109.50	278.3	Dec.	
4,788.1	106.22		1,161.4	111.8	1,452.1	886.4	2,058.0	6,188.4	5,563.1	110.33	238.4	2000 Jan.	
4,808.4	106.70		1,164.0	112.8	1,463.5	890.3	2,062.2	6,243.1	5,597.1	111.01	246.8	Feb.	
4,848.0	107.49		1,162.4	113.6	1,466.7	906.3	2,056.3	6,345.4	5,667.5	112.33	177.1	Mar.	
4,939.9	108.42		1,162.7	113.2	1,487.3	916.3	2,036.2	6,427.2	5,728.1	113.40	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	113.94	181.6	May	
4,929.2	108.36		1,163.1	115.9	1,501.1	918.9	1,998.0	6,508.2	5,823.1	115.13	273.2	June	
4,938.6	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	
4,941.5	108.42		1,165.7	118.6	1,527.4	940.8	1,946.0	6,574.3	5,871.3	115.94	268.2	Aug.	
4,955.0	108.67		1,164.4	120.8	1,530.6	967.6	1,931.7	6,647.0	5,936.0	117.17	251.9	Sep. ^(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		
15.7	5.5	5.3	4.8	-0.8	4.9	14.4	30.8	63.1	42.3	10.0	-2.2	1999 Mar.	
34.1	5.3	5.4	1.8	-2.2	14.5	11.5	-13.1	40.5	21.4	9.6	-15.6	Apr.	
31.4	5.5	5.4	-2.7	-3.6	4.5	5.2	14.8	49.7	31.5	9.9	-41.0	May	
21.4	5.5	5.6	9.3	-1.0	6.0	13.9	-11.0	90.3	94.8	10.4	16.8	June	
12.9	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	5.7	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.	
17.6	5.7	5.9	6.2	-0.6	12.8	7.7	31.6	43.6	45.1	10.0	-34.0	Oct.	
44.7	6.1	6.0	8.2	0.1	5.5	4.1	16.8	77.8	61.2	10.2	-11.5	Nov.	
80.1	6.2	5.8	11.7	2.1	-2.5	31.2	-36.9	54.1	35.1	9.5	10.4	Dec.	
3.2	5.2	5.8	1.7	-0.9	-0.9	18.6	5.9	46.2	41.6	8.7	-44.8	2000 Jan.	
21.5	6.1	6.0	0.8	1.0	11.2	5.3	4.4	53.8	34.7	9.4	7.8	Feb.	
35.7	6.5	6.4	-2.1	0.8	2.3	16.9	-1.9	96.1	66.6	9.8	-73.6	Mar.	
41.8	6.6	6.4	-0.8	-0.4	14.7	9.7	-19.6	71.1	53.8	10.4	-22.5	Apr.	
3.2	6.0	6.0	1.0	1.2	7.4	3.1	-14.1	47.8	27.2	10.2	-15.1	May	
-5.9	5.4	5.5	-1.1	1.5	13.8	-3.2	-18.0	25.6	60.2	9.4	86.3	June	
5.5	5.2	5.4	-0.9	1.4	3.4	15.7	-28.7	36.2	24.0	9.1	-12.2	July	
-3.0	5.6	5.4	1.6	1.7	10.6	7.0	-17.8	20.9	16.9	9.5	-1.6	Aug.	
11.3	5.5	-	-1.8	2.2	1.6	25.5	-12.1	70.3	62.3	9.8	-21.5	Sep. ^(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⁾

(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 Feb.	1,778.9	100.14	2,107.7	99.08	3,886.6	99.56	592.1	105.80	4,478.7	100.34	5,119.7	101.65
Mar.	1,798.7	101.18	2,118.0	99.50	3,916.7	100.26	587.6	105.40	4,504.3	100.91	5,160.0	102.36
Apr.	1,810.0	101.79	2,122.3	99.67	3,932.2	100.63	601.9	107.37	4,534.2	101.47	5,187.3	102.90
May	1,829.3	102.85	2,124.0	99.72	3,953.3	101.14	605.7	107.96	4,559.0	102.00	5,227.3	103.68
June	1,846.1	103.76	2,118.1	99.42	3,964.2	101.40	613.8	109.18	4,578.0	102.37	5,284.7	104.84
July	1,871.3	105.24	2,130.5	100.07	4,001.8	102.42	608.4	108.37	4,610.2	103.17	5,318.9	105.57
Aug.	1,873.0	105.30	2,131.4	100.06	4,004.4	102.44	615.5	109.54	4,619.9	103.33	5,355.0	106.27
Sep.	1,883.8	105.93	2,131.1	100.06	4,014.8	102.73	637.7	111.35	4,652.5	103.80	5,389.1	106.98
Oct.	1,893.7	106.44	2,139.3	100.32	4,033.0	103.10	646.5	112.74	4,679.5	104.31	5,434.7	107.86
Nov.	1,906.1	107.04	2,141.5	100.33	4,047.7	103.38	662.2	115.21	4,709.8	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	117.24	4,732.7	105.14	5,480.7	108.78
2000 Jan.	1,949.3	109.39	2,123.9	99.46	4,073.1	103.98	690.5	117.39	4,763.6	105.68	5,556.5	110.20
Feb.	1,974.5	110.80	2,133.0	99.96	4,107.5	104.89	696.3	118.36	4,803.7	106.60	5,607.5	111.22
Mar.	1,989.0	111.54	2,138.8	100.17	4,127.8	105.34	721.7	122.46	4,849.5	107.53	5,668.7	112.36
Apr.	2,005.6	112.36	2,144.0	100.30	4,149.6	105.79	765.5	122.27	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	123.17	4,919.4	108.13	5,774.5	114.29
June	1,984.3	111.42	2,156.4	100.96	4,140.7	105.72	766.7	122.72	4,907.3	107.88	5,799.4	114.66
July	1,998.4	112.14	2,162.9	101.20	4,161.3	106.18	779.0	124.51	4,940.3	108.52	5,825.7	115.09
Aug.	2,016.4	113.04	2,175.3	101.70	4,191.7	106.86	783.5	124.86	4,975.2	109.16	5,893.5	116.38
Sep. ⁹⁾	2,015.2	112.94	2,187.6	102.23	4,202.8	107.11	787.0	125.30	4,989.8	109.43	5,952.4	117.50

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 Feb.	-5.4	-0.3	-6.5	-0.3	-11.8	-0.3	11.5	2.0	-0.3	0.0	16.8	0.3
Mar.	18.5	1.0	8.8	0.4	27.3	0.7	-2.2	-0.4	25.1	0.6	35.7	0.7
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	16.6	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	7.9	1.2	22.5	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	-0.1	0.0	11.7	1.8	11.5	0.2	-5.0	-0.1
2000 Jan.	40.9	2.1	-17.4	-0.8	23.5	0.6	0.9	0.1	24.4	0.5	71.4	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	57.4	1.0
Apr.	14.6	0.7	2.8	0.1	17.4	0.4	-1.1	-0.1	16.3	0.3	61.5	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	-11.2	-0.2	18.7	0.3
July	12.8	0.6	5.0	0.2	17.9	0.4	11.2	1.5	29.0	0.6	21.8	0.4
Aug.	16.1	0.8	10.7	0.5	26.8	0.6	2.2	0.3	29.0	0.6	65.1	1.1
Sep. ⁹⁾	-1.9	-0.1	11.5	0.5	9.6	0.2	2.8	0.4	12.4	0.2	56.6	1.0

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⁾
1998 Q3	2,223.6	775.1	324.3	1,124.3	2,420.4	80.2	126.0	195.1	28.9	48.6	1,379.3	111.8	86.6	364.0	36.8			
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	2,258.6	818.7	338.4	1,101.4	2,527.8	87.0	149.0	187.3	15.4	66.9	1,464.0	135.0	98.0	325.1	35.8			
Q2	2,328.7	844.0	351.3	1,133.5	2,594.4	85.2	154.4	193.0	18.7	63.7	1,513.7	138.3	98.4	329.1	35.7			
Q3	2,344.9	831.5	362.3	1,151.1	2,653.3	86.7	157.2	195.3	19.5	64.3	1,561.7	135.7	96.1	336.8	36.2			
Q4	2,417.1	857.8	372.2	1,187.0	2,718.1	89.4	156.3	194.2	19.9	60.4	1,619.2	141.4	98.4	338.9	37.4			
2000 Q1	2,494.3	901.7	392.2	1,200.4	2,761.3	89.8	160.2	198.3	20.2	58.8	1,650.2	140.8	100.3	342.8	39.1			
Q2 ^(p)	2,555.4	923.0	405.9	1,226.4	2,824.5	91.7	164.8	201.2	21.1	61.0	1,694.6	144.7	101.7	343.8	38.1			

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
1998 Q3	247.5	143.3	54.2	50.0	35.2	27.2	2.4	5.6
Q4	264.0	158.0	52.9	53.0	27.8	19.0	2.5	6.3
1999 Q1	300.0	183.4	54.8	61.8	35.9	27.0	3.0	5.9
Q2	306.2	192.2	51.7	62.3	40.2	28.7	2.7	8.8
Q3	298.7	181.1	53.3	64.3	41.7	32.9	2.8	6.0
Q4	314.8	190.5	54.6	69.7	29.2	20.6	2.7	5.9
2000 Q1	335.3	206.6	55.8	72.8	37.0	25.6	4.0	7.4
Q2 ^(p)	362.9	226.9	60.3	75.6	36.7	26.8	3.8	6.1

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
1998 Q3	831.5	216.5	273.7	7.8	14.2	251.7	326.1	18.3	11.2	296.7	15.3
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	843.9	199.8	289.9	15.0	22.1	252.7	338.6	20.5	11.4	306.8	15.6
2000 Q1	835.2	193.9	288.5	13.2	24.0	251.3	336.8	21.2	10.6	305.1	15.9
Q2 ^(p)	826.9	186.6	287.0	9.9	25.1	252.1	336.6	21.9	10.5	304.2	16.8

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 to 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 Q3	705.6	392.2	250.5	25.4	37.5	3,225.1	745.6	1,111.0	1,311.6	56.8
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 ^(p)	810.9	453.9	302.5	24.1	30.5	3,280.0	885.2	1,098.3	1,249.9	46.6

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 Q3	254.1	68.6	77.8	10.3	97.4	408.3	24.8	363.1	4.4	16.0
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 ^(p)	423.9	165.6	178.8	5.3	74.3	460.0	34.4	410.3	3.5	11.8

3. Deposits held by government

	General government ²⁾																
	1	Central government		Other general government													
		2	State government					Local government					Social security funds				
			Overnight 3	With agreed maturity 4	Redeemable at notice 5	Repos 6	7	Overnight 8	With agreed maturity 9	Redeemable at notice 10	Repos 11	12	Overnight 13	With agreed maturity 14	Redeemable at notice 15	Repos 16	17
1998 Q3	297.0	156.4	52.7	7.8	44.6	0.1	0.2	47.2	21.7	20.3	3.5	1.6	40.8	14.3	23.7	1.3	1.5
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	269.8	130.2	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 ^(p)	300.3	146.5	32.2	10.5	21.5	0.1	0.1	62.2	28.5	28.4	3.1	2.2	59.3	23.0	32.7	0.5	3.1

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) 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			
	1	Banks ³⁾⁴⁾		Non-banks		5	Banks ³⁾		Non-banks		9	Banks ³⁾		Non-banks	
		2	General government ³⁾	Other	6		General government ³⁾	Other	7	8		10	Other	11	12	13	General government ^{3)}	Other
1998 Q3	78.7	70.4	4.4	3.9	94.0	3.0	89.8	1.2	0.6	0.1	0.5	10.3	9.5	0.4	0.4
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 ⁴⁾	101.0	87.9	10.3	2.7	205.5	4.5	197.1	4.0	0.4	0.1	0.3	85.3	82.8	0.5	2.0

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			
	1	Banks ³⁾⁴⁾		Non-banks		5	Banks ³⁾		Non-banks		9	Banks ³⁾		Non-banks	
		2	General government ³⁾	Other	6		General government ³⁾	Other	7	8		10	Other	11	12	13	General government ^{3)}	Other
1998 Q3	1,323.6	949.8	68.7	305.1	271.1	66.6	84.1	120.4	57.6	23.0	34.7	1,485.9	1,159.3	34.0	292.7
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	1,267.3	896.0	61.2	310.1	300.0	71.5	105.5	123.0	58.5	22.3	36.2	1,618.0	1,204.4	70.7	342.9
Q2	1,248.3	849.8	63.9	334.5	320.8	78.1	104.5	138.2	75.2	32.5	42.7	1,666.6	1,214.7	63.0	388.9
Q3	1,254.4	850.5	64.5	339.4	319.7	87.6	90.0	142.0	77.6	37.7	39.9	1,688.5	1,230.2	62.6	395.7
Q4	1,276.6	862.6	64.7	349.2	340.1	94.1	89.6	156.5	80.1	37.4	42.7	1,773.5	1,278.4	72.0	423.1
2000 Q1	1,329.1	889.0	66.5	373.6	371.9	108.5	100.5	162.9	98.1	45.9	52.2	1,989.9	1,441.0	71.2	477.7
Q2 ⁴⁾	1,340.1	908.1	67.1	364.9	417.8	133.7	112.4	171.6	103.2	48.6	54.7	1,953.8	1,400.8	74.3	478.6

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			
	1	Banks ³⁾⁴⁾		Non-banks		5	Banks ³⁾		Non-banks		9	Banks ³⁾		Non-banks	
		2	General government ³⁾	Other	6		General government ³⁾	Other	7	8		10	Other	11	12	13	General government ^{3)}	Other
1998 Q3	1,402.3	1,020.2	73.1	309.0	365.1	69.7	173.8	121.6	58.2	23.0	35.1	1,496.2	1,168.8	34.3	293.1
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	1,375.7	993.1	69.6	313.0	485.4	75.4	284.2	125.8	58.9	22.4	36.5	1,709.9	1,294.0	71.2	344.7
Q2	1,439.7	1,024.5	77.0	338.2	496.0	82.5	271.4	142.0	75.6	32.5	43.0	1,831.8	1,377.5	63.2	391.1
Q3	1,362.5	949.5	71.3	341.7	495.9	91.6	258.1	146.1	78.0	37.8	40.2	1,771.1	1,310.8	63.0	397.2
Q4	1,336.2	908.3	75.2	352.8	534.0	99.8	274.0	160.3	80.7	37.5	43.2	1,816.8	1,318.2	72.3	426.3
2000 Q1	1,422.0	970.8	75.4	375.9	571.6	113.3	289.7	168.6	98.6	46.0	52.6	2,058.2	1,507.7	71.3	479.1
Q2 ⁴⁾	1,441.1	996.0	77.5	367.6	623.3	138.2	309.5	175.6	103.7	48.7	55.0	2,039.1	1,483.7	74.8	480.6

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) 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 Q3	3,310.6	2,932.0	41.1	337.4	234.1	27.1	44.2	32.0	4,889.2	4,736.7	19.7	132.7	95.2	12.7	13.7	11.2
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	4,850.7	23.7	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	3,856.5	3,447.8	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	3,924.0	3,488.6	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 ³⁾	4,050.8	3,613.4	52.4	385.0	267.8	37.2	60.3	19.6	5,274.1	5,094.9	28.7	150.6	110.6	16.9	13.0	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 Q3	1,168.8	464.3	127.3	577.2	443.6	47.5	54.1	32.0	330.8	143.1	28.8	158.9	122.3	13.8	11.2	11.6
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	609.2	470.4	52.9	53.1	32.7	415.1	178.1	36.8	200.3	149.2	24.2	12.9	13.9
Q2	1,377.5	614.8	134.0	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	1,310.8	553.8	130.1	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	1,318.2	539.0	120.9	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	1,507.7	598.5	155.9	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 ³⁾	1,483.7	586.5	141.0	756.1	591.7	66.2	61.1	37.2	555.4	235.4	51.9	268.0	204.5	32.3	15.8	15.5

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 Q3	2,105.7	1,891.4	26.0	188.3	105.3	33.9	33.4	15.8	166.1	147.9	0.6	17.6	15.5	1.0	0.7	0.3
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	2,334.5	2,079.9	33.8	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	2,369.0	2,108.8	35.2	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	2,427.8	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 ³⁾	2,483.5	2,192.3	40.9	250.4	140.7	57.0	34.0	18.6	263.2	234.9	1.4	26.9	17.6	5.4	2.5	1.4

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) 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 Q3	3,356.0	-	-	-	-	-	-	-	5,792.7	5,630.4	26.3	136.0	77.7	12.7	42.8	2.9
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	3,842.3	-	-	-	-	-	-	-	6,364.3	6,132.0	22.3	210.0	114.7	28.3	62.4	4.6
2000 Q1	3,939.5	-	-	-	-	-	-	-	6,506.2	6,239.9	33.7	232.6	126.4	35.7	63.9	6.7
Q2 ^(p)	4,030.6	-	-	-	-	-	-	-	6,658.2	6,365.2	36.2	256.8	140.2	39.7	68.8	8.1

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 Q3	706.8	679.7	7.2	20.0	12.9	2.9	1.4	2.9	1,416.1	1,380.3	10.2	25.6	14.0	7.0	2.3	2.3
Q4	722.4	680.9	17.8	23.6	15.8	3.6	1.8	2.5	1,377.8	1,340.9	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	1,418.9	1,386.5	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	1,429.0	1,398.8	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	1,442.7	1,412.5	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 ^(p)	896.8	857.6	12.9	26.2	17.1	4.9	2.7	1.5	1,407.3	1,373.7	5.9	28.3	14.3	9.5	1.8	2.8

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 Q3	1,020.2	435.2	83.5	501.5	364.1	67.5	26.7	43.2	380.2	174.7	24.8	180.7	157.6	5.3	11.9	5.9
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	993.1	457.8	76.3	459.0	325.1	62.3	27.2	44.4	384.6	134.1	29.1	221.4	193.7	7.7	14.4	5.6
Q2	1,024.5	477.0	77.1	470.4	349.8	52.9	26.2	41.6	417.3	139.3	34.8	243.1	212.6	8.0	16.3	6.3
Q3	949.5	428.1	78.4	442.9	320.3	54.1	28.3	40.2	413.6	143.4	36.9	233.3	198.8	10.8	18.0	5.8
Q4	908.3	388.8	74.9	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	970.8	426.3	90.4	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 ^(p)	996.0	450.5	92.8	452.7	318.0	58.7	32.3	43.7	449.0	138.5	39.3	271.2	229.7	13.8	20.8	6.8

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 Q3	69.7	20.3	-4.3	53.7	39.7	5.2	1.0	7.8	290.2	41.5	31.5	217.2	161.1	30.1	4.4	21.6
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	75.4	19.5	5.6	50.3	35.0	5.3	0.9	9.1	409.7	52.4	30.9	326.4	255.1	37.2	4.3	29.7
Q2	82.5	21.7	6.2	54.6	39.1	5.6	1.2	8.8	413.1	66.9	33.0	313.2	248.7	37.1	4.9	22.5
Q3	91.6	34.0	6.1	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	99.8	38.0	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	113.3	43.6	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 ^(p)	138.2	48.5	12.4	77.4	62.7	6.4	1.7	6.6	483.2	94.2	29.0	360.0	307.4	33.2	5.1	14.3

3 Financial markets and interest rates in the euro area

Table 3.1

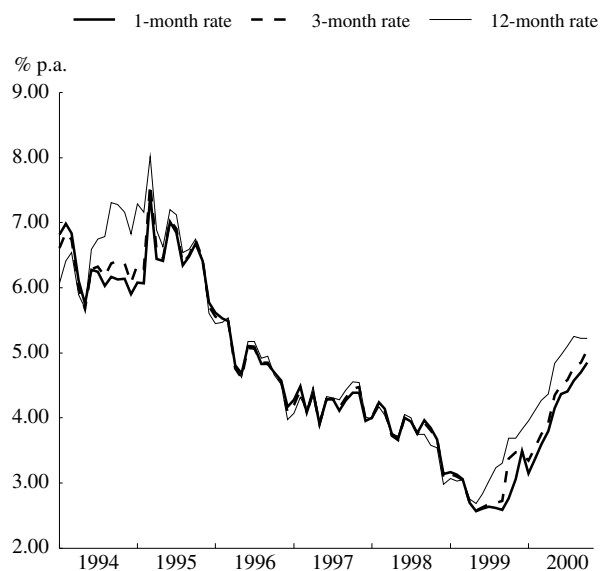
Money market interest rates ¹⁾

(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
1995	5.62	6.51	6.59	6.68	6.86	6.04	1.23
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
1999 Oct.	2.50	2.76	3.38	3.46	3.68	6.18	0.25
Nov.	2.94	3.06	3.47	3.48	3.69	6.10	0.30
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
2000 6 Oct.	4.80	4.85	5.02	5.09	5.21	6.80	0.53
13	4.73	4.81	4.99	5.05	5.14	6.77	0.52
20	4.68	4.86	5.04	5.11	5.22	6.76	0.51
27	4.85	4.95	5.13	5.19	5.29	6.76	0.52

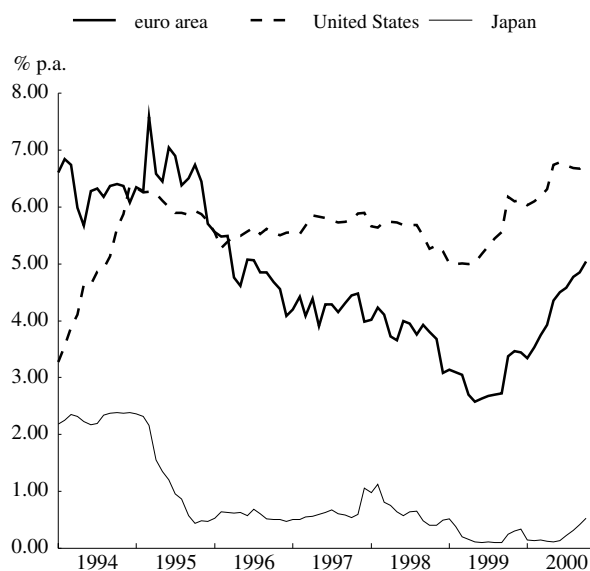
Euro area money market rates

(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

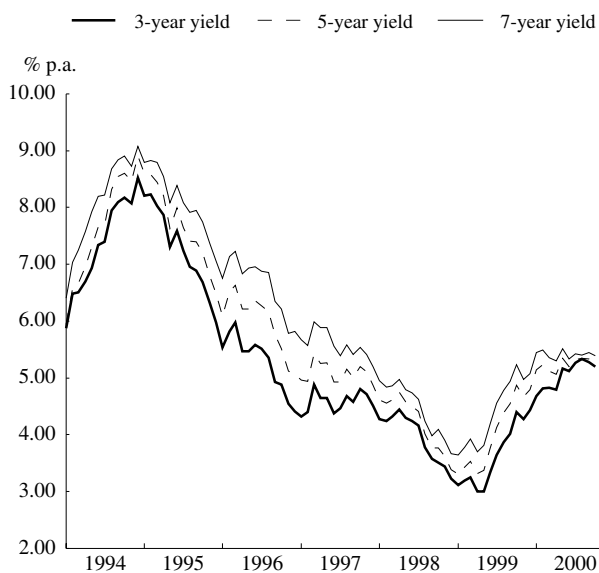
Government bond yields ¹⁾

(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
1995	5.69	5.97	6.48	7.06	8.73	6.69	3.32
1996	4.17	4.41	5.06	5.82	7.23	6.54	3.03
1997	4.33	4.51	4.87	5.20	5.99	6.45	2.15
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
1999 Oct.	4.07	4.40	4.87	5.23	5.47	6.10	1.78
Nov.	3.99	4.27	4.67	4.97	5.18	6.03	1.81
Dec.	4.18	4.43	4.79	5.07	5.30	6.26	1.73
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
2000 6 Oct.	5.19	5.23	5.28	5.38	5.43	5.84	1.80
13	5.11	5.14	5.18	5.33	5.40	5.74	1.84
20	5.20	5.23	5.26	5.36	5.40	5.66	1.84
27	5.20	5.22	5.24	5.37	5.42	5.72	1.84

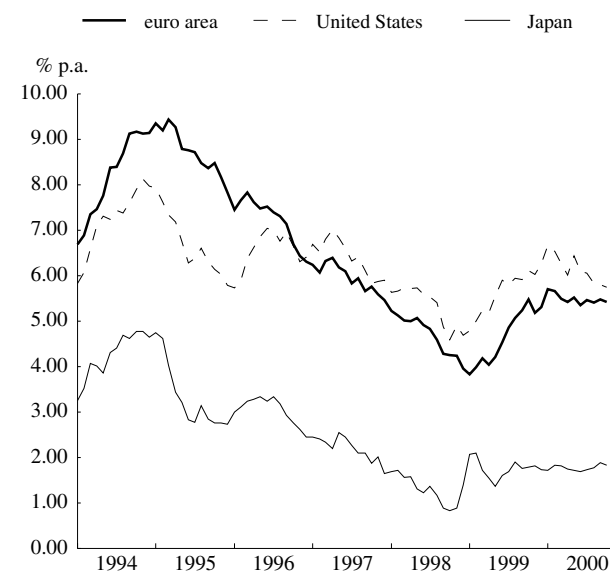
Euro area government bond yields

(monthly)



10-year government bond yields

(monthly)



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

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

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

Table 3.3

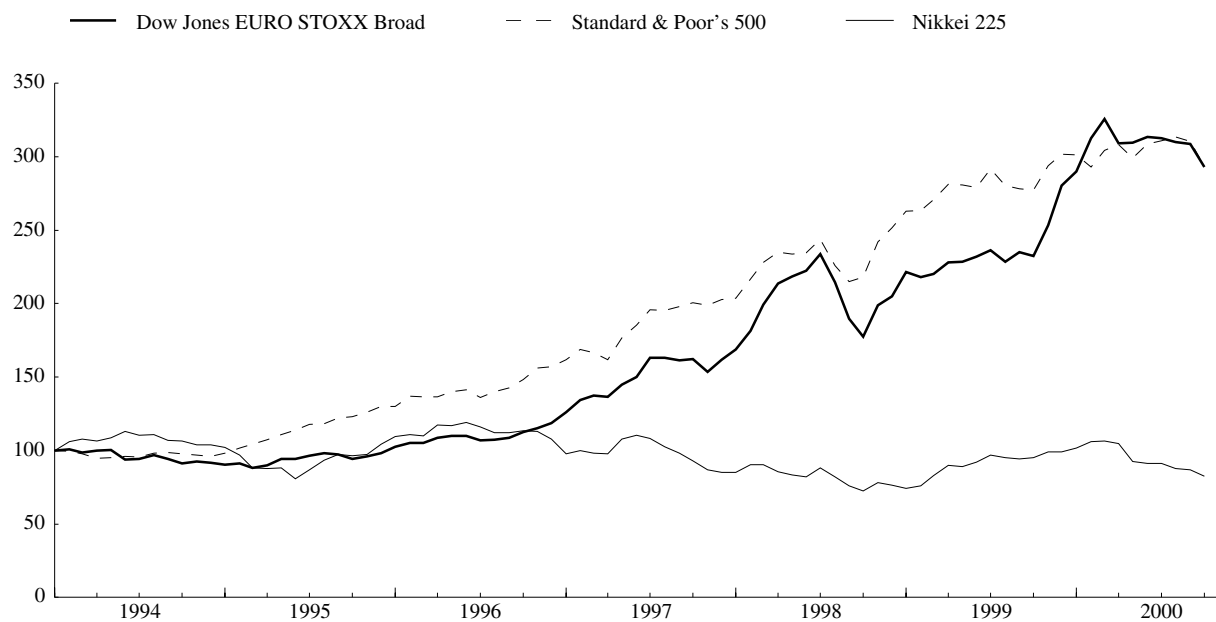
Stock market indices

(index levels, in points)¹⁾

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main economic sector indices											
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Industrial	Technology	Utilities	Telecommunications	Health-care			Standard & Poor's 500	Nikkei 225
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1995	130.5	1,388.1	150.6	127.9	141.1	131.2	117.0	124.5	146.0	132.3	161.9	166.4	542.2	17,363.4
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
1999 Oct.	322.4	3,742.6	282.7	253.2	321.5	295.4	290.9	294.4	489.0	281.9	695.7	395.5	1,312.6	17,697.9
Nov.	351.2	4,160.0	294.9	265.0	333.2	305.7	310.3	314.7	589.9	297.4	836.2	427.1	1,391.6	18,440.3
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
2000 6 Oct.	411.9	4,958.4	282.7	280.6	328.3	373.0	373.7	352.5	879.9	347.2	836.1	570.5	1,409.0	15,994.2
13	396.7	4,782.7	274.0	273.3	329.2	384.5	355.1	336.3	819.2	343.1	775.3	547.0	1,374.2	15,330.3
20	404.5	4,889.5	277.9	278.4	330.3	374.9	363.9	348.1	880.5	331.2	795.2	545.0	1,396.9	15,198.7
27	412.5	4,965.9	291.8	279.9	337.0	365.4	368.6	356.5	888.4	332.2	892.4	568.1	1,379.6	14,582.2

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

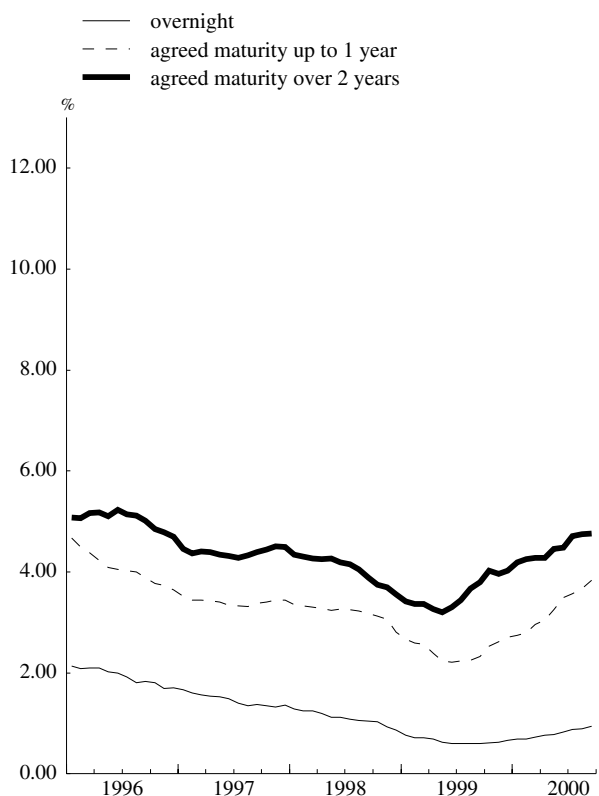
Retail bank interest rates

(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 Sep.	0.60	2.32	2.32	3.79	1.99	2.80	5.38	5.19	9.29	5.53
Oct.	0.61	2.52	2.52	4.03	2.00	2.93	5.58	5.55	9.36	5.79
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	6.56	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	9.96	6.51
Sep.	0.94	3.84	3.82	4.76	2.38	4.20	6.94	6.43	9.98	6.56

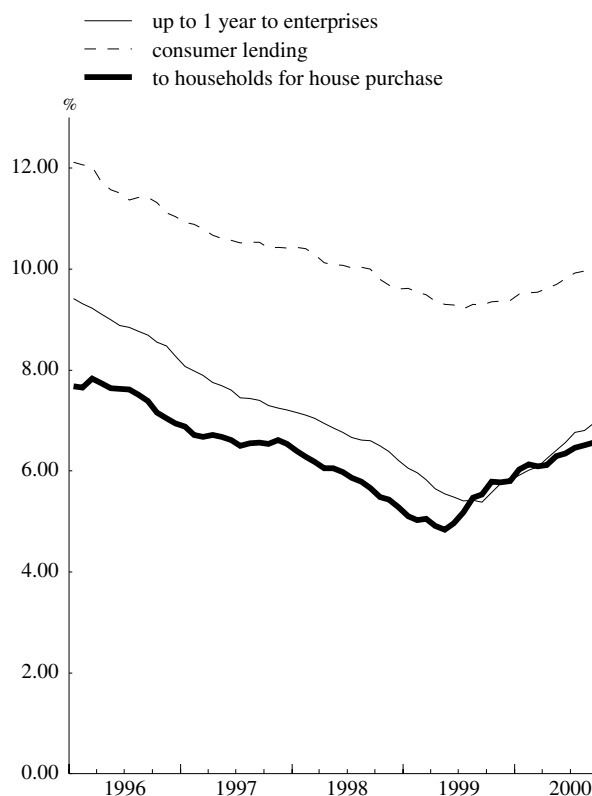
Deposit interest rates

(monthly)



Lending interest rates

(monthly)



Source: ECB.

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

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

	By euro area residents									
					In euro ⁴⁾				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 Aug.	181.8	164.7	17.1	581.7	175.0	159.0	16.0	552.1	6.8	5.7
Sep.	192.2	188.1	4.0	585.5	185.0	183.3	1.7	553.1	7.1	4.8
Oct.	198.9	189.9	8.9	596.1	192.9	182.9	10.0	563.1	6.0	7.0
Nov.	194.5	176.6	17.9	615.0	187.0	169.9	17.1	580.6	7.5	6.7
Dec.	171.4	169.2	2.1	618.1	162.6	163.5	-0.9	579.9	8.7	5.7
2000 Jan.	250.7	265.5	-14.9	599.3	239.3	255.2	-16.0	562.0	11.4	10.3
Feb.	252.5	239.1	13.4	613.6	239.9	230.0	9.9	572.0	12.6	9.1
Mar.	269.7	248.7	21.0	633.6	257.5	239.5	18.0	590.8	12.2	9.2
Apr.	251.4	249.5	1.9	635.3	239.4	238.4	1.0	590.7	12.1	11.1
May	277.3	261.3	16.0	653.2	266.3	250.7	15.6	608.8	11.1	10.6
June	258.3	256.8	1.6	656.1	242.2	246.2	-4.0	605.1	16.2	10.6
July	286.2	280.7	5.4	664.1	269.2	265.2	4.0	610.2	17.0	15.5
Aug.	275.3	275.4	-0.1	666.7	260.7	258.4	2.3	613.0	14.6	17.0

2. Long-term ³⁾

	By euro area residents									
					In euro ⁴⁾				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 Aug.	70.7	49.6	21.1	5,801.5	62.3	43.9	18.4	5,373.0	8.5	5.8
Sep.	138.4	75.1	63.3	5,863.4	123.4	67.1	56.2	5,429.4	15.0	8.0
Oct.	116.6	75.1	41.6	5,910.5	107.3	69.4	37.9	5,468.5	9.3	5.7
Nov.	104.7	78.6	26.1	5,943.0	94.8	71.9	22.9	5,491.4	9.9	6.7
Dec.	77.3	111.6	-34.3	5,915.1	70.6	97.6	-27.0	5,462.3	6.7	14.0
2000 Jan.	110.4	98.8	11.7	5,934.3	101.7	91.0	10.7	5,476.9	8.7	7.8
Feb.	123.2	70.1	53.1	5,987.6	111.0	62.1	48.9	5,526.3	12.2	8.0
Mar.	128.7	94.1	34.6	6,034.8	115.2	84.3	30.9	5,559.2	13.4	9.8
Apr.	112.6	76.2	36.3	6,081.1	102.3	67.5	34.8	5,593.7	10.3	8.8
May	124.4	84.9	39.5	6,116.6	112.2	74.4	37.8	5,635.0	12.2	10.5
June	103.3	63.2	40.1	6,151.4	91.0	53.3	37.7	5,672.3	12.3	9.9
July	124.1	74.9	49.2	6,202.9	100.8	67.7	33.1	5,701.4	23.3	7.1
Aug.	93.0	50.8	42.3	6,254.5	75.8	47.6	28.1	5,730.0	17.2	3.1

3. Total

	By euro area residents									
					In euro ⁴⁾				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 Aug.	252.6	214.3	38.2	6,383.1	237.3	202.9	34.3	5,925.1	15.3	11.4
Sep.	330.5	263.2	67.3	6,448.8	308.4	250.4	57.9	5,982.6	22.2	12.8
Oct.	315.5	265.0	50.5	6,506.6	300.2	252.3	47.9	6,031.6	15.3	12.7
Nov.	299.2	255.3	44.0	6,558.0	281.9	241.9	40.0	6,072.0	17.4	13.4
Dec.	248.7	280.8	-32.2	6,533.2	233.2	261.1	-27.9	6,042.2	15.4	19.7
2000 Jan.	361.1	364.3	-3.2	6,533.5	341.0	346.2	-5.2	6,038.9	20.1	18.1
Feb.	375.7	309.2	66.5	6,601.2	350.9	292.1	58.8	6,098.3	24.8	17.1
Mar.	398.4	342.8	55.6	6,668.4	372.7	323.8	48.9	6,150.0	25.7	19.0
Apr.	364.0	325.7	38.3	6,716.4	341.6	305.8	35.8	6,184.4	22.3	19.9
May	401.7	346.3	55.5	6,769.8	378.5	325.1	53.4	6,243.7	23.3	21.1
June	361.6	320.0	41.6	6,807.6	333.2	299.5	33.7	6,277.4	28.4	20.5
July	410.3	355.6	54.7	6,867.0	370.0	333.0	37.0	6,311.6	40.3	22.6
Aug.	368.3	326.2	42.2	6,921.2	336.5	306.1	30.4	6,343.0	31.9	20.1

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

1) Data coverage for euro area residents is estimated at around 95% of total issues.

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

currencies		By non-residents of the euro area in euro ⁴⁾				Total in euro ⁴⁾				
		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	
1.2	29.5	.	.	.	.	.	.	.	.	1999 Aug.
2.3	32.3	28.0	18.6	9.4	31.7	591.3	566.8	24.5	584.8	Sep.
-1.0	33.0	.	.	.	.	.	.	.	.	Oct.
0.8	34.4	.	.	.	.	.	.	.	.	Nov.
3.0	38.2	21.8	20.0	1.8	34.6	564.4	536.3	28.0	614.5	Dec.
1.1	37.3	.	.	.	.	.	.	.	.	2000 Jan.
3.6	41.6	.	.	.	.	.	.	.	.	Feb.
3.0	42.7	32.6	32.0	0.6	36.8	769.3	756.8	12.5	627.6	Mar.
0.9	44.6	.	.	.	.	.	.	.	.	Apr.
0.5	44.4	.	.	.	.	.	.	.	.	May
5.6	51.0	37.3	31.0	6.3	43.0	785.1	766.3	18.8	648.2	June
1.5	53.9	.	.	.	.	.	.	.	.	July
-2.4	53.8	.	.	.	.	.	.	.	.	Aug.

currencies		By non-residents of the euro area in euro ⁴⁾				Total in euro ⁴⁾				
		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	428.5	.	.	.	.	.	.	.	.	1999 Aug.
7.1	433.9	63.7	12.5	51.1	566.3	370.8	202.5	168.4	5,995.7	Sep.
3.6	442.0	.	.	.	.	.	.	.	.	Oct.
3.2	451.6	.	.	.	.	.	.	.	.	Nov.
-7.3	452.8	49.4	21.4	27.9	594.5	322.1	260.4	61.7	6,056.8	Dec.
0.9	457.3	.	.	.	.	.	.	.	.	2000 Jan.
4.2	461.3	.	.	.	.	.	.	.	.	Feb.
3.6	475.7	65.7	21.4	44.3	639.0	393.6	258.7	134.9	6,198.1	Mar.
1.5	487.4	.	.	.	.	.	.	.	.	Apr.
1.7	481.6	.	.	.	.	.	.	.	.	May
2.4	479.1	44.4	23.7	20.7	659.8	349.9	218.9	131.0	6,332.1	June
16.2	501.5	.	.	.	.	.	.	.	.	July
14.1	524.5	.	.	.	.	.	.	.	.	Aug.

currencies		By non-residents of the euro area in euro ⁴⁾				Total in euro ⁴⁾				
		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	
3.9	458.0	.	.	.	.	.	.	.	.	1999 Aug.
9.4	466.2	91.7	31.1	60.6	597.9	962.1	769.3	192.8	6,580.5	Sep.
2.6	475.0	.	.	.	.	.	.	.	.	Oct.
4.0	486.0	.	.	.	.	.	.	.	.	Nov.
-4.3	491.0	71.2	41.5	29.7	629.1	886.4	796.7	89.7	6,671.3	Dec.
2.0	494.6	.	.	.	.	.	.	.	.	2000 Jan.
7.7	502.9	.	.	.	.	.	.	.	.	Feb.
6.7	518.4	98.3	53.4	44.9	675.8	1,162.9	1,015.5	147.4	6,825.7	Mar.
2.5	532.1	.	.	.	.	.	.	.	.	Apr.
2.1	526.0	.	.	.	.	.	.	.	.	May
8.0	530.1	81.7	54.7	27.0	702.8	1,135.0	985.2	149.8	6,980.3	June
17.7	555.4	.	.	.	.	.	.	.	.	July
11.8	578.2	.	.	.	.	.	.	.	.	Aug.

3) "Short-term" means securities with an original maturity of one year or less (in accordance with the ESA 95, in exceptional cases two years or less). Securities with longer original maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term.

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

Table 3.6**Euro-denominated securities other than shares by original maturity, residency and sector of the issuer** ^{1) 2) 3)}*(EUR billions; end of period; nominal values)***Amounts outstanding****1. Short-term** ⁴⁾

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	552.1	191.3	7.0	62.3	288.7	2.8	.	.	.	.
Sep.	553.1	200.6	6.8	64.6	278.6	2.5	31.7	11.2	12.0	7.3
Oct.	563.1	213.8	6.6	66.1	273.6	3.0	.	.	.	.
Nov.	580.6	237.2	6.4	67.5	266.0	3.5	.	.	.	.
Dec.	579.9	248.6	5.7	66.5	254.4	4.8	34.6	14.4	12.1	6.3
2000 Jan.	562.0	229.3	6.2	66.1	257.1	3.5	.	.	.	.
Feb.	572.0	240.2	6.2	65.8	256.7	3.0	.	.	.	.
Mar.	590.8	250.9	6.0	66.7	264.6	2.6	36.8	15.5	11.9	8.1
Apr.	590.7	245.7	5.8	72.3	264.1	2.8	.	.	.	.
May	608.8	259.7	5.1	76.0	265.7	2.2	.	.	.	.
June	605.1	259.1	3.5	76.1	264.1	2.2	43.0	18.7	11.7	10.8
July	610.2	264.8	3.8	78.0	260.6	2.9	.	.	.	.
Aug.	613.0	263.7	3.8	79.7	263.5	2.3	.	.	.	.

2. Long-term ⁴⁾

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	5,373.0	1,938.3	173.3	194.4	2,972.9	94.0	.	.	.	.
Sep.	5,429.4	1,964.2	181.0	195.7	2,993.6	94.9	566.3	153.3	75.9	101.1
Oct.	5,468.5	1,983.7	183.8	199.0	3,008.4	93.7	.	.	.	.
Nov.	5,491.4	1,993.9	191.3	198.4	3,013.7	94.2	.	.	.	.
Dec.	5,462.3	1,976.7	192.7	197.0	3,001.7	94.1	594.5	159.2	81.8	113.9
2000 Jan.	5,476.9	1,984.4	191.8	192.1	3,014.2	94.3	.	.	.	.
Feb.	5,526.3	2,003.7	193.8	192.5	3,041.2	95.1	.	.	.	.
Mar.	5,559.2	2,021.7	195.1	195.9	3,050.6	95.9	639.0	176.9	89.1	128.2
Apr.	5,593.7	2,042.3	198.0	202.1	3,054.5	96.9	.	.	.	.
May	5,635.0	2,066.2	201.5	204.8	3,064.3	98.1	.	.	.	.
June	5,672.3	2,072.8	206.2	211.4	3,083.9	97.8	659.8	185.1	93.0	136.4
July	5,701.4	2,087.9	214.5	218.4	3,081.5	98.9	.	.	.	.
Aug.	5,730.0	2,099.5	218.2	221.6	3,090.4	100.3	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	5,925.1	2,129.7	180.3	256.7	3,261.7	96.8	.	.	.	.
Sep.	5,982.6	2,164.8	187.8	260.3	3,272.3	97.4	597.9	164.5	87.9	108.4
Oct.	6,031.6	2,197.5	190.4	265.1	3,282.0	96.6	.	.	.	.
Nov.	6,072.0	2,231.1	197.7	265.8	3,279.7	97.7	.	.	.	.
Dec.	6,042.2	2,225.3	198.4	263.5	3,256.1	98.9	629.1	173.6	93.9	120.2
2000 Jan.	6,038.9	2,213.7	198.1	258.2	3,271.4	97.7	.	.	.	.
Feb.	6,098.3	2,244.0	200.1	258.3	3,297.8	98.1	.	.	.	.
Mar.	6,150.0	2,272.7	201.0	262.6	3,315.1	98.6	675.8	192.4	101.0	136.3
Apr.	6,184.4	2,288.0	203.8	274.3	3,318.7	99.6	.	.	.	.
May	6,243.7	2,325.9	206.6	280.9	3,330.0	100.3	.	.	.	.
June	6,277.4	2,331.9	209.7	287.6	3,348.0	100.0	702.8	203.9	104.7	147.2
July	6,311.6	2,352.8	218.4	296.4	3,342.1	101.9	.	.	.	.
Aug.	6,343.0	2,363.2	221.9	301.3	3,353.9	102.6	.	.	.	.

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

1) Data coverage for euro area residents is estimated at around 95% of total issues.

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

3) Corresponding ESA 95 sector codes: 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 (S131); other general government comprises state government (S1312), local government (S1313) and social security funds (S1314).

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
0.3	0.6	0.3	584.8	211.8	18.8	71.9	279.0	3.1	0.3	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
0.3	0.6	0.8	614.5	263.0	17.8	72.8	254.7	5.5	0.8	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
0.2	0.3	0.7	627.6	266.4	17.9	74.9	264.8	3.0	0.7	Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
0.2	0.4	1.2	648.2	277.9	15.2	86.9	264.2	2.6	1.2	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
82.7	29.2	124.1	5,995.7	2,117.4	256.9	296.8	3,076.4	124.1	124.1	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
86.6	29.1	124.0	6,056.8	2,135.9	274.5	310.9	3,088.3	123.3	124.0	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
93.5	30.0	121.3	6,198.1	2,198.6	284.2	324.0	3,144.1	125.9	121.3	Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
96.6	29.9	118.7	6,332.1	2,258.0	299.2	347.9	3,180.6	127.7	118.7	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
83.1	29.8	124.3	6,580.5	2,329.2	275.6	368.7	3,355.3	127.3	124.3	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
86.9	29.8	124.8	6,671.3	2,398.9	292.2	383.7	3,343.0	128.7	124.8	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
93.7	30.3	122.0	6,825.7	2,465.1	302.0	398.9	3,408.8	128.9	122.0	Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
96.8	30.3	119.9	6,980.3	2,535.8	314.4	434.8	3,444.8	130.3	119.9	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
.	.	.	.	.	.	.	.	.	.	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

4) "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.

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

6) Including the European Investment Bank. The ECB is included in the Eurosystem.

Table 3.6 (cont'd)
Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ^{1) 2) 3)}
(EUR billions; transactions during the month or quarter; nominal values)
Gross issues
1. Short-term ⁴⁾

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	175.0	92.3	2.0	35.8	43.8	1.1	.	.	.	.
Sep.	185.0	105.1	1.2	37.8	40.0	0.8	28.0	9.7	10.6	6.7
Oct.	192.9	107.3	1.5	41.3	41.2	1.5	.	.	.	.
Nov.	187.0	117.7	1.2	33.7	32.5	2.0	.	.	.	.
Dec.	162.6	117.9	0.9	23.0	18.5	2.3	21.8	9.6	6.9	4.2
2000 Jan.	239.3	154.7	2.1	40.0	41.2	1.3	.	.	.	.
Feb.	239.9	155.4	1.9	44.2	37.0	1.4	.	.	.	.
Mar.	257.5	169.9	1.7	45.0	40.0	0.9	32.6	14.0	10.2	7.5
Apr.	239.4	141.3	2.0	51.3	43.4	1.4	.	.	.	.
May	266.3	175.7	1.6	52.9	34.6	1.4	.	.	.	.
June	242.2	159.8	2.1	46.5	32.8	1.0	37.3	16.4	9.3	10.0
July	269.2	167.6	2.0	56.5	41.4	1.8	.	.	.	.
Aug.	260.7	168.0	1.8	51.3	38.1	1.6	.	.	.	.

2. Long-term ⁴⁾

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	62.3	27.6	2.2	1.7	30.5	0.2	.	.	.	.
Sep.	123.4	55.7	9.3	3.9	53.0	1.4	63.7	21.3	9.8	22.2
Oct.	107.3	49.8	4.4	5.5	46.5	1.0	.	.	.	.
Nov.	94.8	45.3	9.1	3.0	36.1	1.3	.	.	.	.
Dec.	70.6	39.3	4.7	1.6	23.5	1.5	49.4	13.7	7.8	15.9
2000 Jan.	101.7	41.5	2.0	0.1	57.3	0.8	.	.	.	.
Feb.	111.0	49.8	3.6	3.9	51.7	2.0	.	.	.	.
Mar.	115.2	51.8	3.3	4.6	53.7	1.7	65.7	24.0	9.7	17.9
Apr.	102.3	46.2	5.1	7.5	41.6	1.9	.	.	.	.
May	112.2	53.5	5.2	4.4	47.6	1.5	.	.	.	.
June	91.0	36.8	9.5	7.8	36.6	0.4	44.4	15.6	6.3	15.1
July	100.8	44.6	10.5	8.4	35.1	2.1	.	.	.	.
Aug.	75.8	35.0	4.1	3.5	31.5	1.7	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	237.3	119.9	4.2	37.5	74.3	1.4	.	.	.	.
Sep.	308.4	160.8	10.6	41.8	93.0	2.2	91.7	31.0	20.4	28.9
Oct.	300.2	157.1	5.9	46.9	87.7	2.5	.	.	.	.
Nov.	281.9	163.0	10.3	36.6	68.6	3.3	.	.	.	.
Dec.	233.2	157.2	5.6	24.6	42.0	3.8	71.2	23.4	14.8	20.1
2000 Jan.	341.0	196.2	4.1	40.1	98.4	2.1	.	.	.	.
Feb.	350.9	205.3	5.5	48.1	88.6	3.4	.	.	.	.
Mar.	372.7	221.7	5.0	49.6	93.7	2.7	98.3	38.0	19.9	25.4
Apr.	341.6	187.5	7.0	58.8	85.0	3.4	.	.	.	.
May	378.5	229.2	6.9	57.3	82.3	2.9	.	.	.	.
June	333.2	196.6	11.6	54.3	69.3	1.4	81.7	32.0	15.6	25.1
July	370.0	212.2	12.5	64.9	76.5	3.9	.	.	.	.
Aug.	336.5	202.9	5.8	54.8	69.6	3.3	.	.	.	.

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

1) Data coverage for euro area residents is estimated at around 95% of total issues.

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

3) Corresponding ESA 95 sector codes: 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).

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
0.3	0.5	0.2	591.3	318.0	15.4	122.9	131.0	3.8	0.2	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
0.2	0.2	0.7	564.4	352.6	10.6	102.2	92.4	5.8	0.7	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
0.2	0.2	0.6	769.3	494.0	15.8	136.7	118.3	3.9	0.6	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
0.1	0.3	1.1	785.1	493.2	15.1	160.7	110.9	4.1	1.1	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
5.0	2.1	3.2	370.8	140.1	30.3	36.7	155.8	4.8	3.2	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
6.6	1.0	4.3	322.1	148.2	26.0	26.0	112.8	4.8	4.3	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
9.5	1.9	2.6	393.6	167.2	18.7	26.6	172.1	6.4	2.6	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
4.5	1.5	1.4	349.9	152.1	26.1	34.8	130.3	5.3	1.4	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
5.4	2.6	3.5	962.1	458.1	45.7	159.5	286.8	8.5	3.5	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
6.8	1.1	5.0	886.4	500.7	36.6	128.2	205.2	10.7	5.0	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
.	.	.	.	.	.	.	.	.	.	2000 Jan.
9.7	2.1	3.1	1,162.9	661.2	34.5	163.3	290.4	10.3	3.1	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.
4.7	1.8	2.5	1,135.0	645.3	41.1	195.5	241.2	9.5	2.5	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

4) "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.

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

6) Including the European Investment Bank. The ECB is included in the Eurosystem.

Table 3.6 (cont'd)
Euro-denominated securities other than shares by original maturity, residency and sector of the issuer ^{1) 2) 3)}
(EUR billions; transactions during the month or quarter; nominal values)
Net issues
1. Short-term ⁴⁾

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	16.0	12.3	0.2	1.4	2.3	-0.3	.	.	.	.
Sep.	1.7	9.9	-0.1	2.3	-10.1	-0.3	9.4	3.1	3.5	2.4
Oct.	10.0	12.7	-0.2	1.5	-4.5	0.4	.	.	.	.
Nov.	17.1	23.5	-0.3	1.4	-8.1	0.6	.	.	.	.
Dec.	-0.9	10.9	-0.4	-0.9	-11.6	1.3	1.8	2.8	-0.3	-1.3
2000 Jan.	-16.0	-18.0	0.6	-0.4	2.0	-0.2	.	.	.	.
Feb.	9.9	11.0	0.0	-0.3	-0.5	-0.4	.	.	.	.
Mar.	18.0	9.9	-0.3	0.8	7.9	-0.4	0.6	0.5	-0.7	1.5
Apr.	1.0	-4.2	-0.1	5.5	-0.4	0.1	.	.	.	.
May	15.6	12.6	-0.7	3.7	0.5	-0.6	.	.	.	.
June	-4.0	-2.9	0.5	0.1	-1.7	0.0	6.3	3.2	-0.2	2.7
July	4.0	4.6	0.3	1.9	-3.5	0.7	.	.	.	.
Aug.	2.3	-1.5	-0.1	1.6	2.9	-0.6	.	.	.	.

2. Long-term ⁴⁾

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	18.4	5.2	1.3	0.0	12.0	-0.1	.	.	.	.
Sep.	56.2	25.9	7.4	1.3	20.7	0.9	51.1	17.1	7.1	20.1
Oct.	37.9	18.2	2.8	3.4	14.8	-1.3	.	.	.	.
Nov.	22.9	9.6	7.5	0.0	5.3	0.5	.	.	.	.
Dec.	-27.0	-15.4	1.5	-1.1	-11.9	0.0	27.9	5.6	6.0	12.8
2000 Jan.	10.7	4.2	-0.9	-5.4	12.6	0.2	.	.	.	.
Feb.	48.9	18.7	2.0	0.4	27.0	0.8	.	.	.	.
Mar.	30.9	16.7	0.9	3.0	9.5	0.9	44.3	17.6	7.3	14.4
Apr.	34.8	20.3	2.8	6.2	4.6	0.9	.	.	.	.
May	37.8	22.9	3.7	2.8	7.2	1.3	.	.	.	.
June	37.7	8.2	7.2	6.0	16.6	-0.3	20.7	8.3	3.8	8.2
July	33.1	18.9	8.4	7.0	-2.4	1.2	.	.	.	.
Aug.	28.1	11.5	3.4	3.0	8.9	1.3	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
1999 Aug.	34.3	17.5	1.5	1.4	14.3	-0.4	.	.	.	.
Sep.	57.9	35.8	7.3	3.6	10.6	0.6	60.6	20.2	10.6	22.5
Oct.	47.9	31.0	2.6	4.8	10.3	-0.8	.	.	.	.
Nov.	40.0	33.1	7.3	1.4	-2.9	1.1	.	.	.	.
Dec.	-27.9	-4.5	1.0	-2.0	-23.6	1.2	29.7	8.4	5.7	11.5
2000 Jan.	-5.2	-13.8	-0.2	-5.8	14.6	-0.1	.	.	.	.
Feb.	58.8	29.7	2.0	0.1	26.6	0.4	.	.	.	.
Mar.	48.9	26.6	0.6	3.8	17.3	0.5	44.9	18.1	6.6	16.0
Apr.	35.8	16.2	2.7	11.7	4.2	1.1	.	.	.	.
May	53.4	35.5	3.0	6.5	7.6	0.7	.	.	.	.
June	33.7	5.4	7.6	6.1	14.9	-0.3	27.0	11.5	3.6	10.9
July	37.0	23.5	8.7	8.8	-5.9	1.9	.	.	.	.
Aug.	30.4	10.0	3.4	4.6	11.8	0.7	.	.	.	.

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

1) Data coverage for euro area residents is estimated at around 95% of total issues.

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

3) Corresponding ESA 95 sector codes: 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).

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
0.0	0.3	0.1	24.5	30.5	3.4	8.4	-17.9	-0.1	0.1	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
0.0	0.0	0.6	28.0	49.9	-1.2	0.6	-24.2	2.3	0.6	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
-0.1	-0.3	-0.2	12.5	3.3	-0.3	1.7	9.3	-1.4	-0.2	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
0.0	0.1	0.5	18.8	8.8	-0.5	12.0	-1.7	-0.3	0.5	Apr.
.	.	.	.	.	.	.	.	.	.	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
4.6	1.8	0.4	168.4	53.3	20.7	28.0	62.9	3.1	0.4	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
3.9	-0.1	-0.3	61.7	18.1	17.7	15.1	12.0	-0.9	-0.3	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
7.0	0.9	-2.9	134.9	57.2	9.3	12.4	56.1	2.7	-2.9	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
3.1	-0.1	-2.6	131.0	59.7	17.5	23.2	31.5	1.8	-2.6	Apr.
.	.	.	.	.	.	.	.	.	.	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

of the euro area			Total							
Central government	Other general government	International organisations ⁶⁾	Total	Banks (including central banks) ⁵⁾	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations ⁶⁾	
11	12	13	14	15	16	17	18	19	20	
4.6	2.1	0.6	192.8	83.7	24.1	36.4	45.1	3.0	0.6	1999 Aug.
.	.	.	.	.	.	.	.	.	.	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
3.9	-0.1	0.2	89.7	68.0	16.6	15.7	-12.2	1.4	0.2	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
6.9	0.6	-3.1	147.4	60.6	9.0	14.1	65.4	1.3	-3.1	2000 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
3.1	0.0	-2.1	149.8	68.5	17.0	35.2	29.8	1.5	-2.1	Apr.
.	.	.	.	.	.	.	.	.	.	May
.	.	.	.	.	.	.	.	.	.	June
.	.	.	.	.	.	.	.	.	.	July
.	.	.	.	.	.	.	.	.	.	Aug.

4) "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.

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

6) Including the European Investment Bank. The ECB is included in the Eurosystem.

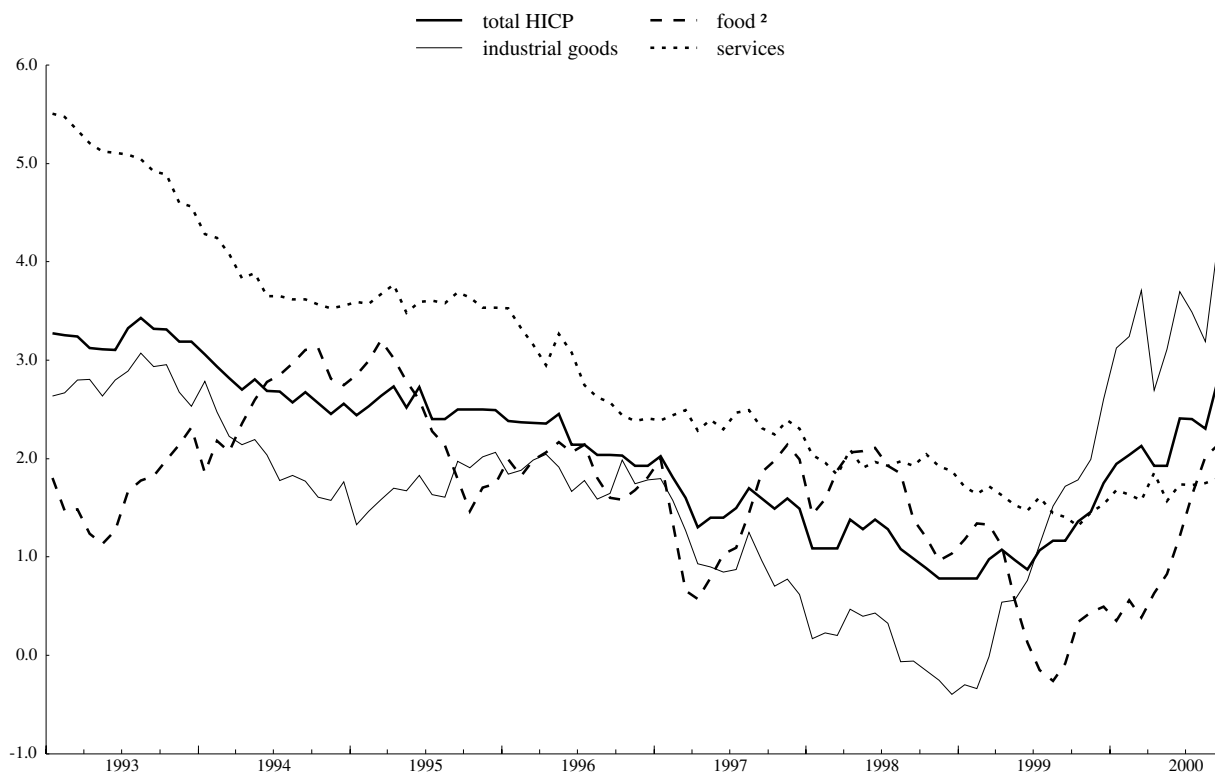
4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices ¹⁾

(annual percentage changes, unless otherwise indicated)

	Total (index, 1996 = 100)	Total	Goods							Services
			Goods	Food ²⁾			Industrial goods			
				Food ²⁾	Processed food ²⁾	Unprocessed food	Industrial goods	Non-energy industrial goods	Energy	
Weight in the total (%) ³⁾	100.0	100.0	62.7	20.9	12.6	8.2	41.8	32.8	9.0	37.3
	1	2	3	4	5	6	7	8	9	10
1995	97.9	2.5	2.0	2.4	2.5	2.2	1.7	1.8	1.4	3.6
1996	100.0	2.2	1.9	1.9	1.9	1.7	1.8	1.5	3.0	2.9
1997	101.6	1.6	1.2	1.4	1.4	1.4	1.0	0.5	2.8	2.4
1998	102.7	1.1	0.6	1.6	1.4	1.9	0.1	0.9	-2.6	2.0
1999	103.8	1.1	0.8	0.5	0.9	0.0	1.0	0.7	2.2	1.5
1999 Q3	104.1	1.1	0.9	-0.2	0.6	-1.4	1.5	0.6	4.6	1.5
Q4	104.4	1.5	1.5	0.4	0.9	-0.3	2.1	0.6	7.8	1.4
2000 Q1	105.2	2.0	2.3	0.4	1.0	-0.3	3.4	0.6	13.6	1.6
Q2	105.9	2.1	2.4	0.9	1.0	0.8	3.2	0.6	12.5	1.7
Q3	106.7	2.5	3.1	1.9	1.2	3.1	3.6	0.7	14.0	1.8
1999 Sep.	104.1	1.2	1.1	-0.1	0.6	-1.1	1.7	0.5	6.2	1.4
Oct.	104.2	1.4	1.3	0.3	0.8	-0.4	1.8	0.5	6.3	1.3
Nov.	104.3	1.5	1.5	0.4	0.9	-0.3	2.0	0.6	7.1	1.5
Dec.	104.7	1.7	1.9	0.5	1.0	-0.2	2.6	0.6	10.0	1.5
2000 Jan.	104.8	1.9	2.2	0.4	1.0	-0.5	3.1	0.7	12.0	1.7
Feb.	105.2	2.0	2.3	0.6	1.0	0.0	3.2	0.5	13.5	1.6
Mar.	105.6	2.1	2.6	0.4	1.0	-0.5	3.7	0.6	15.3	1.6
Apr.	105.7	1.9	2.0	0.6	0.9	0.2	2.7	0.5	10.5	1.9
May	105.8	1.9	2.3	0.8	1.0	0.6	3.1	0.6	12.2	1.6
June	106.3	2.4	2.8	1.2	1.0	1.5	3.7	0.6	14.7	1.7
July	106.5	2.4	2.9	1.6	1.0	2.6	3.5	0.6	13.7	1.7
Aug.	106.5	2.3	2.8	2.0	1.1	3.4	3.2	0.6	12.3	1.8
Sep.	107.0	2.8	3.5	2.1	1.3	3.4	4.2	0.8	16.0	1.8



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

1) Extended coverage from January 2000. The change affects annual percentage changes during 2000. See the general notes for a brief explanation.

2) Including alcoholic beverages and tobacco.

3) Referring to the index period 2000.

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	
1995	100.0	3.7	4.1	.	2.1	-	-	3.2	-	0.2	2.1	13.0
1996	100.3	0.3	0.9	-0.6	1.5	2.2	2.2	2.2	1.2	6.5	-6.9	15.9
1997	101.4	1.1	0.8	1.4	0.4	1.1	0.7	1.4	1.0	10.0	12.9	17.1
1998	100.6	-0.7	-0.6	-2.6	0.7	0.7	0.6	0.7	0.2	-21.2	-12.5	12.0
1999	100.2	-0.4	0.2	-0.5	0.2	0.3	0.7	0.1	0.6	17.8	-3.1	17.1
1999 Q3	100.6	0.1	0.8	0.9	0.0	0.3	0.7	0.1	0.8	31.0	1.1	19.7
Q4	101.7	2.1	2.7	5.4	0.2	0.7	0.8	0.6	0.6	61.5	14.0	23.0
2000 Q1	103.3	4.3	4.6	10.2	0.6	0.9	1.1	0.9	1.7	78.3	19.9	27.1
Q2	104.8	5.2	5.2	11.4	0.7	1.4	1.2	1.5	1.9	53.7	18.3	29.1
Q3	.	.	.	.	.	.	.	.	.	46.7	18.0	33.9
1999 Oct.	101.3	1.4	2.0	3.6	0.2	0.6	0.9	0.5	-	44.3	10.7	20.8
Nov.	101.7	2.1	2.6	5.3	0.2	0.7	0.7	0.7	-	60.4	11.9	23.5
Dec.	102.2	2.9	3.4	7.3	0.2	0.7	0.9	0.6	-	81.3	19.3	24.8
2000 Jan.	102.8	3.8	4.0	9.1	0.5	0.8	1.1	0.7	-	76.2	19.4	24.9
Feb.	103.3	4.4	4.7	10.4	0.6	0.9	1.1	0.9	-	87.6	20.0	27.6
Mar.	103.8	4.8	5.0	11.1	0.6	1.1	1.1	1.0	-	72.0	20.2	28.4
Apr.	104.1	4.6	4.7	10.2	0.7	1.2	1.1	1.3	-	43.9	19.4	24.6
May	104.9	5.3	5.3	11.6	0.7	1.5	1.2	1.7	-	61.9	22.8	30.4
June	105.3	5.6	5.5	12.3	0.8	1.5	1.4	1.5	-	55.2	12.9	31.5
July	105.9	5.6	5.3	12.0	0.8	1.6	1.4	1.7	-	42.0	14.3	30.6
Aug.	106.2	5.6	5.1	11.6	0.7	1.7	1.5	1.8	-	47.5	18.3	33.6
Sep.	.	.	.	.	.	.	.	.	-	50.3	21.4	37.4
Oct.	.	.	.	.	.	.	.	.	-	55.9	22.7	36.8

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	
1995	100.0	2.7	2.6	2.9	2.9	1.7	2.9	2.7	
1996	102.1	2.1	2.1	2.4	2.2	0.9	0.9	0.8	
1997	103.6	1.5	1.7	1.9	1.6	0.9	1.8	2.5	
1998	105.3	1.6	1.2	1.4	1.6	0.7	0.0	-1.4	
1999	106.5	1.2	1.3	1.2	2.3	0.6	-0.3	0.1	
1998 Q2	105.2	1.7	1.4	1.6	1.7	0.9	0.8	-0.4	
Q3	105.6	1.7	1.1	1.2	1.6	0.7	-0.4	-2.4	
Q4	105.8	1.4	0.8	0.9	1.4	0.4	-1.7	-3.8	
1999 Q1	106.2	1.4	0.8	0.9	2.0	0.4	-1.9	-3.8	
Q2	106.4	1.2	1.2	1.1	2.3	0.3	-1.4	-1.5	
Q3	106.7	1.1	1.4	1.2	2.4	0.7	0.1	1.2	
Q4	106.9	1.0	1.8	1.5	2.3	1.1	1.9	4.5	
2000 Q1	107.2	1.0	2.3	1.9	1.7	1.9	3.9	8.1	
Q2	107.2	0.8	2.3	1.6	1.3	2.7	4.3	9.0	

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

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

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

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

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

5) 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	7	Exports ³⁾ 8	Imports ^{3)} 9
1995		5,309.0	5,210.9								2,998.4	1,093.7	1,092.4	26.4	98.1	1,569.6	1,471.5
1996	5,533.8	5,408.1	3,143.6	1,142.3	1,121.4	0.8	125.8	1,658.0	1,532.2
1997	5,648.1	5,498.7	3,197.3	1,150.8	1,136.8	13.7	149.4	1,828.8	1,679.4
1998	5,874.2	5,733.0	3,322.6	1,177.2	1,198.4	34.8	141.3	1,947.0	1,805.7
1999	6,124.6	6,016.1	3,473.3	1,228.5	1,277.2	37.2	108.5	2,036.8	1,928.4
1999 Q1	1,508.9	1,478.8	856.1	303.3	311.3	8.0	30.1	481.6	451.5
Q2	1,521.0	1,494.0	863.3	306.2	316.1	8.5	27.0	496.6	469.6
Q3	1,538.6	1,511.6	872.8	308.5	324.0	6.3	27.0	519.5	492.5
Q4	1,556.1	1,531.7	881.1	310.5	325.8	14.4	24.3	539.1	514.7
2000 Q1	1,576.2	1,553.6	893.5	313.5	335.5	11.0	22.6	561.9	539.3
Q2	1,589.6	1,575.2	904.2	314.4	340.0	16.6	14.4	584.1	569.7

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	16	Exports ³⁾ 17	Imports ^{3)} 18
1995		5,309.0	5,210.9						
1996	5,383.1	5,262.8	3,045.7	1,111.3	1,105.7	0.0	120.3	1,637.8	1,517.5
1997	5,504.7	5,350.1	3,091.0	1,121.9	1,130.1	7.1	154.5	1,808.1	1,653.6
1998	5,655.6	5,531.8	3,181.6	1,133.9	1,185.5	30.8	123.9	1,936.5	1,812.6
1999	5,793.8	5,694.5	3,268.2	1,150.2	1,248.0	28.1	99.3	2,023.2	1,923.9
1999 Q1	1,432.4	1,411.4	811.1	286.2	305.5	8.6	21.0	483.4	462.3
Q2	1,440.2	1,418.1	813.6	286.9	309.9	7.7	22.1	496.3	474.2
Q3	1,453.7	1,425.9	819.4	287.9	315.8	2.8	27.9	514.5	486.6
Q4	1,467.5	1,439.2	824.1	289.1	316.9	9.0	28.3	529.1	500.7
2000 Q1	1,481.1	1,449.1	830.9	291.0	322.9	4.2	32.0	542.8	510.8
Q2	1,493.8	1,462.0	838.2	290.9	324.6	8.2	31.9	559.6	527.7

(annual percentage changes)

1995	2.2	2.0	1.8	0.6	2.3	—	—	7.9	7.4
1996	1.4	1.0	1.6	1.6	1.2	—	—	4.3	3.1
1997	2.3	1.7	1.5	1.0	2.2	—	—	10.4	9.0
1998	2.7	3.4	2.9	1.1	4.9	—	—	7.1	9.6
1999	2.4	2.9	2.7	1.4	5.3	—	—	4.5	6.1
1999 Q1	1.9	3.0	2.9	1.4	4.1	—	—	0.3	3.7
Q2	2.1	3.0	2.7	1.4	5.6	—	—	2.2	4.8
Q3	2.5	2.9	2.6	1.5	5.8	—	—	5.7	7.0
Q4	3.2	2.9	2.6	1.5	5.6	—	—	9.7	9.0
2000 Q1	3.4	2.7	2.4	1.7	5.7	—	—	12.3	10.5
Q2	3.7	3.1	3.0	1.4	4.8	—	—	12.8	11.3

Source: Eurostat.

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

2) Including acquisitions less disposals of valuables.

3) Exports and imports cover goods and services and include cross-border trade within the euro area. 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	116.2	109.2	102.2	115.2
1999	114.0	104.0	108.5	101.3	114.4	123.1	113.7	103.7	123.9
1999 Q1	112.5	106.3	107.2	99.6	113.1	120.9	112.4	103.0	120.8
Q2	113.3	103.5	107.5	100.7	113.6	122.2	113.5	103.6	123.0
Q3	114.5	102.2	109.1	101.9	114.8	124.0	114.1	103.7	124.7
Q4	115.7	104.1	110.3	103.2	116.1	125.5	114.7	104.6	127.0
2000 Q1	117.4	106.5	111.8	105.4	117.3	127.6	116.2	105.5	127.0
Q2	118.3	103.4	113.4	105.1	118.7	128.6	116.5	106.9	129.3

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	102.5	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	109.8	106.5
1999	109.2	111.9	106.7	97.8	111.2	115.3	105.6	113.7	110.4
1999 Q1	107.9	110.6	105.1	96.9	110.3	113.6	105.1	111.7	109.0
Q2	108.6	111.4	106.0	97.6	110.4	114.6	105.3	112.7	109.4
Q3	109.6	112.7	107.3	98.1	111.6	115.9	105.8	114.6	110.6
Q4	110.5	113.2	108.4	98.8	112.7	117.1	106.1	115.9	112.7
2000 Q1	111.8	111.6	110.1	100.0	114.3	118.8	106.6	117.1	111.4
Q2	112.7	111.2	111.0	99.2	115.9	119.7	107.0	118.7	113.9

(annual percentage changes)

1995	2.3	0.9	2.9	-0.3	2.2	3.1	1.6	-0.3	0.6
1996	1.5	5.8	-0.3	-1.9	0.8	3.7	1.8	2.5	1.4
1997	2.3	1.1	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	3.5	3.7
1999 Q1	1.8	1.2	-0.1	-0.4	2.9	3.3	1.5	3.1	3.2
Q2	2.1	1.5	0.8	2.1	2.9	3.4	1.1	3.5	3.1
Q3	2.5	3.4	1.9	2.1	2.9	3.8	1.1	3.8	3.7
Q4	3.1	3.4	3.7	3.0	3.6	3.8	1.1	3.8	4.7
2000 Q1	3.6	0.9	4.8	3.3	3.6	4.6	1.4	4.8	2.2
Q2	3.8	-0.1	4.7	1.6	5.0	4.5	1.6	5.3	4.1

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	0.5	
1996	100.1	0.0	100.4	0.3	0.0	-0.2	1.5	-0.1	0.0	-0.4	-2.3	
1997	103.8	3.8	104.7	4.3	4.9	5.5	4.9	3.6	3.7	2.8	0.0	
1998	107.7	3.7	109.1	4.2	4.7	3.9	6.5	5.3	5.9	2.0	0.3	
1999	109.8	2.0	111.1	1.8	1.8	2.2	1.4	2.8	3.0	1.6	2.8	
1999 Q2	108.6	1.0	109.8	0.6	0.4	0.5	0.8	1.5	1.8	-0.1	3.1	
Q3	110.6	2.5	111.8	2.4	2.3	3.2	1.6	3.2	3.4	2.1	2.8	
Q4	112.0	4.2	113.5	4.1	4.6	5.4	2.7	5.2	5.5	3.6	4.6	
2000 Q1	113.5	5.1	114.7	4.8	5.1	5.9	6.5	6.6	7.7	0.0	5.2	
Q2	114.7	5.6	116.6	6.0	6.3	6.6	8.3	7.7	8.5	2.8	0.1	
1999 Sep.	110.7	2.6	112.3	2.6	2.5	3.3	2.4	2.5	2.7	1.5	2.8	
Oct.	111.1	2.8	113.1	2.8	3.2	3.8	1.8	3.2	3.3	2.8	2.9	
Nov.	112.2	4.2	113.7	4.2	4.7	5.2	3.0	5.1	5.3	3.9	3.8	
Dec.	112.7	5.6	113.8	5.4	6.0	7.5	3.2	7.7	8.3	4.1	7.5	
2000 Jan.	112.0	3.0	113.8	3.2	3.1	4.4	4.7	3.8	4.9	-2.2	2.2	
Feb.	114.4	7.0	114.7	5.8	6.6	7.1	6.9	8.6	9.8	1.4	13.7	
Mar.	114.0	5.3	115.6	5.4	5.5	6.2	7.6	7.1	8.2	0.8	1.0	
Apr.	114.0	5.5	116.3	6.0	6.5	6.3	7.6	9.2	10.1	3.7	-0.9	
May	116.5	7.9	117.0	8.2	8.4	9.3	11.5	9.8	10.9	3.3	3.0	
June	113.8	3.5	116.4	3.8	4.1	4.2	6.0	4.3	4.8	1.5	-1.8	
July	.	.	116.9	5.3	5.6	4.9	7.5	6.8	7.6	1.7	.	
Aug.	.	.	117.1	6.2	6.8	6.2	10.4	9.0	11.1	1.0	.	
Sep.	.	.	.	.	.	.	.	.	.	.	.

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						17	18	19
12	13	14	15	16	17	18	19	20	21		
1995	100.0	.	100.0	.	.	.	.	.	777	0.9
1996	101.8	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	1.2	0.6	1.5	861	4.2	
1998	107.8	3.6	104.7	2.9	2.1	3.5	2.0	4.5	923	7.2	
1999	111.4	3.3	107.4	2.6	3.2	2.3	1.4	3.1	974	5.5	
1999 Q3	111.7	2.8	107.7	2.3	3.3	1.8	-1.0	4.0	998	6.6	
Q4	113.6	4.3	108.8	3.0	3.5	2.6	2.6	3.7	950	-0.1	
2000 Q1	114.0	3.7	109.1	2.5	3.3	1.7	1.2	5.4	981	1.4	
Q2	115.7	4.8	110.2	3.3	3.5	3.0	1.7	5.0	985	0.7	
Q3	.	.	.	.	.	.	.	.	927	-7.7
1999 Sep.	111.2	2.5	107.3	1.9	3.6	0.1	-5.0	3.5	964	2.0	
Oct.	113.6	5.1	109.0	3.9	4.9	2.9	3.9	3.7	972	3.0	
Nov.	114.0	3.9	108.9	2.4	3.0	2.3	1.6	3.7	956	-1.3	
Dec.	113.2	4.0	108.5	2.7	2.7	2.7	2.4	3.9	922	-2.8	
2000 Jan.	113.5	3.9	108.9	2.7	3.6	1.7	-0.3	4.7	975	0.7	
Feb.	114.9	5.3	109.7	3.8	3.5	4.1	6.6	6.8	994	5.3	
Mar.	113.6	1.9	108.6	1.0	2.6	-0.8	-2.5	4.6	973	-0.9	
Apr.	114.9	4.8	110.0	3.6	3.2	3.7	1.9	5.8	974	-1.7	
May	116.5	6.2	110.7	4.4	5.1	4.2	3.5	5.9	981	1.4	
June	115.6	3.5	109.9	2.0	2.1	1.0	-0.4	3.4	1,000	2.4	
July	116.0	3.6	110.4	2.4	2.4	1.2	0.9	4.8	887	-14.5	
Aug.	116.7	4.3	110.8	2.6	2.5	2.5	2.1	3.5	940	-4.3	
Sep.	.	.	.	.	.	.	.	.	955	-0.9

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

Table 5.3

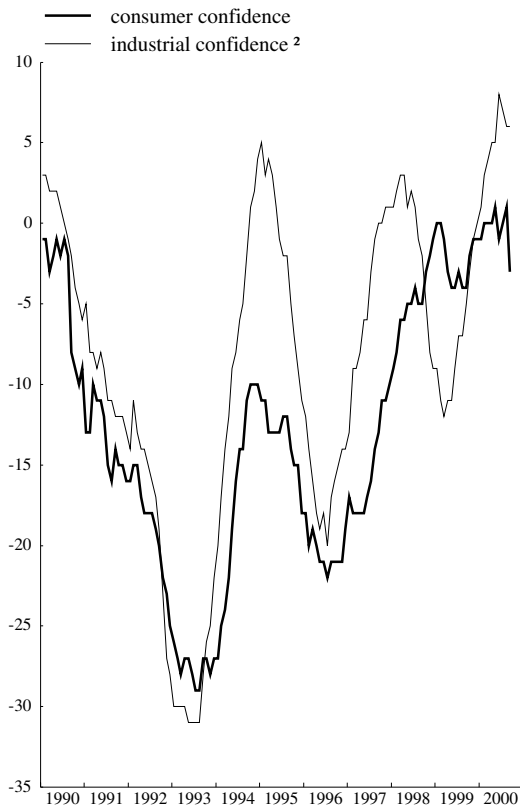
Business and consumer surveys

(percentage balances, seasonally adjusted, unless otherwise indicated)

	Manufacturing industry				Construction confidence indicator	Retail trade confidence indicator	Consumer confidence indicator
	Confidence indicator	Production expectations	Assessment of order books	Capacity utilisation ^b (percentages)			
	1	2	3	4	5	6	7
1995	-2	10	-8	82.6	-27	-12	-13
1996	-16	-1	-30	80.6	-36	-11	-20
1997	-4	11	-15	81.0	-33	-9	-15
1998	-1	11	-5	83.0	-19	-3	-5
1999	-7	7	-17	81.8	-7	-5	-2
1999 Q3	-6	8	-17	81.6	-7	-7	-4
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	83.8	2	-2	-1
1999 Sep.	-5	10	-15	-	-8	-7	-4
Oct.	-3	13	-11	-	-6	-9	-2
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	-	2	-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

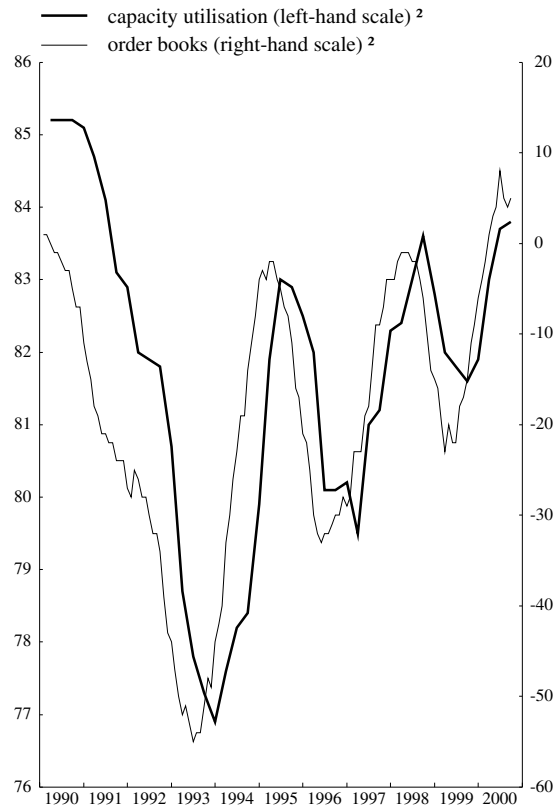
Consumer and industrial confidence indicators

(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	14.084	10.9	9.4	21.3
1999	104.3	1.7	2.1	-0.4	0.1	2.5	13.007	10.0	8.7	19.1
1999 Q2	104.3	1.6	2.0	-0.4	-0.2	2.4	13.100	10.0	8.8	19.3
Q3	104.8	1.7	2.2	-0.7	-0.1	2.5	12.902	9.9	8.6	18.9
Q4	105.3	1.7	2.2	-0.5	0.1	2.5	12.617	9.7	8.5	18.2
2000 Q1	105.8	1.9	2.3	-0.1	0.2	2.6	12.352	9.5	8.3	18.0
Q2	106.5	2.1	2.5	0.4	0.9	2.9	11.936	9.2	8.0	17.5
1999 Aug.	-	-	-	-	-	-	12.931	9.9	8.6	19.0
Sep.	-	-	-	-	-	-	12.847	9.8	8.6	18.8
Oct.	-	-	-	-	-	-	12.691	9.7	8.5	18.4
Nov.	-	-	-	-	-	-	12.599	9.7	8.5	18.2
Dec.	-	-	-	-	-	-	12.561	9.6	8.5	18.1
2000 Jan.	-	-	-	-	-	-	12.491	9.6	8.4	18.1
Feb.	-	-	-	-	-	-	12.373	9.5	8.3	18.1
Mar.	-	-	-	-	-	-	12.192	9.4	8.2	17.9
Apr.	-	-	-	-	-	-	12.063	9.2	8.1	17.7
May	-	-	-	-	-	-	11.936	9.2	8.0	17.5
June	-	-	-	-	-	-	11.809	9.1	8.0	17.3
July	-	-	-	-	-	-	11.800	9.0	7.9	17.4
Aug.	-	-	-	-	-	-	11.845	9.0	7.9	17.5

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	3.3	1.8	-	-	-	-	-	3.9
1996	1.9	3.0	1.1	3.4	3.0	4.6	3.7	4.0	3.7
1997	0.7	2.3	1.6	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	1.2	1.9	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	0.7	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	3.3
1999 Q1	1.6	1.6	0.0	2.1	2.2	1.4	2.3	1.7	2.8
Q2	1.6	2.1	0.5	2.1	2.2	1.5	1.7	2.1	2.6
Q3	1.0	1.8	0.7	2.3	2.4	1.9	2.6	2.1	2.3
Q4	0.3	1.7	1.4	2.4	2.6	1.9	2.6	1.8	1.8
2000 Q1	0.5	2.3	1.7	3.6	3.7	3.1	3.7	3.0	2.8
Q2	0.5	1.8	1.2	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, 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)

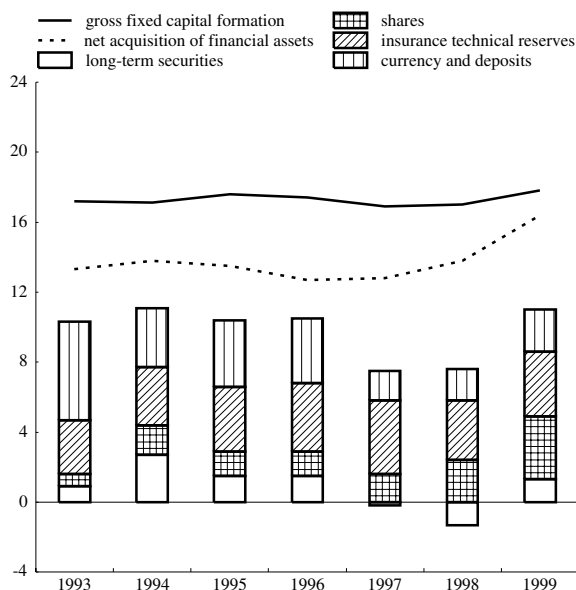
	Euro area saving and investment ¹⁾			Investment of private non-financial sectors ¹⁾²⁾							
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other 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	22.0	20.8	0.5	17.6	10.7	13.5	3.8	1.8	1.5	1.4	3.7
1996	21.7	20.6	1.0	17.4	10.6	12.7	3.7	0.4	1.5	1.4	3.9
1997	22.1	20.0	1.6	16.9	10.5	12.8	1.7	-0.5	-0.2	1.6	4.2
1998	22.1	20.0	1.2	17.0	10.7	13.8	1.8	-2.2	-1.3	2.4	3.4
1999	21.8	20.9	0.1	17.8	11.7	16.4	2.4	1.4	1.3	3.6	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	20	21	22	
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	21.7	12.1	7.1	-1.8	-1.8	1.4	4.7	3.2	6.4	43.4	24.7	
1996	21.2	11.8	8.5	0.2	0.0	1.7	5.5	4.5	4.2	42.2	28.6	
1997	20.3	10.6	9.1	0.1	0.1	1.4	5.9	4.5	3.7	43.1	31.0	
1998	19.1	10.0	11.3	0.3	0.2	2.5	6.8	4.9	2.5	44.8	37.2	
1999	18.0	9.6	14.7	0.9	0.4	2.0	9.1	7.1	1.7	48.0	45.0	

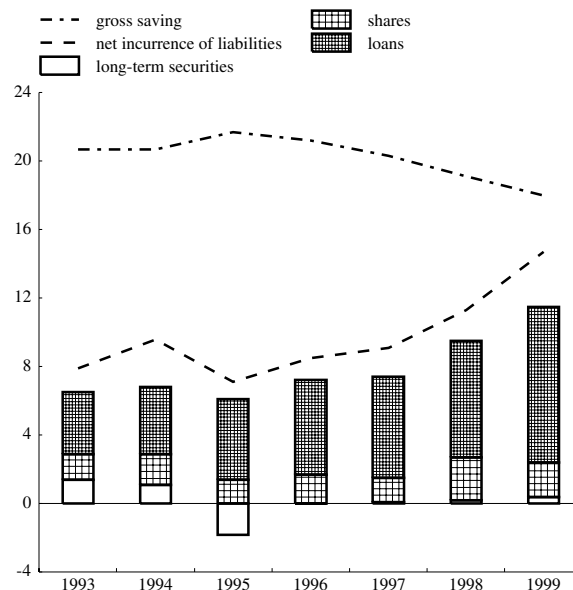
Investment and financing of private non-financial sectors ¹⁾²⁾

(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	46.1	11.9	9.6	2.2	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	48.2	47.6	12.2	9.6	2.6	13.6	0.7	17.5	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	5.1	2.4	0.5	0.3	43.4
1999	48.4	47.8	12.9	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	20.6	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	48.3	11.2	5.2	5.7	26.2	22.9	2.2	0.6	4.0	2.6	1.4	0.0	46.6
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	45.7
1998	50.0	46.1	10.7	5.0	4.7	25.6	22.3	2.0	0.5	3.9	2.5	1.5	0.1	45.3
1999	49.7	45.6	10.7	5.1	4.3	25.6	22.3	2.1	0.5	4.0	2.5	1.5	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	0.0	-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	0.0	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	0.2	0.3	3.0	20.0	10.7	5.1	5.1	1.7	-2.4	8.2	11.8

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

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11
1996	-3.8	-3.4	-5.0	-4.1	-0.2	-7.1	2.6	-1.8	-3.8	-4.0	-3.2
1997	-1.9	-2.7	-3.2	-3.0	0.7	-2.7	3.4	-1.1	-1.7	-2.6	-1.5
1998	-0.9	-2.1	-2.6	-2.7	2.1	-2.8	3.7	-0.7	-2.3	-2.3	1.3
1999	-0.7	-1.4	-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	16.0	8.3	30.5	48.1	24.9	7.2	16.0	9.3
1992	60.9	2.6	16.6	8.7	33.1	50.3	26.7	7.5	16.1	10.7
1993	67.3	2.7	17.5	8.2	39.0	52.6	27.9	8.6	16.0	14.7
1994	69.9	2.9	16.5	8.3	42.2	56.1	29.9	9.7	16.5	13.8
1995	74.1	2.9	18.1	7.7	45.4	58.5	30.6	10.9	17.1	15.6
1996	75.3	2.9	17.6	7.6	47.1	59.2	30.3	13.1	15.8	16.2
1997	74.7	2.9	16.8	6.4	48.5	57.0	29.0	14.4	13.7	17.6
1998	73.0	2.8	15.7	5.5	49.0	53.5	26.9	16.1	10.4	19.5
1999	72.1	2.9	14.7	4.5	50.0	50.4	25.3	15.1	10.0	21.7

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	46.4	4.5	6.3	0.3	11.7	45.7	4.4	17.6	18.5	21.4	56.3	1.7	1.1
1992	60.9	49.5	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	69.9	57.4	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	30.4	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	25.1	31.0	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	25.8	30.9	71.2	2.8	1.8
1999	72.1	60.0	6.2	5.6	0.3	6.9	65.2	4.7	14.5	26.7	30.9	70.3	-	1.8

3. Euro area countries – government debt

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11
1996	130.9	59.8	68.2	57.1	74.3	122.1	6.2	75.2	69.1	62.7	57.1
1997	125.4	60.9	66.9	59.3	65.1	119.8	6.0	70.0	64.5	59.4	54.1
1998	119.6	60.7	65.1	59.7	55.0	116.2	6.4	66.6	64.0	55.7	48.7
1999	116.1	61.1	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	1.3	-0.1	3.7	.	.	.	.
1992	6.6	5.6	0.3	0.7	0.0	0.1	1.5	0.8	4.2	4.8	3.1	0.7	1.8
1993	7.9	7.5	0.3	0.1	-0.1	0.2	1.3	-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	5.0	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	5.3	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	1.4	0.3	0.0	0.0	0.2	-0.4	-0.8	2.7	-1.2	-0.7	-0.5	2.9

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+)	Deficit-debt adjustment ⁸⁾											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other ¹⁰⁾
				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	0.5	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	0.1

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

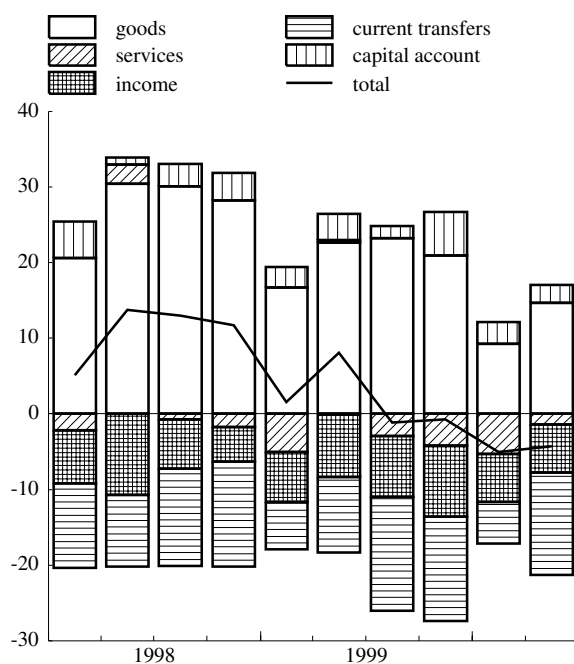
Summary balance of payments ^{1) 2)}

(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 Q2	4.7	22.6	0.4	-8.3	-10.0	3.4	17.3	-43.8	1.1	2.3	52.4	5.4	-25.4
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
1999 June	4.7	10.6	-0.2	-2.3	-3.4	1.5	12.4	-15.5	13.4	0.2	13.2	1.0	-18.5
July	2.3	13.6	-1.1	-5.5	-4.6	0.7	1.6	-3.1	6.6	2.0	-2.9	-1.0	-4.6
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

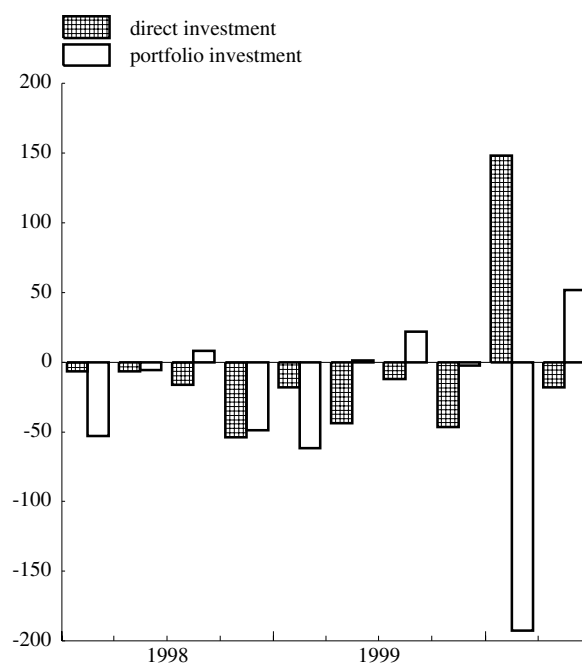
Current and capital accounts

(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 Q2	335.2	330.5	198.1	175.5	61.7	61.3	60.9	69.2	14.6	24.5	4.7	1.3
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
1999 June	121.1	116.4	71.4	60.8	22.7	22.9	22.6	24.9	4.4	7.9	1.9	0.5
July	117.9	115.6	74.3	60.7	22.5	23.6	16.6	22.1	4.6	9.3	1.3	0.6
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

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 Q2	-71.4	-40.1	-31.3	27.6	13.5	14.1
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
1999 June	-25.1	-21.6	-3.5	9.6	5.1	4.6
July	-4.9	-11.7	6.7	1.9	2.9	-1.0
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

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 Q2	-96.2	97.3	-42.4	38.0	-53.8	-63.6	9.7	59.3	49.4	9.9
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
1999 June	-32.0	45.5	-15.5	18.0	-16.5	-20.7	4.2	27.5	30.1	-2.7
July	-19.4	25.9	-9.7	13.4	-9.7	-13.0	3.3	12.6	9.9	2.7
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

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 Q2	1.7	50.6	-0.5	2.1	1.1	-2.1	18.5	36.7	-15.9	17.4	34.4	19.4	-17.3	13.9
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
1999 June	-3.2	16.4	1.0	0.2	0.6	-1.8	3.7	6.6	-7.6	9.8	11.4	-3.1	-8.5	11.5
July	-11.5	8.6	3.2	1.2	-0.7	-1.1	-8.3	5.9	-4.1	7.8	-4.2	-1.9	-5.6	2.6
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

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 1	Monetary gold 2	Special drawing rights 3	Reserve position in the IMF 4	Foreign exchange							Other claims 12
					Total 5	Currency and deposits		Securities			Financial derivatives 11	
						With monetary authorities and the BIS 6	With banks 7	Equity 8	Bonds and notes 9	Money market instruments 10		
1999	10.2	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	42.2	114.4	129.9	-15.5	-599.6	-361.8	-237.8	-210.7	-27.0	-5.7	169.8	80.0	0.4	89.3	363.3
1998	-132.4	164.6	175.4	-10.8	-609.1	-475.5	-133.6	-125.5	-8.2	-3.6	-13.8	86.5	-172.2	71.9	329.4

*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 deriva- tives			
							With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes				Money market instru- ments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1998 Dec. ³⁾	329.4	99.6	404.131	5.1	23.4	199.8	12.5	18.3	169.1	0.0	116.7	52.4	0.0	1.5	7.6
1999 Dec.	372.3	116.4	402.762	4.5	24.2	225.1	13.8	20.6	190.8	-	-	-	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

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 deriva- tives			
							With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes				Money market instru- ments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1999 Dec.	49.3	6.9	24.030	0.0	0.0	41.0	0.3	6.4	34.4	-	-	-	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

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	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manufactured articles	Machinery, transport equipment	Other	Export trade indices 1995 = 100		
									Value ²⁾	Volume ²⁾	Unit value
	1	2	3	4	5	6	7	8	9	10	11
1996	669.7	49.2	14.2	13.1	85.5	195.5	295.9	16.3	107.6	104.7	102.8
1997	762.8	52.8	16.3	14.4	99.0	216.6	342.8	20.9	122.5	115.9	105.7
1998	796.3	56.1	15.8	12.6	104.4	221.7	371.1	14.7	127.9	120.0	106.6
1999	829.6	55.3	16.3	13.5	113.6	224.2	382.7	24.0	133.3	122.3	109.0
1997 Q1	170.7	12.0	3.8	3.7	22.6	48.9	74.7	5.0	109.7	104.2	105.3
Q2	191.8	13.4	4.1	3.6	25.1	53.9	86.4	5.3	123.3	117.3	105.1
Q3	193.5	13.0	4.2	3.4	25.6	55.6	86.5	5.1	124.3	116.6	106.6
Q4	206.8	14.4	4.2	3.7	25.6	58.2	95.1	5.5	132.9	125.7	105.7
1998 Q1	194.5	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	187.6	12.3	3.8	2.6	25.8	51.0	86.4	5.7	120.5	112.4	107.2
Q2	202.9	13.5	3.9	3.1	27.9	54.9	93.9	5.8	130.4	119.7	108.9
Q3	209.2	13.9	4.1	3.8	29.6	56.7	95.1	6.1	134.4	122.8	109.5
Q4	229.9	15.6	4.5	4.0	30.4	61.7	107.4	6.4	147.7	134.2	110.1
2000 Q1	229.7	13.7	4.8	4.8	32.5	62.2	105.2	6.5	147.6	128.8	114.6
Q2	246.5	14.8	5.1	5.2	34.1	64.8	116.1	6.5	158.4	136.0	116.5
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	24.8	1.5	104.7	98.0	106.8
Feb.	60.1	4.0	1.2	0.8	8.3	16.5	27.3	2.1	115.8	108.4	106.9
Mar.	73.2	4.7	1.4	1.0	9.8	19.9	34.3	2.1	141.0	130.7	107.9
Apr.	65.8	4.3	1.3	1.0	9.1	17.7	30.5	1.7	126.8	116.4	108.9
May	63.7	4.5	1.3	1.0	9.0	17.3	28.8	1.8	122.7	113.1	108.5
June	73.5	4.6	1.3	1.1	9.8	19.8	34.5	2.2	141.7	129.6	109.3
July	76.1	4.6	1.4	1.2	10.3	20.8	35.4	2.4	146.7	132.6	110.6
Aug.	60.9	4.2	1.3	1.1	9.2	16.1	27.2	1.8	117.4	106.7	110.0
Sep.	72.2	5.1	1.4	1.5	10.1	19.8	32.4	1.9	139.2	128.9	108.0
Oct.	77.1	5.2	1.4	1.4	10.1	20.8	36.0	2.1	148.6	135.2	109.9
Nov.	77.2	5.3	1.5	1.2	10.6	20.7	35.8	2.0	148.9	136.7	108.9
Dec.	75.6	5.1	1.6	1.4	9.6	20.1	35.5	2.3	145.7	130.8	111.4
2000 Jan.	66.0	4.0	1.4	1.5	9.4	17.6	30.1	2.0	127.3	111.8	113.8
Feb.	75.3	4.5	1.6	1.6	10.8	20.8	33.9	2.1	145.1	125.6	115.5
Mar.	88.4	5.2	1.8	1.7	12.3	23.7	41.2	2.4	170.4	148.9	114.5
Apr.	73.1	4.4	1.6	1.6	10.3	19.5	33.9	1.9	140.8	121.5	115.9
May	88.7	5.4	1.9	1.9	12.0	23.2	42.1	2.3	171.0	146.8	116.5
June	84.8	5.0	1.6	1.7	11.8	22.2	40.1	2.3	163.4	139.7	117.0
July	84.0	4.8	1.5	1.7	11.5	23.2	39.2	2.1	161.9	.	.
Aug.	77.2	.	.	.	.	.	.	.	148.8	.	.

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	46.6	36.5	71.6	54.1	167.0	193.6	24.6	105.5	102.9	102.6
1997	674.2	49.7	41.3	81.2	62.0	188.1	228.8	23.1	119.8	110.3	108.6
1998	711.0	55.1	41.3	58.5	68.0	202.0	270.1	16.1	126.3	123.0	102.7
1999	776.2	51.8	39.2	77.5	70.6	209.3	304.1	23.7	137.9	129.8	106.3
1997 Q1	159.1	11.4	9.7	21.2	14.7	44.6	51.8	5.8	113.1	106.0	106.7
Q2	168.0	12.6	11.0	18.6	16.0	46.5	57.5	5.7	119.4	111.4	107.2
Q3	166.6	12.2	10.0	20.0	15.2	48.9	55.6	4.7	118.5	106.9	110.8
Q4	180.4	13.5	10.6	21.4	16.1	48.2	63.8	6.8	128.2	117.0	109.6
1998 Q1	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	67.2	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	178.5	12.3	9.2	13.8	16.9	49.9	70.9	5.5	126.9	128.3	98.9
Q2	188.5	12.8	10.1	16.8	17.6	50.4	75.2	5.7	134.0	129.1	103.8
Q3	193.2	12.7	9.5	21.2	17.1	54.0	72.9	5.8	137.3	125.5	109.4
Q4	216.0	14.0	10.4	25.8	19.0	54.9	85.2	6.7	153.6	136.5	112.5
2000 Q1	231.0	12.5	11.3	31.7	20.0	60.6	87.4	7.5	164.2	136.3	120.5
Q2	242.4	13.7	12.5	32.0	21.3	62.1	93.2	7.6	172.3	137.4	125.4
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	22.6	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	1.8	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.	54.8	3.8	3.0	4.6	5.1	15.4	21.2	1.7	116.9	119.0	98.2
Feb.	56.2	3.8	2.9	4.2	5.4	16.1	21.9	1.9	119.8	121.6	98.5
Mar.	67.5	4.6	3.3	5.0	6.4	18.5	27.8	1.9	143.9	144.1	99.9
Apr.	61.3	4.2	3.3	5.6	5.7	15.9	24.6	1.9	130.8	127.7	102.4
May	62.1	4.2	3.3	5.7	5.7	16.4	24.9	1.8	132.3	126.5	104.6
June	65.2	4.4	3.5	5.4	6.1	18.1	25.6	2.0	139.0	132.8	104.6
July	64.2	4.3	3.4	6.7	5.7	18.3	24.0	1.9	137.0	126.9	108.0
Aug.	58.3	4.0	2.7	7.0	5.1	16.2	21.6	1.7	124.4	113.1	110.0
Sep.	70.6	4.4	3.4	7.6	6.3	19.5	27.3	2.1	150.6	136.6	110.2
Oct.	69.8	4.5	3.3	7.9	6.3	18.5	27.0	2.3	148.9	133.7	111.3
Nov.	73.7	4.7	3.6	8.4	6.6	18.6	29.5	2.3	157.1	141.8	110.8
Dec.	72.5	4.8	3.4	9.5	6.1	17.9	28.7	2.1	154.7	134.1	115.4
2000 Jan.	71.0	4.0	3.5	10.3	5.8	18.5	26.5	2.4	151.3	127.8	118.4
Feb.	75.4	4.0	3.6	10.3	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	180.4	147.3	122.5
Apr.	72.8	4.2	3.7	9.5	6.5	18.3	28.3	2.3	155.2	127.4	121.8
May	87.7	5.0	4.7	11.3	7.5	22.7	33.9	2.7	187.1	148.0	126.4
June	81.9	4.5	4.1	11.3	7.3	21.1	31.1	2.6	174.7	136.9	127.6
July	78.9	4.4	4.0	11.9	6.7	20.9	28.2	2.8	168.2	.	.
Aug.	78.2	.	.	.	.	.	.	.	166.7	.	.

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	2.7	-22.3	-58.5	31.4	28.5	102.3	-8.3
1997	88.6	3.2	-25.0	-66.8	37.0	28.5	114.0	-2.2
1998	85.3	1.0	-25.5	-45.9	36.4	19.7	101.0	-1.4
1999	53.4	3.5	-22.9	-64.0	43.0	14.9	78.6	0.3
1997 Q1	11.6	0.6	-5.8	-17.5	7.9	4.3	22.8	-0.8
Q2	23.8	0.7	-6.9	-15.0	9.1	7.4	28.9	-0.4
Q3	26.8	0.9	-5.9	-16.6	10.4	6.8	30.9	0.3
Q4	26.3	1.0	-6.4	-17.7	9.5	10.0	31.3	-1.3
1998 Q1	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	9.1	0.1	-5.4	-11.2	8.9	1.1	15.5	0.1
Q2	14.4	0.7	-6.2	-13.7	10.3	4.5	18.7	0.1
Q3	16.0	1.1	-5.4	-17.4	12.5	2.6	22.2	0.3
Q4	13.9	1.6	-5.9	-21.8	11.3	6.7	22.2	-0.3
2000 Q1	-1.3	1.2	-6.6	-26.8	12.4	1.6	17.9	-0.9
Q2	4.1	1.1	-7.4	-26.8	12.8	2.7	22.8	-1.1
1998 Jan.	0.9	-0.2	-2.2	-4.6	2.8	-0.3	5.6	-0.2
Feb.	5.9	0.3	-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	8.7	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.	-0.5	-0.1	-1.8	-3.8	2.6	-0.7	3.6	-0.2
Feb.	3.9	0.1	-1.7	-3.3	2.9	0.4	5.4	0.2
Mar.	5.7	0.1	-1.9	-4.0	3.4	1.4	6.5	0.2
Apr.	4.4	0.2	-2.0	-4.6	3.4	1.8	5.9	-0.2
May	1.6	0.3	-2.1	-4.8	3.2	0.9	3.9	0.0
June	8.3	0.2	-2.1	-4.3	3.7	1.8	8.9	0.2
July	11.8	0.2	-2.0	-5.5	4.7	2.5	11.5	0.5
Aug.	2.6	0.2	-1.4	-5.8	4.0	-0.2	5.6	0.1
Sep.	1.6	0.7	-2.0	-6.1	3.8	0.3	5.1	-0.2
Oct.	7.3	0.8	-1.9	-6.5	3.8	2.3	9.0	-0.1
Nov.	3.6	0.6	-2.1	-7.2	4.1	2.2	6.4	-0.2
Dec.	3.0	0.2	-1.9	-8.1	3.5	2.3	6.8	0.1
2000 Jan.	-5.0	0.0	-2.2	-8.8	3.6	-0.9	3.6	-0.3
Feb.	-0.2	0.5	-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.	0.3	0.2	-2.1	-7.9	3.7	1.1	5.6	-0.5
May	1.0	0.3	-2.8	-9.4	4.6	0.4	8.2	-0.4
June	2.8	0.5	-2.5	-9.5	4.5	1.2	9.0	-0.3
July	5.1	0.4	-2.5	-10.2	4.8	2.3	11.1	-0.8
Aug.	-1.0	.	.	.	.	.	.	.

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

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.1). 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	112.3	95.4	105.9	1.270	138.1	1.568	0.814
1997	99.1	99.4	99.2	100.9	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	95.4	96.6	95.8	1.066	121.3	1.600	0.659
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	96.1	96.5	96.0	1.057	127.7	1.600	0.658
Q3	94.6	94.7	94.5	94.0	95.5	94.6	1.049	118.7	1.602	0.655
Q4	92.2	92.2	92.2	91.4	94.2	92.6	1.038	108.4	1.600	0.636
2000 Q1	89.0	89.6	89.7	87.9	91.1	89.5	0.986	105.5	1.607	0.614
Q2	86.0	86.6	87.0	85.6	88.4	86.6	0.933	99.6	1.563	0.610
Q3	84.7	85.7	86.1	84.4	87.3	85.2	0.905	97.4	1.544	0.612
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	85.0	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	88.2	-	89.4	87.6	0.940	101.4	1.551	0.623
Aug.	84.6	85.5	86.1	-	87.0	85.0	0.904	97.8	1.551	0.607
Sep.	82.8	83.7	84.1	-	85.3	83.1	0.872	93.1	1.531	0.608
Oct.	81.6	82.6	82.9	-	84.4	82.0	0.855	92.7	1.513	0.589
% ch. vs. ⁴⁾ prev. month										
2000 Oct.	-1.4	-1.3	-1.4	-	-1.1	-1.3	-1.9	-0.4	-1.2	-3.0
% ch. vs. ⁴⁾ prev. year										
2000 Oct.	-13.6	-12.4	-12.1	-	-12.4	-13.4	-20.1	-18.3	-5.1	-8.8

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 ³⁾	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
8.98	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
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.
1.3	-0.2	0.3	-0.3	-0.2	2.7	-1.9	-0.8	-1.2	% ch. vs. ⁴⁾ prev. month 2000 Oct.
-2.3	0.2	3.1	-3.4	-18.2	-1.4	-19.8	-25.2	-16.5	% ch. vs. ⁴⁾ prev. year 2000 Oct.

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	1.4	3.1	5.3	5.6	4.7	3.73
1998	1.3	1.2	55.8	4.94	7.50	-1.1	2.6	2.5	2.2	5.2	4.6	4.27
1999	2.1	2.8	52.6	4.91	7.44	1.5	3.4	1.7	1.8	5.2	4.2	3.44
1999 Q3	2.3	-	-	5.35	7.44	1.8	3.2	1.4	-0.4	5.2	3.4	3.19
Q4	2.8	-	-	5.57	7.44	0.8	0.2	2.5	4.5	4.9	4.1	3.78
2000 Q1	2.8	-	-	5.79	7.45	1.3	2.5	2.6	3.1	4.9	2.2	3.95
Q2	2.9	-	-	5.67	7.46	0.8	2.3	3.6	7.7	4.8	1.3	4.73
Q3	2.6	-	-	5.69	7.46	.	.	.	.	.	.	5.84
2000 Apr.	2.9	-	-	5.57	7.45	-	-	-	12.5	4.7	-0.9	4.32
May	2.8	-	-	5.77	7.46	-	-	-	11.4	4.8	1.5	4.70
June	2.9	-	-	5.67	7.46	-	-	-	0.3	4.9	3.3	5.14
July	2.8	-	-	5.76	7.46	-	-	-	6.1	4.9	0.5	5.78
Aug.	2.2	-	-	5.64	7.46	-	-	-	8.2	4.8	2.5	5.66
Sep.	2.7	-	-	5.66	7.46	-	-	-	.	.	.	6.10
Oct.	.	-	-	5.57	7.45	-	-	-	.	.	.	5.55
Greece												
1997	5.4	-4.6	108.3	9.92	309.3	-4.1	8.4	3.5	1.8	7.9	11.8	12.48
1998	4.5	-3.2	105.5	8.48	330.7	-3.1	5.5	3.1	8.3	10.0	10.2	13.53
1999	2.1	-1.8	104.6	6.30	325.8	-4.1	2.5	3.4	3.4	.	7.6	10.08
1999 Q3	1.4	-	-	6.56	326.1	-	-	-	4.7	.	6.6	9.86
Q4	2.0	-	-	6.68	329.2	-	-	-	0.0	.	6.3	10.13
2000 Q1	2.6	-	-	6.44	332.7	-	-	-	7.8	.	5.1	8.71
Q2	2.3	-	-	6.12	336.2	-	-	-	5.9	.	8.9	8.33
Q3	2.8	-	-	6.06	337.6	-	-	-	.	.	.	7.79
2000 Apr.	2.1	-	-	6.09	335.2	-	-	-	8.0	.	9.5	8.48
May	2.6	-	-	6.19	336.6	-	-	-	6.7	.	8.0	8.30
June	2.2	-	-	6.06	336.6	-	-	-	3.3	.	9.3	8.22
July	2.6	-	-	6.08	336.9	-	-	-	0.4	.	9.7	8.02
Aug.	2.9	-	-	6.04	337.3	-	-	-	.	.	9.4	7.92
Sep.	3.0	-	-	6.05	338.6	-	-	-	.	.	.	7.42
Oct.	.	-	-	5.97	339.5	-	-	-	.	.	.	6.88
Sweden												
1997	1.8	-2.0	75.0	6.62	8.65	-	0.4	2.0	7.1	9.9	4.2	4.43
1998	1.0	1.9	72.4	4.99	8.92	3.3	1.6	3.0	4.1	8.3	3.5	4.36
1999	0.6	1.9	65.7	4.98	8.81	1.6	0.1	3.8	1.0	7.2	6.8	3.32
1999 Q3	0.7	-	-	5.48	8.71	2.8	0.3	3.8	-0.7	7.1	6.1	3.22
Q4	1.0	-	-	5.69	8.65	0.8	-0.8	3.8	3.0	6.8	9.1	3.69
2000 Q1	1.2	-	-	5.79	8.50	3.0	6.7	4.0	6.2	6.5	8.7	3.99
Q2	1.2	-	-	5.30	8.28	1.5	5.2	3.9	10.4	6.1	9.1	4.09
Q3	1.3	-	-	5.30	8.40	.	.	.	.	.	.	4.14
2000 Apr.	1.0	-	-	5.43	8.27	-	-	-	13.2	6.1	9.9	4.14
May	1.3	-	-	5.34	8.24	-	-	-	6.4	6.0	11.2	4.10
June	1.4	-	-	5.13	8.32	-	-	-	11.6	6.1	6.1	4.05
July	1.3	-	-	5.31	8.41	-	-	-	.	5.6	5.9	4.21
Aug.	1.4	-	-	5.31	8.39	-	-	-	.	5.9	4.4	4.13
Sep.	1.3	-	-	5.27	8.41	-	-	-	.	.	.	4.08
Oct.	.	-	-	5.23	8.52	-	-	-	.	.	.	4.03
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	2.2	0.6	6.1	5.3	5.54
1999 Q3	1.2	1.3	45.6	5.39	0.655	-1.8	3.4	2.3	1.9	6.0	3.5	5.28
Q4	1.2	1.5	45.4	5.46	0.636	-0.3	3.0	2.9	2.2	5.9	3.6	5.98
2000 Q1	0.8	6.6	43.6	5.60	0.614	-1.3	2.9	3.0	2.0	5.8	3.8	6.20
Q2	0.6	-0.3	43.9	5.31	0.610	-0.8	.	3.2	2.6	5.5	5.6	6.28
Q3	0.8	1.9	42.6	5.31	0.612	.	.	.	.	.	.	6.21
2000 Apr.	0.6	1.8	43.5	5.30	0.598	-	-	-	2.0	5.7	5.0	6.30
May	0.5	-1.3	43.1	5.41	0.602	-	-	-	2.4	5.5	5.1	6.30
June	0.8	-1.4	43.9	5.21	0.629	-	-	-	3.3	5.4	6.6	6.23
July	1.0	7.5	43.4	5.24	0.623	-	-	-	0.1	.	6.8	6.19
Aug.	0.6	-2.3	44.0	5.32	0.607	-	-	-	0.9	.	.	6.22
Sep.	1.0	0.6	42.6	5.38	0.608	-	-	-	.	.	.	6.21
Oct.	.	.	.	5.20	0.589	-	-	-	.	.	.	6.16

Sources: Eurostat (columns 1, 8, 9 and 10 (except Greece)); 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), 10 (Greece) and 11); ECB calculation (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

4) Total excluding construction; adjusted for working days.

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

12 Economic and financial developments outside the EU

Table 12.1

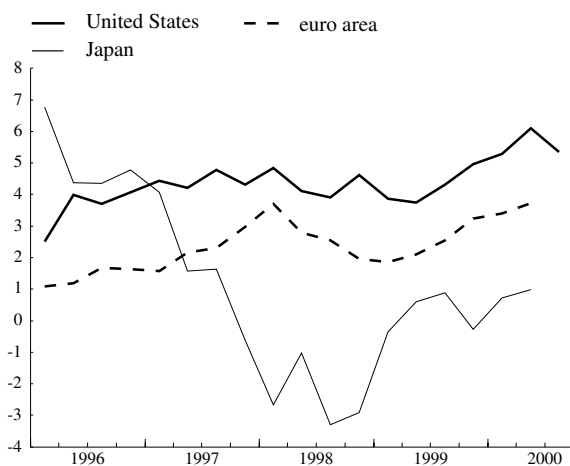
Economic and financial developments

(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											
1996	2.9	-2.3	3.6	4.7	5.4	4.8	5.51	6.54	1.270	-2.2	58.8
1997	2.3	0.0	4.4	7.0	4.9	4.9	5.76	6.45	1.134	-0.9	56.4
1998	1.6	0.7	4.4	4.9	4.5	7.4	5.57	5.33	1.121	0.3	53.3
1999	2.2	-1.7	4.2	4.2	4.2	7.5	5.42	5.64	1.066	1.0	50.3
1999 Q2	2.1	-1.4	3.8	4.1	4.3	8.0	5.07	5.54	1.057	0.9	51.2
Q3	2.3	-0.8	4.3	4.4	4.2	7.5	5.44	5.88	1.049	1.2	50.4
Q4	2.6	-3.1	5.0	4.8	4.1	6.1	6.14	6.13	1.038	1.3	50.3
2000 Q1	3.2	-3.7	5.3	5.9	4.1	5.8	6.11	6.48	0.986	2.0	49.3
Q2	3.3	-4.4	6.1	6.6	4.0	5.8	6.63	6.18	0.933	2.1	46.4
Q3	3.5	.	5.3	6.2	4.0	5.6	6.70	5.89	0.905	.	.
2000 May	3.2	-	-	6.6	4.1	5.6	6.75	6.42	0.906	-	-
June	3.7	-	-	6.8	4.0	5.5	6.79	6.10	0.949	-	-
July	3.7	-	-	6.3	4.0	5.4	6.73	6.04	0.940	-	-
Aug.	3.4	-	-	6.2	4.1	5.6	6.69	5.83	0.904	-	-
Sep.	3.5	-	-	6.2	3.9	6.0	6.67	5.80	0.872	-	-
Oct.	.	-	-	.	.	.	6.78	5.74	0.855	-	-
Japan											
1996	0.1	-1.9	5.1	2.3	3.4	3.3	0.57	3.03	138.1	-2.9	-
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	-
1999 Q2	-0.3	-1.6	0.6	-0.6	4.7	4.1	0.12	1.53	127.7	-	-
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	.	.	5.3	.	1.9	0.32	1.79	97.4	-	-
2000 May	-0.7	-7.8	-	7.5	4.6	2.2	0.10	1.71	98.1	-	-
June	-0.7	-7.5	-	7.3	4.7	1.9	0.13	1.69	100.7	-	-
July	-0.5	-4.5	-	4.2	4.7	2.0	0.22	1.72	101.4	-	-
Aug.	-0.8	.	-	8.2	4.6	1.7	0.32	1.77	97.8	-	-
Sep.	-0.8	.	-	3.8	.	1.9	0.41	1.88	93.1	-	-
Oct.	.	.	-	.	.	.	0.52	1.83	92.7	-	-

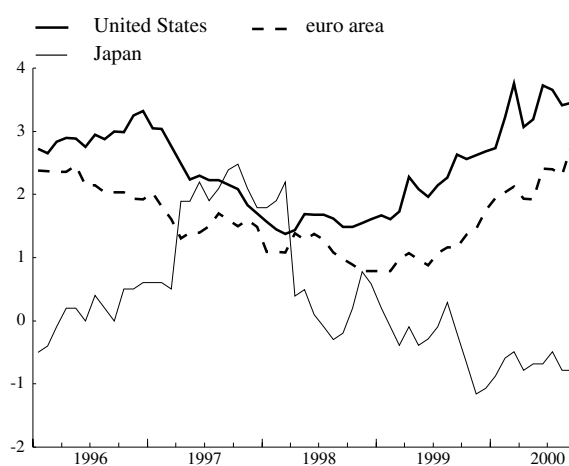
Real gross domestic product

(annual percentage changes; quarterly)



Consumer price indices

(annual percentage changes; monthly)



Sources: National data (columns 1, 2 (United States), 3, 4, 5, 6, 8 (to December 1998), 9 and 10); 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.

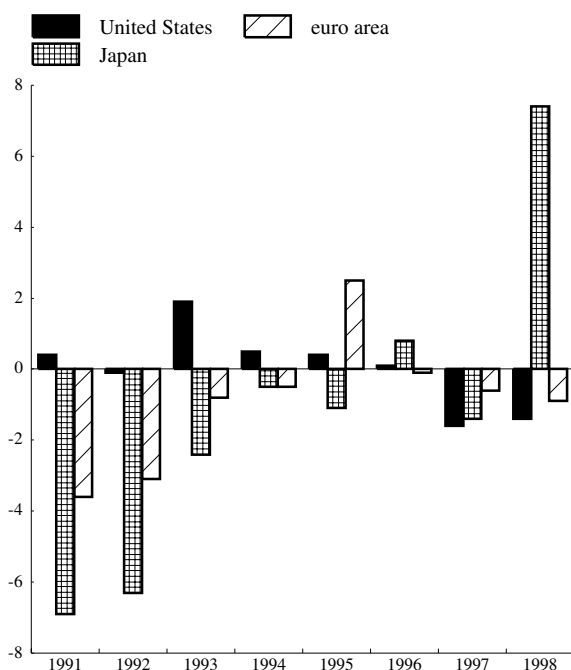
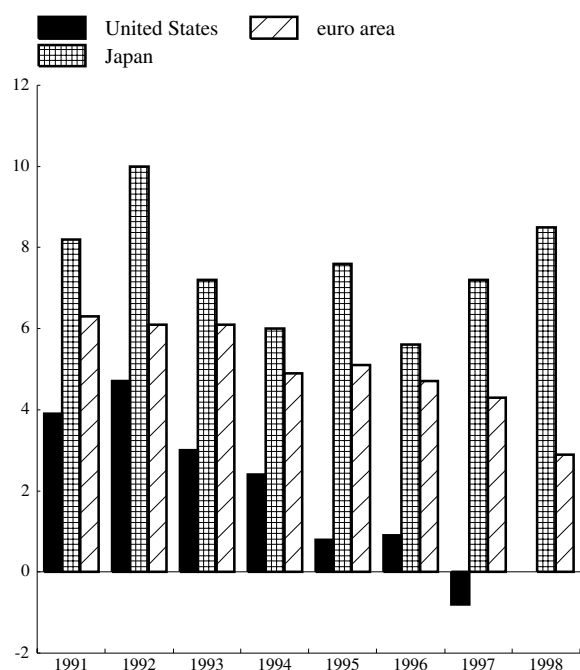
4) For more information, see Table 10.

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	1.1	11.8	5.7	13.0	4.8
1997	18.1	19.9	-1.5	9.4	8.6	1.8	8.7	3.4	1.9	11.6	3.7	12.3	4.6
1998	18.8	20.8	-2.3	9.6	8.8	3.9	8.5	5.4	1.7	12.0	5.8	12.5	5.8
1999	18.5	21.1	-3.4	9.8	9.3	7.0	8.7	8.5	3.6	12.6	5.3	11.4	6.7
1998 Q3	19.0	20.8	-2.5	9.7	8.8	4.4	8.5	5.8	0.6	12.0	3.7	12.4	5.3
Q4	18.6	20.9	-2.6	9.7	9.0	1.6	8.4	3.3	-1.0	12.3	4.3	12.4	6.0
1999 Q1	18.8	21.0	-2.7	9.6	9.1	8.3	8.7	9.7	6.3	12.4	4.5	11.9	6.5
Q2	18.4	21.2	-3.2	9.6	9.5	8.0	8.7	9.4	0.4	12.7	5.7	11.6	6.8
Q3	18.4	21.1	-3.6	9.8	9.3	6.9	8.6	8.4	3.6	12.6	5.1	11.1	6.4
Q4	18.3	21.4	-3.9	10.0	9.3	4.9	8.7	6.6	4.2	12.6	5.8	10.9	7.0
2000 Q1	18.2	21.4	-4.0	9.9	9.6	8.8	8.9	10.3	5.8	12.8	4.7	10.1	8.2
Q2	18.4	22.0	-4.2	10.4	9.7	4.2	9.0	6.0	3.7	12.5	4.1	9.9	5.6
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	-9.4	-1.5	5.0	5.6	13.7	-0.4
1999	.	26.0	.	.	.	2.6	.	-2.4	1.4	.	6.8	.	-0.5
1998 Q3	.	26.9	.	.	.	3.3	.	-0.9	1.5	.	4.4	.	2.0
Q4	.	26.9	.	.	.	13.4	.	-6.9	-7.0	.	11.3	.	-0.8
1999 Q1	.	26.9	.	.	.	0.8	.	-14.9	-2.2	.	-3.6	.	6.3
Q2	.	24.2	.	.	.	-16.5	.	-17.7	1.9	.	14.4	.	-7.2
Q3	.	26.4	.	.	.	9.9	.	-1.4	1.5	.	4.3	.	1.4
Q4	.	26.9	.	.	.	15.0	.	21.1	4.1	.	11.8	.	-2.2
2000 Q1	.	26.3	.	.	.	7.2	.	-6.1	-4.4	.	2.9	.	8.4
Q2	.	23.7	.	.	.	-25.1	.	-19.9	0.3	.	4.2	.	-9.3

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

Net lending of households¹⁾
(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.

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. 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 31 October 2000.

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 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

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

“Money 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, redemptions and amounts outstanding are shown in Table 3.5, with a sectoral breakdown of issuers of euro-denominated securities, whether resident in the euro area or elsewhere, in Table 3.6. 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 the 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. Estimates for periods before 1995 based on national consumer price indices are not fully comparable. The index is based on national HICPs that follow the same methodology in all euro area countries. Data from January 2000 include the cost of health and educational services; earlier data on the extended basis are, in general, not available. The HICP from January 2000 also covers spending by non-residents which had previously been excluded from the HICP in certain Member States.

With regard to statistics on national accounts (Tables 4.2 and 5.1), the implementation of the European System of Accounts 1995 (ESA 95) during 1999 and thereafter has begun to pave the way for fully comparable data, including quarterly summary accounts, across the euro area. Before 1999 the deflators of GDP in Table 4.2.2 are derived from national data in domestic currency. National accounts in this issue are based mainly on the ESA 95.

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

Opinion survey data (Table/Chart 5.3) draw on the Business and Consumer Surveys of the European Commission.

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

Financial accounts statistics

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 early in 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/2000/4) on the statistical reporting requirements of the European Central Bank, 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 1998 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 separately 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 new 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.

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 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.

Documents published by the European Central Bank (ECB)

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

For a complete list of documents published by the European Monetary Institute, please visit the ECB's website (<http://www.ecb.int>).

Annual Report

"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:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

“TARGET and payments in euro”, November 1999.

“Legal instruments of the European Central Bank”, November 1999.

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

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

“The Eurosystem and the EU enlargement process”, February 2000.

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- “Report on electronic money”, August 1998.
- “Assessment of EU securities settlement systems against the standards for their use in ESCB credit operations”, September 1998.
- “Money and banking statistics compilation guide”, September 1998.
- “The single monetary policy in Stage Three: General documentation on ESCB monetary policy instruments and procedures”, September 1998.
- “Third progress report on the TARGET project”, November 1998.
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“TARGET: facts, figures, future”, September 1999.

“The European Central Bank”, June 2000.

“The ECB payment mechanism”, August 2000.

“The euro banknotes and coins”, August 2000.

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