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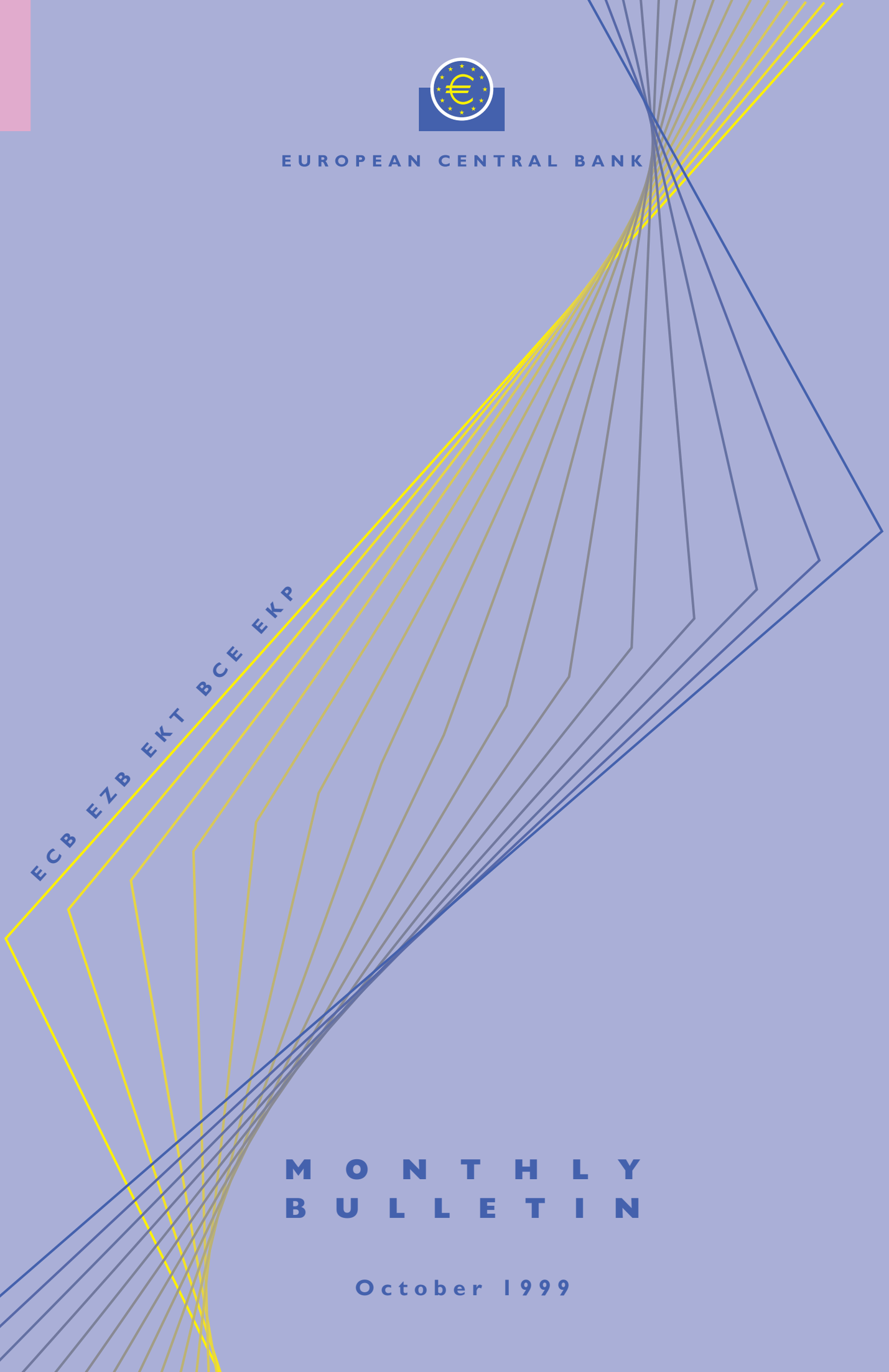
EUROPEAN CENTRAL BANK



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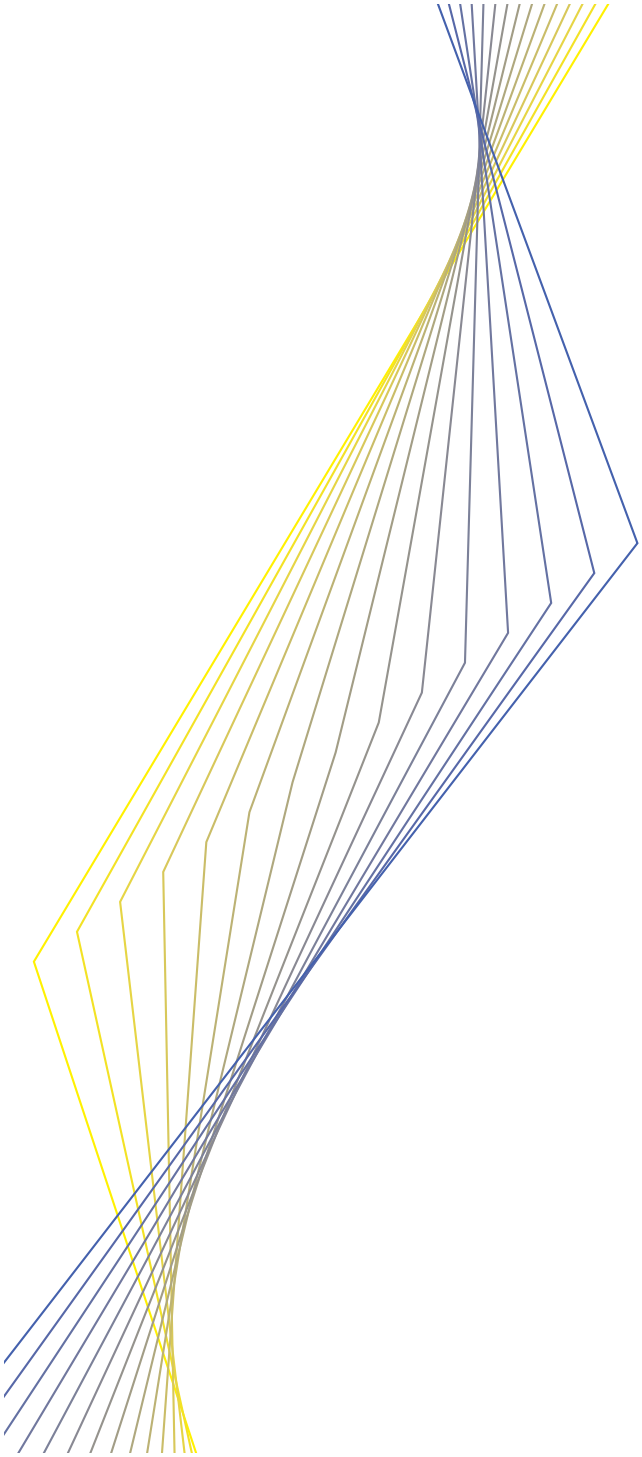

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October 1999

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Contents

Abbreviations

Countries

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

Others

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

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

Editorial

At its meetings held on 23 September and 7 October 1999 the Governing Council of the ECB decided to keep the interest rates on the monetary policy instruments of the Eurosystem unchanged. The interest rate on the main refinancing operations thus remained at 2.5% and the interest rates on the deposit and marginal lending facilities were kept at 1.5% and 3.5% respectively.

The Governing Council noted that the balance of risks to price stability remains on an upward trend. This is indicated, first of all, by monetary developments. The persistence of M3 growth above the reference value, the shift towards the most liquid financial instruments and the high growth of credit to the private sector suggest that it is relatively easy for households and firms to increase spending. At the same time, economic conditions have improved further both at the global and at the domestic euro area level and an acceleration of economic growth is now expected in the period ahead. Even though the rates of increase in the headline Harmonised Index of Consumer Prices (HICP) are still low, against the background of changed economic conditions continuous close attention must be paid to upward risks to price stability.

Looking at recent developments in greater detail, the rate of growth of the broad monetary aggregate M3 has gradually been moving away from the reference value of 4½% in recent months. The latest three-month average of M3 growth rates (covering the period from June to August 1999) increased to 5.6%, compared with 5.5% in the previous three-month period (covering the period from May to July 1999). At the same time the most liquid components of M3 have experienced relatively strong growth, which seems to be linked to the low level of opportunity costs of holding these assets. This development and the continuing high level of growth of credit granted to the private sector, which has been expanding at rates of around 10% since the start of Stage Three of Economic and Monetary Union, suggest that households and firms are experiencing a rather generous liquidity situation at the present juncture.

The nominal effective exchange rate of the euro stood at broadly the same levels in early October as at the end of August. After weakening in the first half of September, the euro strengthened against the Japanese yen, the US dollar and other major currencies in late September in response to further signs of a pick-up in euro area economic activity. Long-term bond yields in the euro area continued to rise in September and early October and the differential between bond yields in the United States and those in the euro area narrowed. These developments indicate market expectations of an improvement in economic conditions in the euro area. At the same time, they may also reflect market expectations of a reaction on the part of monetary policy to inflationary pressure associated with the pick-up in euro area economic activity.

The more favourable expectations for real GDP growth in the euro area are partly connected with a further improved outlook for the world economy. Recent data for the US economy point towards a continuation of strong output growth. The growth outlook for Japan has also become more positive, which is reflected in recent financial market developments. In some other Asian countries the recovery appears to be taking place somewhat earlier than expected. Individual downside risks in these countries and the more general uncertainty regarding the recovery in Latin America do not seem to threaten this more favourable outlook for the world economy.

As regards economic activity in the euro area, data available for the first half of 1999 are consistent with the view that there has been an upturn in growth this year. In fact, available industrial production data suggest that the stabilisation of output in this sector has given way to an upturn in activity. A more marked strengthening of industrial production growth in the third and fourth quarters of 1999 is indicated by various survey data available at

both the area-wide and the national level. Overall, the outlook for a continuing improvement in economic activity therefore remains favourable.

Consumer price data available for August show a further rise in the annual rate of change in the headline HICP to 1.2%, i.e. an increase of 0.1 percentage point since July. This was mainly due to the increase in oil prices. However, the progressive year-on-year decline in unprocessed food prices and a lower rate of increase in services prices provided something of a counterweight to the higher rates of increase in HICP energy prices. Largely reflecting the aforementioned development in services prices, the annual rate of increase in the HICP rate excluding energy and seasonal food declined to 0.9% in August, after having risen to 1% in July. Given the relatively quick pass-through of oil prices to consumer prices, expectations of further increases in the HICP rate of change in the coming months have become firmer. Seen in isolation, the increase in energy prices should have only a temporary effect upon consumer price increases, but it is essential that this effect should not trigger wage claims which prove incompatible with price stability. All in all, in line with the medium-term orientation of the Eurosystem's monetary policy, both the rising trend in M3 and high credit growth call for great vigilance on the part of monetary policy at a time of accelerating economic activity.

With regard to the medium-term outlook for sustained economic growth, there is a strong case for stepping up structural reform in labour and product markets. The anticipation of a cyclical improvement must not lead to a weakening of efforts in this regard, but should rather be used as a welcome opportunity to make convincing progress. This, together with continued wage moderation and fiscal adjustment in full compliance with the Stability and Growth Pact, would not only greatly facilitate the monetary policy task of maintaining price stability, but would also substantially improve the prospects for economic growth and employment.

This issue of the ECB Monthly Bulletin includes an article entitled "Inflation differentials in a monetary union". A second article provides information on ESCB preparations for the year 2000.

Economic developments in the euro area

1 Monetary and financial developments

Monetary policy decisions by the Governing Council of the ECB

At its meetings held on 23 September and 7 October 1999 the Governing Council of the ECB decided to maintain the prevailing level of ECB interest rates. The interest rate on the main refinancing operations of the Eurosystem was left at 2.5%, and the interest rates on the marginal lending facility and on the deposit facility were maintained at 3.5% and 1.5% respectively (see Chart 1).

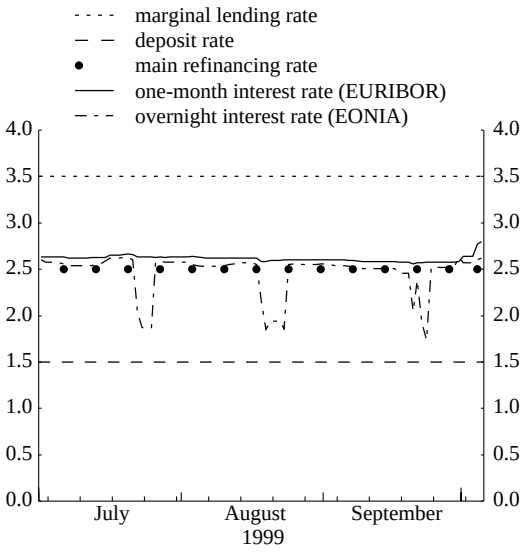
M3 growth on a rising trend

In August 1999 the annual rate of increase in the broad monetary aggregate M3 stood at 5.7%, compared with 5.8% in the previous month (the latter figure was revised upwards from 5.6%). The three-month average of the annual growth rates of M3, covering the period from June to August 1999, increased slightly to 5.6%, from 5.5% in the three-month period from May to July 1999 (revised upwards from 5.4%). M3 growth continues to exhibit a rising trend (see Chart 2), with the three-month moving average of M3 growth climbing to more than 1 percentage point above the reference value of 4½%. In the six-month period from March to August 1999 M3 increased by 5.7% on a seasonally adjusted and annualised basis. This shows that it was not only the strong increase in January 1999, which may have been partly related to the changeover to Stage Three of Economic and Monetary Union, which has caused M3 to grow at rates in excess of the reference value.

Chart 1

ECB interest rates and money market rates

(percentages per annum; daily data)

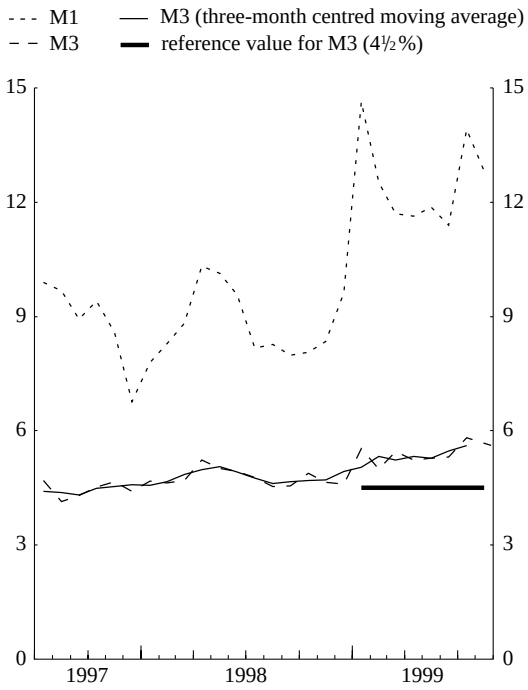


Source: ECB.

Chart 2

Monetary aggregates in the euro area

(annual percentage changes)



Source: ECB.

The relatively fast expansion of M3 can be mainly explained by the low opportunity costs of holding monetary instruments, especially the most liquid ones, and possibly also by the gradual improvement of economic conditions in the euro area. At the same time, the steepening of the term structure, which, by itself, should have contributed to portfolio shifts from instruments included in M3 into longer-term financial assets, has so far had no visible dampening impact on M3 growth.

Table 1

M3 and its main components

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

	Aug. 1999 levels	June 1999 change		July 1999 change		Aug. 1999 change		June to Aug. 1999 average change	
	EUR billions	EUR billions	%	EUR billions	%	EUR billions	%	EUR billions	%
M3	4,604.9	17.7	0.4	34.3	0.8	-1.7	0.0	16.8	0.4
Currency in circulation and overnight deposits (= M1)	1,867.4	14.6	0.8	24.1	1.3	-0.3	0.0	12.8	0.7
Other short-term deposits (= M2 - M1)	2,128.7	0.2	0.0	13.5	0.6	-4.3	-0.2	3.1	0.1
Marketable instruments (= M3 - M2)	608.7	2.9	0.5	-3.3	-0.5	2.8	0.5	0.8	0.1

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.

On the basis of non-seasonally adjusted monthly data, the monetary aggregate M3 fell by €20 billion in August 1999; using seasonally adjusted figures, M3 remained virtually constant on a month-on-month basis (see Table 1), after a strong increase in the previous month (0.8%). This seasonally adjusted stability of M3 in August mirrored that of M1, while a decline in other short-term deposits (of €4 billion or 0.2%) contrasted with an increase in the marketable instruments included in M3 (of €3 billion or 0.5%). However, some caution is required when interpreting monthly monetary data as they are relatively volatile.

The annual growth rate of currency in circulation rose slightly to 3.9% in August 1999, thereby continuing the upturn seen in recent months (3.8% in July and 2.9% in June). In part at least, this recovery may be regarded as evidence of a normalisation after the subdued expansion of the past two years. At present, the demand for currency is likely to be stimulated by low opportunity costs and the gradual recovery in economic activity. It is probable that the latter two factors also contributed to the relatively high annual rates of increase of overnight deposits (15.0% in August after 16.4% in July), which were well above those recorded before the start of Stage Three. As a consequence, the 12-month growth rate of M1 remained exceptionally high, even if it decreased slightly to 12.8% in August, from 13.9% in the previous month.

The annual rate of growth of short-term deposits other than overnight deposits declined slightly in August, to 2.4%, from 2.8% in the previous month. Owing to its relatively low level of remuneration, this type of deposit is not regarded as attractive by investors at present. In August a fall in the growth rates was observed both in deposits with an agreed maturity and in deposits redeemable at notice. The rate of change of deposits with an agreed maturity of up to two years fell to -3.0% in August, from -2.5% in July. At the same time, the annual rate of growth of deposits redeemable at a period of notice of up to three months declined to 6.4% in August, from 6.7% in the previous month. The contrasting developments in these two types of deposits over a somewhat longer period may in part be related to the continuous shrinking of the spread between the interest rate on deposits with an agreed maturity of up to two years and the interest rate on deposits redeemable at notice of up to three months. Since January 1998 this interest rate differential has narrowed by 41 basis points and it amounted to only 24 basis points in August 1999. The rate of increase in the intermediate monetary aggregate M2, which includes currency in circulation and all short-term deposits, fell from 7.7% in July to 7.0% in August.

By contrast with M2, the annual rate of change in the marketable instruments included in M3 (which account for 13.5% of the aggregate as a whole) recovered somewhat, albeit remaining negative (-2.0% in August, from -5.3% recorded in the previous month). Among these instruments, the negative trend in repurchase agreements slowed down slightly, but their annual rate of decline remained high, at 20.0% in August, from 22.0% in July. Similarly, the trend contraction of debt securities issued with a maturity of less than two years weakened. (Their annual rate of change was -10.0% in August, from -16.7% in July.) Finally, the annual rate of increase in money market fund shares and money market paper rose to 11.6% in August from 9.3% in the previous month.

Credit growth remained strong in August

Total credit granted to euro area residents continued to expand rapidly in August (the annual rate of growth being 7.8%, compared with 7.7% in July). This was mainly due to the strong annual increase in credit to private euro area residents (10.7% in August, from 10.6% in July), whereas the annual growth rate of total credit to the general government remained virtually unchanged, at 0.2%, in August.

The annual growth of loans (i.e. credit excluding MFI holdings of securities) to the private sector remained stable, standing at a high level in August 1999 (9.9% compared with 10.0% in July), and – as the latest quarterly breakdown by sector from June 1999 implies – has been broadly based across households and companies (see Box 1). The rapid expansion of loans to households and firms can be primarily attributed to the low level of bank lending rates in the euro area. Furthermore, expectations of rising interest rates may have led to some frontloading of loans. In addition, it is probable that the interplay of economic recovery and rising house and land prices in some countries, as well as intense merger and acquisition activity, has contributed to this dynamic trend.

With regard to the other counterparts of M3, the annual rate of increase in longer-term financial liabilities of the MFI sector stood at 5.8% in August, compared with 5.9% in the previous month. Deposits with an agreed maturity of over two years increased by 2.9% (from 2.8% in July). Conversely, the fall in deposits redeemable at a period of notice of over three months became more pronounced (from an annual rate of change of -7.6% in July to -8.0% in August). Debt securities with an original maturity of over two years continued to grow at a fast, although slightly reduced, pace (7.7% in August in annual terms, down from 8.0% in July). Overall, the annual growth rate of longer-term financial liabilities has been fluctuating around 5.6%–5.9% in recent months, suggesting that, thus far, the further steepening of the yield curve witnessed in the past few months has not had a significant impact on the growth rate of these longer-term financial liabilities. This may in part be related to the fact that the rise in longer-term bank retail rates was less pronounced than that in market bond yields over recent months.

In August the net external assets of the MFI sector decreased in absolute and non-seasonally adjusted terms by €34 billion as compared with the previous month. Underlying this development was a reduction in the external assets of MFIs (of €50 billion), which was larger than the decline in their external liabilities (of €16 billion). Over the past 12 months the net external asset position of the MFI sector has fallen by €207 billion.

Overall, the annual increase in M3 of €246 billion in August 1999 was accompanied by the following changes in the counterparts. The growth of credit to the private sector amounted to €574 billion, while that granted to the general government virtually stagnated (€5 billion). The significant differences between flows in credit and money reflect the reduction in net external assets (of €207 billion) and an increase in longer-term financial liabilities (of €188 billion). The other counterparts (net assets) amounted to €62 billion.

Box 1

MFI loans to the non-financial private sector broken down by sector, type and original maturity

Quarterly data on outstanding stocks of loans to the non-financial private sector with a breakdown by sector, type and original maturity have recently been released for the period from June 1998 to June 1999 (see the table below). This makes it possible for the first time to calculate year-on-year growth rates, in order to assess the composition of the high growth rate of MFI loans to the private sector. However, some caveats need to be expressed. In particular, the definitions of consumer credit and lending for house purchase are not fully consistent across the euro area, and the data are partially estimated for periods before December 1998. Furthermore, the annual growth rates shown in the table below are not based on flow data and thus have not been fully adjusted to take account of the effects of changes in value not related to transactions. In particular, these growth rates may be distorted downwards by write-offs/write-downs of loans. Given that only some of the reclassifications made at the start of Stage Three could be taken into account, the reported growth rates should be interpreted with a great deal of caution and cannot be directly compared with the growth rates on loans to the private sector reported in the main text of the ECB Monthly Bulletin.

With these caveats in mind, the table shows that the growth of credit has been broadly based across all sectors of the economy. The annual growth rate of loans to households was 9.5% in June 1999, slightly higher than the growth rate of loans to non-financial corporations (8.3%).

With regard to the maturity breakdown, trends differed across sectors. Loans to non-financial corporations have been growing at a relatively fast pace in the maturity category of up to one year (9.0%) and in that of over five years (9.0%). With regard to consumer credit, the rate of increase in the volume of loans was strongest for those with a maturity of up to one year (an annual increase of 13.8% in June 1999). As for loans for house purchase, the overall strong growth reflected mainly the robust annual increase in loans with a maturity of more than five years (10.6%). Overall, this evidence seems to be consistent with the view that euro area residents are currently taking credit, over both the short term and the longer term, at retail interest rates which are relatively low by historical standards.

Outstanding MFI loans to households and non-financial corporations by type and maturity at issue [1]

(EUR billions (not seasonally adjusted))

	Non-financial corporations [2]				Households [2]						
						Consumer credit [3]			Lending for house purchase [3]		
		Up to 1 year	Over 1 and up to 5 years	Over 5 years		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years
	1	2	3	4	5	6	7	8	9	10	11
1999 June [p]	2,336.0	843.0	351.5	1,141.5	2,590.8	88.8	150.3	190.2	15.3	70.0	1,508.2
% change June 1999/ June 1998 [4]	8.3	9.0	6.5	9.0	9.5	13.8	11.5	7.0	1.1	-1.9	10.6

Source: ECB.

1) *Loans to the private sector also include loans to non-profit institutions serving households and loans to other financial intermediaries, insurance funds and pension funds.*
2) *Corresponding ESA 95 sector codes: non-financial corporations, S11; households, S14.*
3) *The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area. Column 5 includes other lending to households.*
4) *These growth rates cannot be derived from the stock data displayed in Table 2.5 of the "Euro area statistics" section of this Monthly Bulletin, since they take into account the effects of some reclassifications made at the start of Stage Three.*

Money market interest rates picked up at the beginning of October

Having remained broadly stable during September, the money market yield curve shifted upwards in early October. The overnight interest rate, as measured by the EONIA, remained slightly above 2.5% during most of the reserve maintenance period which started on 24 August 1999 and ended on 23 September 1999, reflecting the ample liquidity made available to the banking system (see Box 2) and the absence of expectations of changes in ECB interest rates in the very short term. During the final days of the reserve maintenance period the EONIA temporarily fell below 2%, as the banking system's liquidity exceeded the amount needed to meet the Eurosystem's reserve requirements. Over the first days of the reserve maintenance period which began on 24 September, the overnight interest rate again stood at a level slightly above 2.5%. The EONIA rose to higher levels as from 30 September 1999. This increase probably reflected a desire on the part of financial market participants to adjust their end-quarter balance sheets, a pattern which had already been witnessed at the end of the first and second quarters of 1999. Thereafter, in early October, increasing uncertainty about the likelihood of a change in interest rates by the Eurosystem in the short term contributed to an increase in the EONIA interest rate.

The three-month EURIBOR interest rate remained stable for most of September 1999, oscillating at around 2.69%. The rates on the regular longer-term refinancing operation of the Eurosystem conducted on 28 September 1999 (using the multiple rate allotment procedure and a three-month maturity, as usual) were just below the prevailing three-month EURIBOR interest rate on the day on which the operation was conducted. The marginal rate of allotment was equal to 2.66%, while the weighted average rate of allotment was equal to 2.67%.

However, on 29 September 1999, when the first three-month contracts with a maturity date in early 2000 were made, the three-month EURIBOR increased by more than 30 basis points, to stand at 3.08%. This rise was due to the market perception of the so-called millennium problem. This affects the levels of interest rates on unsecured deposit contracts which span the end of the year, since a premium for the availability of funds at the turn of the year is required by market participants (see the article entitled "ESCB preparations for the year 2000" contained in this issue of the ECB Monthly Bulletin). In early October the three-month EURIBOR interest rate increased further, reaching 3.25% on 5 October 1999 as market expectations of an increase in ECB interest rates in the euro area strengthened.

Enhanced market expectations of rising interest rates in early October were also reflected in other instruments which were little affected by the millennium problem. For example, the one-month EURIBOR interest rate, which is not yet affected by the millennium problem, rose by approximately 20 basis points between 30 September and 5 October 1999. The three-month interest rate on repurchase agreement transactions, which are secured by government bonds, increased by a similar amount over the same period.

Similarly, three-month interest rates implied in futures contracts maturing in the year 2000 increased markedly in early October. On 5 October 1999 the interest rates implied in contracts for delivery in March and June 2000 stood at 3.57% and 3.85% respectively; this was more than 20 basis points higher than at the end of September 1999.

The interest rates on other instruments already affected by the millennium problem over the past few months – owing to the fact that their maturity spanned the end of the year – also rose in early October. The three-month interest rate implied in futures contracts maturing in December 1999 rose by approximately 20 basis points between end-September and 5 October, to stand at 3.43%. The six-month and 12-month

Box 2

Monetary policy operations and liquidity conditions in the eighth maintenance period

Allotments in monetary policy operations

During the eighth reserve maintenance period, which lasted from 24 August to 23 September 1999, the Eurosystem conducted five main refinancing operations and one longer-term refinancing operation. All main refinancing operations were carried out at a fixed interest rate of 2.5%. The allotted volume varied between €61.0 billion and €92.0 billion. The average total amount of bids submitted to the main refinancing operations decreased to €1,193.7 billion, from €1414.8 billion in the previous maintenance period. In particular, on 21 September, in the last main refinancing operation of the period, the amount of bids fell substantially to €660.5 billion, reflecting the ample liquidity conditions prevailing at the end of the maintenance period. This was also reflected in the overnight rates, which fell below the Eurosystem's main refinancing rate during the last week of the period.

The allotment ratios in the main refinancing operations varied between 4.3% and 13.9%, compared with a range of between 4.8% and 5.4% in the seventh maintenance period. The marked increase in the allotment ratio in the last operation mostly reflected the smaller amount of bids referred to above.

The Eurosystem settled a longer-term refinancing operation on 26 August through a variable rate tender with a pre-announced allotment volume of €15 billion, as on previous occasions. A total number of 256 bidders participated in this operation and the total amount of bids was €52.4 billion. The marginal rate was determined at 2.65%.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 August to 23 September 1999

	Liquidity providing	*Liquidity absorbing*	*Net contribution*
(a) Monetary policy operations of the Eurosystem	**195.6**	**0.7**	**+194.9**
Main refinancing operations	150.4	-	+150.4
Longer-term refinancing operations	45.0	-	+45.0
Standing facilities	0.2	0.7	-0.5
Other operations	0.0	0.0	0.0
(b) Other factors affecting the banking system's liquidity	**343.5**	**435.1**	**-91.6**
Banknotes in circulation	-	342.1	-342.1
Government deposits with the Eurosystem	-	51.4	-51.4
Net foreign assets (including gold)	343.5	-	+ 343.5
Other factors (net)	-	41.6	-41.6
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			**103.3**
(d) Required reserves			**102.6**

Source: ECB.
Totals may not add up due to rounding.

Use of standing facilities

Compared with the previous reserve maintenance period, the use of both standing facilities declined by €0.3 billion on average. The average use of the marginal lending facility decreased from €0.5 billion to only €0.2 billion, while the average use of the deposit facility decreased from €1.0 billion to €0.7 billion. Most of the

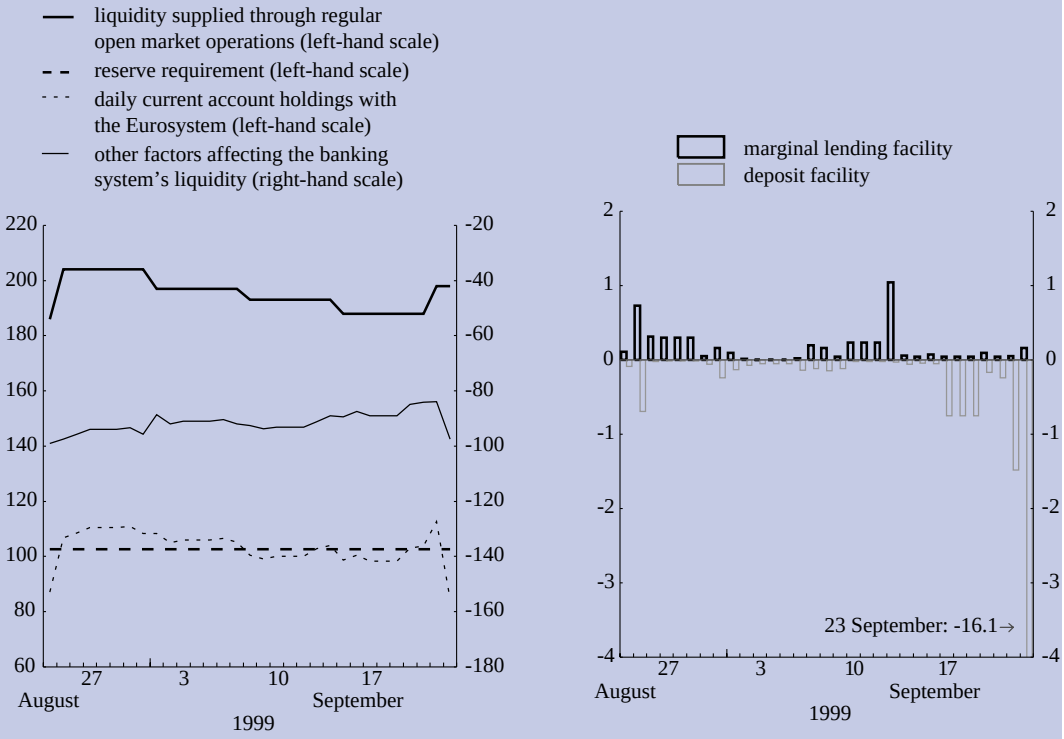
use of the deposit facility is explained by the absorption of excess liquidity through this facility on the last day of the reserve maintenance period, amounting to €16.1 billion.

Liquidity factors not related to monetary policy

The net liquidity-absorbing impact of the autonomous factors (i.e. the factors not related to monetary policy) on the banking system's liquidity (item (b) in the table above) was €91.6 billion on average, i.e. €0.6 billion more than in the previous maintenance period. The sum of autonomous factors fluctuated between €83.9 billion and €98.9 billion, showing somewhat lower volatility than in the previous period.

Factors contributing to the banking system's liquidity during the eighth maintenance period

(EUR billions; daily data)



Source: ECB.

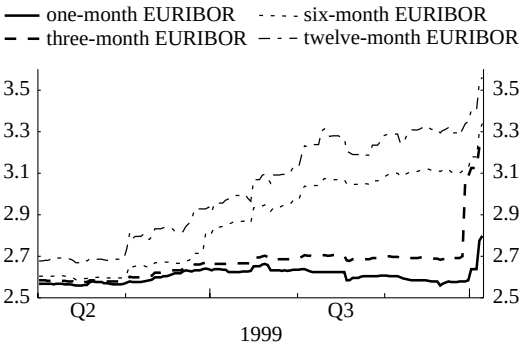
Current account holdings of counterparties

In the eighth reserve maintenance period the average current account holdings amounted to €103.3 billion, and the reserve requirements to €102.6 billion. Compared with the previous reserve maintenance period, the difference between the average current account holdings and the reserve requirements therefore decreased by almost €0.2 billion to less than €0.7 billion. About €0.2 billion of this amount was due to current account holdings not contributing to the fulfilment of reserve requirements as was the case in the previous maintenance period. Approximately €0.5 billion was instead related to excess reserves. This is the lowest amount of excess reserves observed so far. In fact, before the eighth maintenance period, the average amount of excess reserves since the start of Stage Three has been close to €0.7 billion. However, it is too early to state whether the observed reduction in the amount of excess reserves is of a permanent or temporary nature.

Chart 3

Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

EURIBOR interest rates (see Chart 3) also increased in September and early October and stood, on 5 October, at 3.34% and 3.56% respectively, which was 26 and 28 basis points higher respectively than at the end of August.

Long-term bond yields continued to rise in September

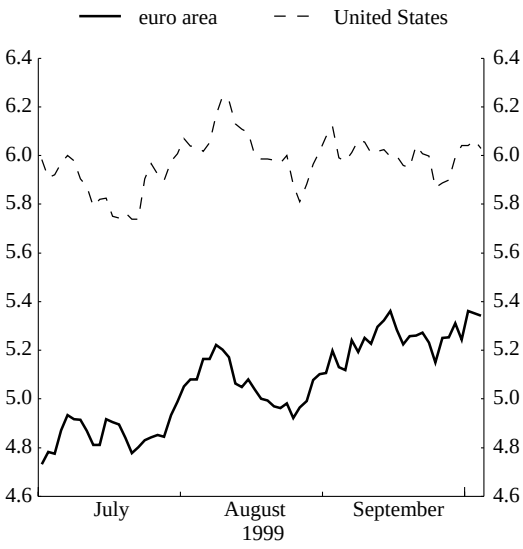
Continuing a trend which has been under way since early May 1999, long-term government bond yields in the euro area rose further in September 1999. On 5 October 1999 the average level of 10-year bond yields in the euro area stood at 5.34%, which was about 25 basis points higher than at end-August (see Chart 4) and more than 130 basis points higher than the levels seen at end-1998. As has been the case since late spring, these upward pressures on long-term bond yields seem to have been mainly associated with changing expectations concerning the future outlook for economic activity in the euro area, while international factors seemed to have played a more limited role. Consistent with the significance of domestic factors in explaining bond market developments during September 1999, the spread of 10-year government bond yields in the United States over comparable yields in the euro area narrowed by more than 20 basis points compared with end-August, standing at about 70 basis points in early October 1999. This brought the spread back to the levels seen at the end of 1998 and left it at almost 90 basis points lower than the peak observed in mid-June 1999.

The international environment for domestic bond market developments had somewhat mixed effects during September 1999. In the United States, in keeping with the pattern which has been evident since June 1999, long-term government bond yields continued to oscillate around levels of close to 6% and did not exhibit any clear trend during September. This overall development reflected a combination of offsetting influences which continued to reflect shifts in market expectations concerning the prospects for future price developments against a background of continued evidence of strong consumer demand in the United States. Among the factors which may have placed downward pressure on long-term bond yields in the United States during September were continued evidence of subdued pressure on prices, lower than expected employment growth and downward revisions to second

Chart 4

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

(percentages per annum; daily data)



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

quarter GDP data. Furthermore, "flight-to-safety" flows related to significant declines in US equity prices during September may have contributed to downward pressures. By contrast, stronger than expected data on business sentiment appeared to place renewed upward pressure on US long-term bond yields in early October. Furthermore, these upward pressures increased following the announcement of the decision by the Federal Open Market Committee of the Federal Reserve on 5 October to leave official interest rates unchanged, but to adopt a bias towards a possible firming of monetary policy in the future.

In Japan long-term bond yields fell by around 30 basis points between end-August and 5 October 1999. This downward pressure on bond yields seems to have been coupled, in part, with the considerable appreciation of the exchange rate of the Japanese yen against other major currencies seen during the course of September, which may have attracted large inflows of capital into Japanese bond markets.

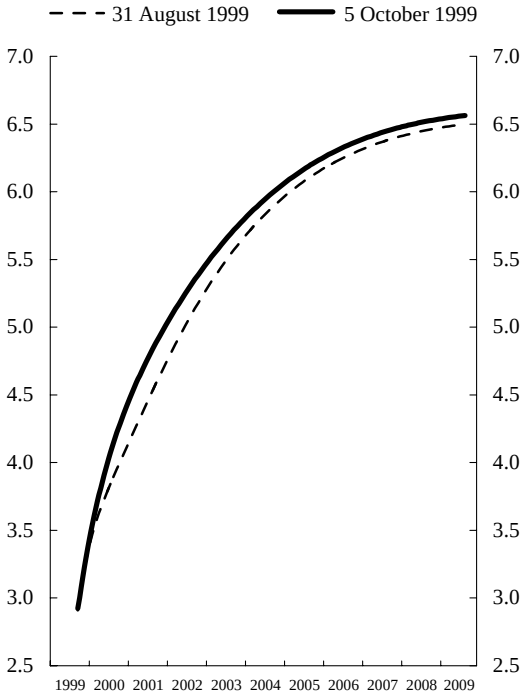
The aforementioned large capital flows into Japanese markets from other parts of the world, including the euro area, may have placed upward pressure on long-term interest rates in the euro area, in particular during the first half of September. Adding to these upward pressures were domestic factors, which, as noted above, seemed to have played the dominant role in determining movements in euro area bond yields during September. In particular, indications of improvements in both consumer and industrial confidence, as well as positive data on industrial production may have led to upward revisions to the expectations of financial market participants regarding the future pace of economic activity in the euro area, and hence to increasing bond yields.

As a consequence of the rise in long-term bond yields, the slope of the forward yield curve became a little steeper at medium to long-term maturities between end-August and 5 October 1999 (see Chart 5). This further

Chart 5

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.

steepening of the yield curve reflected the continuation of a trend which has been evident for much of this year in line with growing optimism about the prospects for future economic activity.

In the French index-linked bond market the increase in the real yield available from index-linked bonds was similar in magnitude to the increase in nominal yields, leaving the "break-even" inflation rate, as derived from the difference between nominal and real bond yields, broadly unchanged between end-August and early October 1999. This would seem to support the view that the main source of the increase in nominal bond yields during September was increasing optimism about the prospects for economic activity in the euro area. Nevertheless, as explained in

Box 2 on page 16 of the February issue of the ECB Monthly Bulletin, care should be exercised when interpreting developments in index-linked bond yields, given the lower level of liquidity which usually characterises these markets.

Stock prices unchanged in September

Following the significant increases observed during August 1999 in a relatively volatile environment, stock prices in the euro area showed little overall change during September 1999, with the broad Dow Jones EURO STOXX index closing at approximately the same level on 5 October 1999 as it had done at end-August (see Chart 6). This left euro area stock prices at more than 8% above end-1998 levels by 5 October 1999. In an environment of improving expectations for economic activity in the euro area, the principal explanation for the volatility in euro area stock prices seemed to have been a spillover of declines in stock prices in the United States during September. In addition, the aforementioned upward movements in domestic long-term bond yields may have placed downward pressure on stock prices.

With regard to the global environment for stock prices in the euro area, in the United States the Standard and Poor's 500 index declined by slightly more than 1% between end-August and 5 October 1999, which left US stock prices at 8% below the peak levels observed in late July 1999. Despite indications of continued strength in the pace of economic activity in the United States, uncertainties as to whether future corporate earnings growth would match the expectations embodied in equity prices seemed to have a subduing influence on US stock prices.

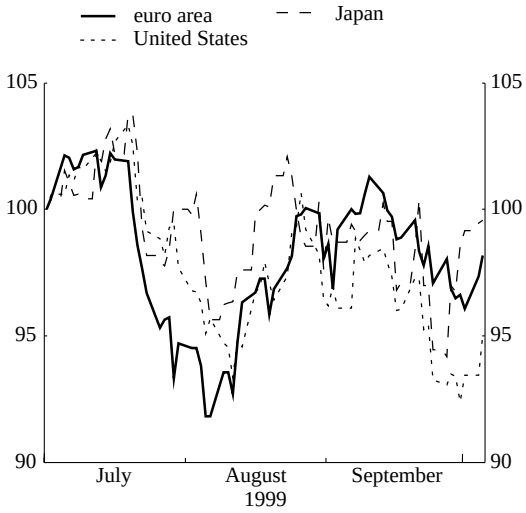
In Japan the Nikkei 225 index increased by 2% between end-August and 5 October 1999. This overall development seemed to reflect a combination of countervailing influences. One factor which may have supported increasing stock prices was the decline in long-term bond yields in Japan. In addition, indications of an improved outlook for the economic situation in Japan may also have played a role. By contrast, negative spillovers from the declines in US stock prices as well as the continued strength of the Japanese yen may have played offsetting roles.

Apart from the negative influence of declining stock prices in the United States, it appears that domestic factors played countervailing roles in the developments which took place in euro area stock markets between end-August and early October. While the further increase in long-term bond yields in the euro area may have placed downward pressure on euro area stock prices by lowering the current valuation of future corporate earnings streams, it appears that this has been offset by improving expectations of economic activity in the euro area.

Chart 6

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

(1 July 1999 = 100; daily data)



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

2 Price developments

Higher energy prices have an impact on HICP increases

The annual increase in the euro area Harmonised Index of Consumer Prices (HICP) rose to 1.2% in August 1999, after having been 1.1% in July and 0.9% in June 1999. This increase was almost entirely caused by developments in energy prices, reflecting the continued rise in the world market price of oil which started at the beginning of this year, with oil prices reaching an average level of €19.2 per barrel in August 1999. By contrast with developments in energy prices, the annual increase in other major components of the HICP has either fallen or remained unchanged (see Table 2 and Chart 7).

In particular, the development of unprocessed food prices has partly offset the impact of the rise in energy prices in recent months. In August 1999 unprocessed food prices declined for the third consecutive month and stood 1.6% lower than a year earlier (as compared with 1.4% lower in July 1999). As in previous months, the decline in unprocessed food prices can mainly be explained by lower prices for fruit and vegetables as a result of seasonal factors. The year-on-year rate of change in services prices fell from 1.6% in July to 1.5% in August 1999. This resulted from the unwinding of a temporary upward effect on the prices of package tours in July. The price increase in the other major components of the HICP, i.e. non-energy industrial goods and

Table 2

Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1996	1997	1998	1998 Q4	1999 Q1	1999 Q2	1999 Q3	1999 Apr.	1999 May	1999 June	1999 July	1999 Aug.	1999 Sep.
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	2.2	1.6	1.1	0.8	0.8	1.0	.	1.1	1.0	0.9	1.1	1.2	.
of which:													
Goods	1.8	1.2	0.6	0.2	0.3	0.6	.	0.7	0.6	0.5	0.7	0.9	.
Food	1.9	1.4	1.6	1.1	1.3	0.6	.	1.2	0.6	0.1	-0.1	-0.2	.
Processed food	2.0	1.4	1.4	1.2	1.2	0.9	.	1.1	0.8	0.7	0.7	0.7	.
Unprocessed food	1.7	1.4	2.0	0.8	1.5	0.3	.	1.2	0.4	-0.7	-1.4	-1.6	.
Industrial goods	1.8	1.0	0.1	-0.2	-0.2	0.6	.	0.6	0.6	0.8	1.1	1.5	.
Non-energy industrial goods	1.4	0.5	0.9	0.9	0.8	0.6	.	0.6	0.6	0.6	0.6	0.6	.
Energy	3.0	2.8	-2.6	-4.4	-3.8	0.8	.	0.3	0.5	1.4	3.2	5.0	.
Services	2.9	2.4	2.0	2.0	1.7	1.6	.	1.7	1.5	1.5	1.6	1.5	.
Other price and cost indicators													
Industrial producer prices [1]	0.4	1.1	-0.8	-2.3	-2.6	-1.3	.	-1.6	-1.4	-1.0	-0.4	.	.
Unit labour costs [2]	2.0	0.7	.	.	.	.	.	-	-	-	-	-	-
Labour productivity [2]	1.2	1.8	.	.	.	.	.	-	-	-	-	-	-
Compensation per employee [2]	3.2	2.6	.	.	.	.	.	-	-	-	-	-	-
Total hourly labour costs [3]	2.5	2.5	1.6	1.9	1.8	.	.	-	-	-	-	-	-
Oil prices (EUR per barrel) [4]	15.9	17.1	12.0	10.1	10.3	15.0	19.7	14.4	14.9	15.6	18.1	19.2	21.8
Commodity prices [5]	-6.9	12.9	-12.5	-20.5	-16.0	-8.2	1.1	-12.5	-7.8	-4.2	-2.3	-0.5	6.6

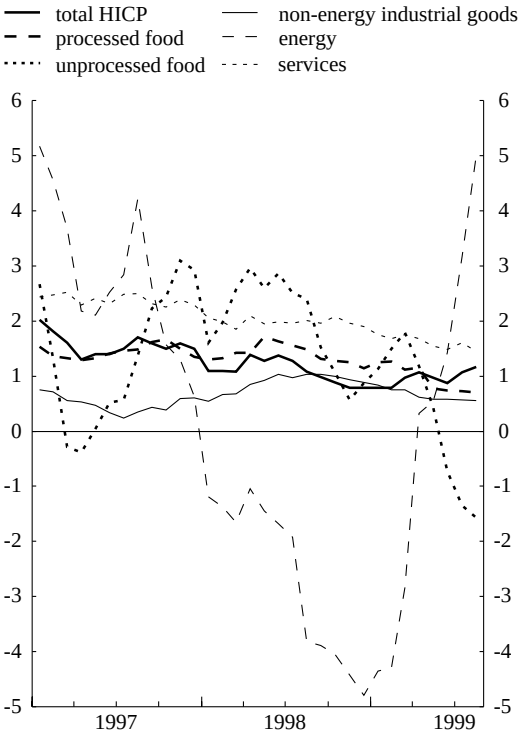
Sources: Eurostat, national data, International Petroleum Exchange, HWWA – Institut für Wirtschaftsforschung (Hamburg) and ECB calculations.

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

Chart 7

Breakdown of HICP inflation in the euro area by components

(annual percentage changes; monthly data)



Source: Eurostat.

processed food, remained unchanged in August 1999, at 0.6% and 0.7% respectively. The annual rate of change in the HICP excluding seasonal food and energy fell from 1.1% in January to 0.9% in May 1999 and has remained broadly unchanged since then.

Looking to the immediate future, there are factors indicating that there may be some upward pressure on prices in the next few months. Most importantly, the further rise in the world market price of oil in September can be expected to have a direct impact on the HICP in the coming months via higher energy prices. Oil prices increased during most of September to reach an average level of €21.8 per barrel for the month as a whole, but fell somewhat in early October and stood at €21.3 per barrel on 6 October 1999. There will also be some further upward movement in the year-on-year rate of change in consumer prices arising from the fact that energy prices were still falling at the end of 1998. In addition, the rise in oil prices since February 1999, by increasing the prices of intermediate goods, has resulted in gradually higher industrial producer prices, which can be expected to put upward pressure in the future on the non-energy industrial goods component of the HICP in particular. The rate of decline in industrial producer prices has diminished in recent months and stood at 0.4% in July 1999. No new data regarding developments in labour costs have become available since the September issue of the ECB Monthly Bulletin. As yet there are no signs of a rise in the rate of increase in labour costs in 1999, as measured by unit labour costs and total hourly labour costs, while future developments need to be monitored closely (see also Box 3). As an offsetting factor, increased competition and deregulation, particularly in the services sector, can be expected to continue to put downward pressure on margins and thereby on the prices of individual components of the HICP.

Box 3

Monitoring wage and labour cost developments in the euro area

Euro area data on wage and labour costs

The monitoring of wage and labour cost developments in the euro area relies on a number of sources of data and information available at both the area-wide and the national level. The wage formation process varies across the euro area owing to differences in the institutional framework, the economic structures and national practices. As a result, national data on wage and labour costs are often based on different definitions, which makes them difficult to aggregate. For the same reason, the availability of harmonised area-wide data on wage and labour costs is limited.

The two major area-wide indicators are unit labour costs (compiled from quarterly national accounts) and the hourly labour cost index, which was first released by Eurostat in April 1999. In quarterly national accounts unit labour costs are calculated as the ratio of compensation per employee to labour productivity. While, within the framework of the ESA 95, unit labour costs and their components will ultimately be available for six sectors in a timely fashion, currently neither timely nor disaggregated information on unit labour costs is available. In some cases Member States have not yet released national accounts data compiled in accordance with the ESA 95 (and have ceased to release data under the old definitions); in other countries data on employment, which are necessary for the unit labour cost calculation, are temporarily suspended or unavailable with the correct sectoral breakdown. Once these initial problems have been resolved, the timeliness of this indicator should become standard. According to current indications, it will be possible to calculate the ESA 95 data on unit labour costs at the euro area level in early 2000, and the normal publication of these data should follow thereafter.

Eurostat also compiles an hourly labour cost index on the basis of national data coming from business surveys and administrative sources. Although these data are not fully harmonised, they are reasonably comparable as Member States aim to use jointly agreed definitions in their methods of calculation. Labour costs include gross wages and salaries, as well as social contributions paid by the employer. Hourly labour costs are defined as the ratio of these costs for all employees (including part-time workers, casual employees and apprentices) to the volume of hours worked. Eurostat currently releases this indicator for industry and for the whole economy with a publication lag of around three months. In fact, the basic data for the indices cover economic activities C to K according to the statistical classification of economic activities in the European Community, "NACE Rev. 1". The data thus include all market economic activities except agriculture, fisheries, forestry, education, health, entertainment, information and personal services. For the whole economy, a breakdown into wages and salaries and other non-wage labour costs is also provided. Since the first release of the hourly labour cost index in April 1999, the data quality has improved and is expected to do so further as Member States incorporate small sectors of the economy initially excluded or improve the estimation of the volume of hours worked.

Apart from the hourly labour cost index, Eurostat also releases conventional earnings indices covering a longer time period. These are based on non-harmonised national data and comprise the wages and salaries paid directly and regularly by the employer. They include social contributions and income taxes paid by the employee, including those withheld by the employer and paid directly to social insurance schemes and tax authorities. However, significant differences exist in the methods of calculation used in the different euro area countries. Therefore, the area-wide aggregate should be interpreted with considerable caution.

A forward-looking assessment of wage developments

A forward-looking assessment of wage developments requires far more information than is available from the area-wide data described above. This is particularly true as such data are released with unavoidable lags and do not appear to have leading indicator properties. A major element in the wage formation process is the outcome of wage negotiations. The results of wage settlements represent a basic indication of forthcoming wage developments. However, the impact of settlements on actual wage developments depends on the precise content of these settlements. These include, in addition to regular wage increases, possible one-off payments, overtime restrictions or payments and other specific arrangements. At the macroeconomic level the number of employees covered by wage negotiations and the wage drift, which reflects the impact of the conjunctural situation on wages actually paid through fluctuations in overtime payments and bonuses, must also be taken into account, as well as other specific factors such as the leading role played by some sectors or the determination of minimum wage increases. Structural changes in labour markets may also affect the wage bargaining process and its impact on actual wage developments. In short, the forward-looking assessment of wage developments is not straightforward and requires a thorough analysis of a wide range of information.

3 Output, demand and labour market developments

Estimates of real GDP growth revised

According to national accounts data published by Eurostat, quarter-on-quarter real GDP growth is estimated to have been 0.3% in the second quarter of 1999. The new data release also contained some downward revisions of data for previous quarters. Quarter-on-quarter real GDP growth in the fourth quarter of 1998 is now estimated to have been 0.1%, i.e. 0.2 percentage point lower than the previous estimate. Similarly, the estimate for the first quarter of 1999 has been revised downwards by 0.1 percentage point, to 0.4%. The quarterly pattern, which shows an improvement in the rate of growth after the end of 1998, was unaffected by these revisions. The higher rate of growth in the first half of 1999 was the result of a less negative contribution to growth from net exports, while the rate of growth of domestic demand was slightly weaker (see Table 3). The growth pattern in the first two quarters of this year was also affected by factors such as weather conditions and holiday patterns. The weakening of domestic demand should not therefore be interpreted as an interruption of the economic recovery.

More generally, it should be kept in mind that Eurostat estimates are now largely based on data compiled in accordance with the new ESA 95 methodology. In view of the far-reaching scope of the changeover to the ESA 95, the possibility of revisions to these first GDP estimates for the second quarter of 1999, as well as the further revision of past data, cannot be excluded. A revised national accounts estimate for the second quarter of 1999 was due to be released on 11 October 1999. As noted above, the new data gave rise to slight downward revisions to euro area GDP growth for recent quarters. Although the prospects for quarter-on-quarter GDP growth in the second half of 1999 have remained unchanged or may even have improved slightly since the September issue of the ECB Monthly Bulletin, the latest downward revisions to past data would result in corresponding revisions to the final outcome for average euro area GDP growth in 1999.

Table 3

Composition of real GDP growth in the euro area

(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates [1]								Quarterly rates [2]				
	1996	1997	1998	1998 Q2	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1998 Q2	1998 Q3	1998 Q4	1999 Q1	1999 Q2
Real gross domestic product	1.3	2.2	2.7	2.8	2.6	1.9	1.6	1.5	0.5	0.5	0.1	0.4	0.3
of which:													
Domestic demand	0.9	1.7	3.3	3.0	3.6	3.1	2.5	2.4	0.4	0.8	0.7	0.6	0.3
Private consumption	1.4	1.3	2.7	2.6	3.2	2.8	2.6	2.0	0.7	0.7	0.4	0.7	0.1
Government consumption	1.8	0.3	1.2	1.3	1.1	1.0	1.2	1.5	0.1	0.1	-0.2	1.3	0.3
Gross fixed capital formation	0.9	2.1	4.2	2.9	4.6	3.2	4.2	5.2	-0.9	2.3	0.1	2.5	0.1
Changes in inventories [3]	-0.5	0.4	0.6	0.6	0.5	0.6	-0.1	-0.2	0.2	-0.2	0.5	-0.6	0.1
Net exports [3]	0.4	0.6	-0.5	-0.1	-0.8	-1.1	-0.8	-0.8	0.1	-0.2	-0.5	-0.1	0.0
Exports [4]	4.4	9.9	6.3	8.9	4.4	1.0	-0.1	0.2	1.3	0.0	-1.5	0.1	1.7
Imports [4]	3.1	8.7	8.5	10.1	7.6	4.6	2.4	2.9	1.2	0.6	0.1	0.5	1.7

Sources: Eurostat and ECB calculations.

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

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

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

4) 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.

Economic activity continues to improve gradually

Industrial production data are now available up to July 1999. These data provide further evidence of increasing activity in the industrial sector. Measured on the basis of three-month moving averages, as shown in Table 4, industrial production excluding construction was 0.7% higher in the period from May to July 1999 than in the previous three months (i.e. the period from February to April 1999). By way of comparison, industrial production had remained broadly unchanged in the first quarter of 1999 from the previous quarter and was still declining in the fourth quarter of 1998. Taking into account the volatility of monthly figures, the data confirm the pattern of a gradual return to positive rates of growth for industrial production that has been emerging over the past few months. In addition, the recovery has become more broadly based, with growth rates improving in all the main sectors of manufacturing production, although the rate of growth in the production of capital goods was still negative in the period from May to July 1999.

No new data from the European Commission Business and Consumer Surveys have been released in time to be included in this issue of the ECB Monthly Bulletin. As shown in Table 5, industrial confidence has been picking up in recent months and returned to its long-term average level in July (see also Box 4 for a more detailed analysis of recent developments in confidence indicators). Available national sources indicate a further rise in industrial confidence in August and September 1999. New data for the Purchasing Managers' Index (PMI) confirm that conditions in the euro area manufacturing sector are improving (see Chart 8). They show a further rise in September to 54.7, compared with values of 53.2 in August and 53.0 in July. September thus represents the sixth consecutive month in which the index has been above the key level of 50, after a turnaround in the fourth quarter of 1998. In September 1999 the increase in the overall PMI was fairly evenly divided among its five components. In particular, it reflected further increases in new orders and an increase in suppliers' delivery times, thereby pointing to a strengthening of demand in the manufacturing sector.

Short-term indicators provide some evidence of a slight slowdown in private consumption growth in the first half of 1999 from the high levels recorded in 1998. The growth of retail sales volumes, at around 3% in the second half of 1998, declined somewhat but at around 2% in the first half of 1999 remained relatively

Table 4

Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	1997	1998	1999 May	1999 June	1999 July	1999 May	1999 June	1999 July	1999 Feb.	1999 Mar.	1999 Apr.	1999 May	1999 June
						month-on-month			3-month moving averages				
Total industry excl. construct.	4.4	4.2	-0.7	0.8	0.1	0.6	0.5	0.1	-0.1	-0.1	0.4	0.2	0.7
Manufacturing	5.0	4.7	-1.0	0.5	-0.1	0.7	0.4	0.3	0.0	-0.1	0.4	0.1	0.9
by main industrial groupings:													
Intermediate goods	5.4	3.9	-1.4	0.2	0.0	0.1	0.3	0.2	-0.2	-0.1	0.1	0.1	0.4
Capital goods	4.8	6.7	-0.9	0.5	-1.4	-0.3	0.2	-0.2	-0.4	-0.5	-0.4	-0.2	-0.2
Consumer goods	2.7	3.0	0.4	1.2	0.3	1.6	-0.1	0.4	0.4	0.1	0.5	0.1	1.1
Durable consumer goods	2.7	6.3	0.9	1.6	-0.5	1.5	0.0	-0.3	-0.2	-0.2	0.2	0.2	1.0
Non-durable consumer goods	2.6	1.4	-0.5	0.5	0.5	-0.1	0.1	0.2	0.0	0.1	0.1	0.0	0.1

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 5

Results from EC Business and Consumer Surveys for the euro area

(seasonally adjusted data)

	1996	1997	1998	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Feb.	1999 Mar.	1999 Apr.	1999 May	1999 June	1999 July
Economic sentiment index [1]	-2.7	2.4	3.1	0.0	-0.7	0.5	-0.2	-0.2	-0.3	0.2	-0.2	0.0	0.4
Consumer confidence indicator [2]	-8	-3	7	7	10	12	8	12	11	9	8	7	9
Industrial confidence indicator [2]	-8	4	7	7	1	-3	-2	-3	-4	-3	-3	-1	0
Construction confidence indicator [2]	-13	-10	4	10	8	14	16	14	14	16	15	17	18
Retail confidence indicator [2]	-5	-3	4	5	3	3	2	2	0	5	3	-3	0
Capacity utilisation (%) [3]	80.3	81.6	83.1	83.3	82.4	81.9	81.8	-	-	81.9	-	-	81.7

Source: European Commission Business and Consumer Surveys.

1) Percentage changes compared with the previous period; index 1985 = 100.

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

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

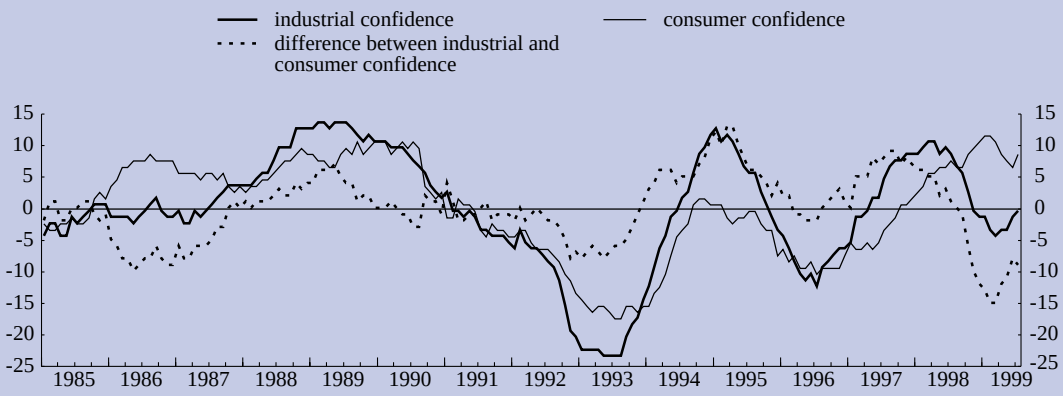
Box 4

Recent developments in industrial and consumer confidence in the euro area

The most remarkable feature of recent developments in survey data has been the divergence between industrial and consumer confidence in the second half of 1998. Both the extent of the difference and the fact that the two indicators moved in opposite directions for several months are unusual from a longer-term perspective (see the chart below). Consumer confidence saw a continuous increase to record high levels, while industrial confidence fell continuously to levels below its long-term average. In earlier periods of divergence movements in consumer confidence have normally followed movements in industrial confidence with only a short lag and differences between the two indicators have mainly arisen as a result of the higher amplitude of the cyclical movements in industrial confidence. When the difference reached its highest point in early 1999, the concern was expressed that consumer confidence would eventually follow the downward path of industrial confidence and fall rapidly to below average levels. This could then have had a negative impact on domestic demand and could thereby have delayed a recovery of industrial confidence. Looking at the latest developments

Industrial and consumer confidence in the euro area

(percentage balances; monthly data)



Source: European Commission Business and Consumer Surveys.

Note: Data shown are calculated as deviations from the average over the period since January 1985.

up to July 1999, industrial confidence returned to its long-term average level and consumer confidence remained fairly close to all-time high levels. While the aforementioned risk to demand and output growth has thus largely diminished, the question remains as to what caused the unusually large and prolonged divergence between the two confidence indicators.

Divergences may be explained in terms of the components of industrial and consumer confidence

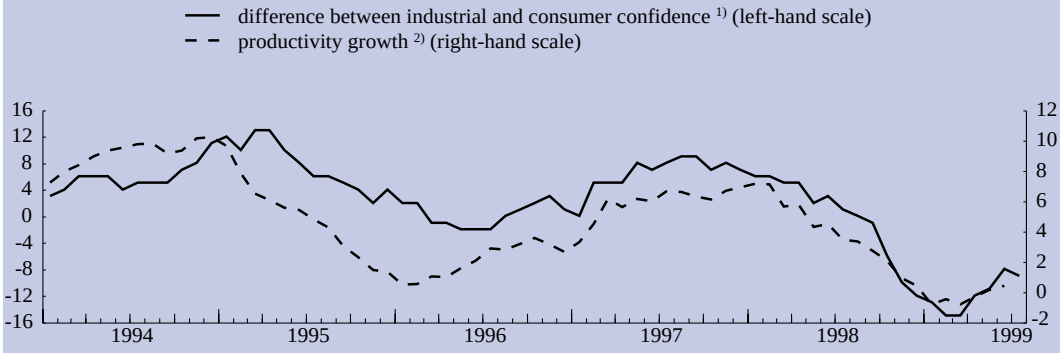
Possible causes of divergences between industrial and consumer confidence can be gauged from the respective survey questions underlying these composite indicators. For industrial confidence the three questions relate to production expectations, the assessment of order books and the assessment of stocks of finished products, all of which bear a close relationship to actual production developments. By contrast, the five questions underlying the consumer confidence series cover assessments of a more general nature. Correlation analysis shows that households' assessments of their financial situation in the past and in the future more strongly reflect employment growth, which is a major determinant of household income, while the assessments of the general economic situation in the past and in the future also reflect output developments. Finally, the willingness to make major purchases at present appears to be determined to a lesser extent by contemporaneous employment and output developments than are the aforementioned responses to the consumer survey. While for industrial confidence the individual questions may be considered more forward-looking, for consumer confidence this is the case for less than half of the questions, giving rise to lags between the two indicators which are similar to those between output and employment developments. At the same time, the leading indicator property of confidence data with regard to actual developments derives from the more timely availability of survey data.

Divergences broadly reflect the productivity cycle

Given that output growth and employment growth appear to be key determinants of industrial and consumer confidence respectively, the differences between the two confidence indicators may be seen as reflecting the differences between output and employment growth, i.e. productivity growth. As changes in employment growth tend to follow the cyclical movements of output growth with a more or less stable time lag, differences between industrial and consumer confidence are expected to be only short-lived and to follow the regular cyclical pattern of productivity growth (see the chart below). It should be noted that the business survey covers manufacturing firms only, whereas the consumer survey covers the household sector as a whole. This implies that consumer confidence will be influenced by employment growth in the overall economy rather than in

Productivity growth and the difference between industrial and consumer confidence in the euro area

(percentage balances; annual percentage changes; monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.
1) Data shown are calculated as deviations from the average over the period since January 1985.
2) Manufacturing; data shown are calculated by using three-month centred moving averages for industrial production.

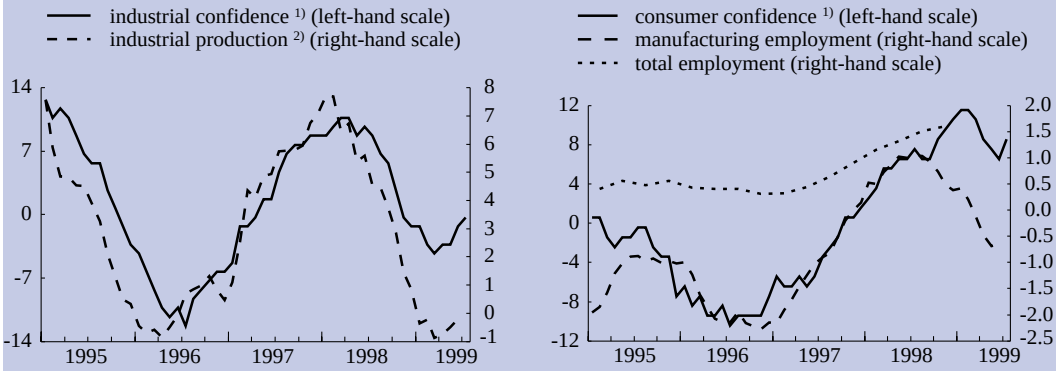
manufacturing, which would give rise to a looser relationship between productivity growth in manufacturing and the difference between the two confidence indicators. However, developments in the cyclically sensitive manufacturing sector tend to carry over to important parts of the services sector, thus shaping opinions on the corporate sector as a whole and on the general economic situation to a larger extent than would correspond to the manufacturing sector's weight in overall GDP. If perceptions of the whole economy are dominated by developments in industry, industrial confidence may also be seen as having a particularly strong effect on households' assessment of the general economic situation, leading to an even closer alignment with overall consumer confidence. Unless there is a protracted decoupling of developments in industry from those in the remaining sectors of the economy, divergences between industrial and consumer confidence will only be temporary and will be reflected in the manufacturing productivity cycle.

Recent divergence is partly explained by pronounced differences in sectoral employment patterns

Both industrial and consumer confidence started to improve in mid-1996 from below-average levels (see the chart below), but industrial confidence returned to its average level half a year earlier than consumer confidence, i.e. in May 1997 compared with October 1997, giving rise to a positive difference between the two indicators. Employment growth in the manufacturing sector improved in the course of 1997 and eventually turned positive at the end of the year. This pattern of growth was also observed in total employment growth, albeit at positive rates, thus triggering further increases in consumer confidence. At the same time, industrial production growth and industrial confidence both started to decline early in 1998. Consumer confidence continued to increase, even though a slowdown in manufacturing employment growth set in during the second half of 1998, owing to continuously strong growth in total employment. This underlying divergence in the pattern of sectoral employment growth may explain the pronounced difference between industrial and consumer confidence emerging in early 1999. No data are available to date for total employment growth in the first half of 1999, but no more than a slight slowdown is likely, thus explaining why consumer confidence remained close to the record high levels observed earlier in the year. Industrial confidence began to recover in line with a turnaround in production growth at the end of the first quarter of 1999. This implied a partial reversal of the divergence between the developments in industrial and consumer confidence, coinciding with a parallel development in productivity growth.

Confidence data and related economic developments in the euro area

(percentage balances; annual percentage changes; monthly data except for total employment)



Sources: European Commission Business and Consumer Surveys and Eurostat.
1) Data shown are calculated as deviations from the average over the period since January 1985.
2) Manufacturing; data shown are calculated by using three-month centred moving averages.

high. However, growth in new passenger car registrations accelerated in the first two quarters of 1999 and stood 7.1% and 8.3% higher, respectively, than a year earlier, thus representing a continuation of the rates of growth recorded in 1998. In July and August there were further increases of 10.4% and 5.3% respectively.

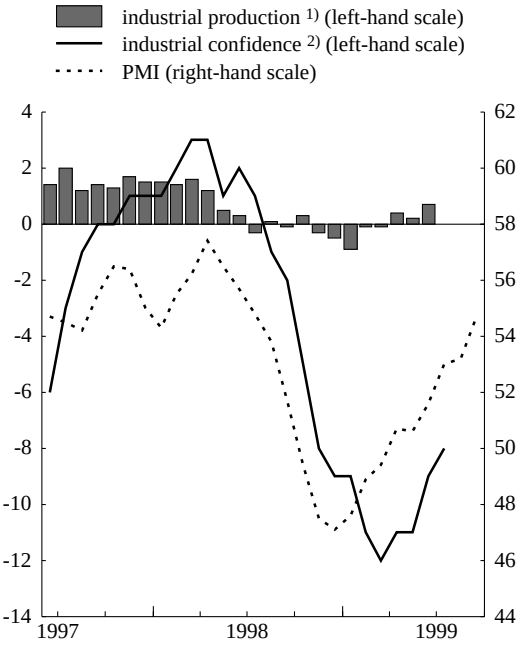
Consumer confidence picked up again in July, after having declined for four consecutive months (see Table 5). Despite the decline in confidence in the first few months of the year, consumer confidence remains at a relatively high level – indeed higher than at any time between mid-1990 and mid-1998. Thus any adverse impact on consumption of the earlier decline is likely to be limited. Furthermore, households' assessment of their financial situation in the future as well as their plans to make major purchases have remained favourable despite a worsening in their assessment of the general economic situation in the first quarter of 1999.

Overall, on the basis of available short-term indicators, there appears to be increasing evidence that the contraction in industrial activity came to an end at the start of the second quarter of 1999. While there appears to have been a turning-point in activity, it is too early to draw firm conclusions regarding the speed and magnitude of this recovery, and thus its impact on overall growth. At the same time consumer confidence has remained robust. In particular, the fact that durable consumption growth appears to have remained relatively strong in the first half of 1999 may indicate a high degree of confidence about future incomes.

Chart 8

Industrial production, industrial confidence and PMI for the euro area

(monthly data)



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

1) Percentage changes compared with the previous three-month moving average; seasonally and working day adjusted data; total industry excluding construction.

2) Percentage balances.

Unemployment virtually unchanged since March 1999

While no recent employment data for the euro area economy as a whole are currently available, on the basis of national data and other partial information employment growth is estimated to have slowed down somewhat in the second quarter of 1999. In the first quarter net job creation was estimated to have continued at the same pace as in the fourth quarter of 1998 (i.e. 0.4% quarter-on-quarter). The more recent weakening in employment growth is mainly attributable to adverse developments in the manufacturing sector, where employment fell by 0.4% quarter-on-quarter in the second quarter of this year. This decline in employment reflects the weak developments in industrial production observed since the fourth quarter of 1998. However, the fall is expected to be short-lived as business surveys in the manufacturing sector indicate more favourable employment prospects for the second half of the year. In the services sector employment seems to have continued to increase at a steady pace against the background of sustained consumer confidence and private consumption. In this sector the

Table 6

Employment growth in the euro area

(annual percentage changes, unless otherwise indicated)

	1997	1998	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Apr.	1999 May	1999 June
							Quarterly rates [1]						
Whole economy [2]	0.6	1.4	1.5	1.6	.	.	0.5	0.4	.	.	-	-	-
Total industry	-1.4	-0.9	0.3	0.4	0.1	.	1.8	-0.1	-0.3	.	.	.	.
Construction	-0.4	-1.0	-0.3	2.1	2.6	.	3.2	1.7	0.6	.	.	.	.
Total industry excl. construct.	-1.4	0.5	0.7	0.2	-0.2	-0.8	0.0	-0.2	-0.2	-0.4	-0.7	-0.9	-0.8
Manufacturing	-1.0	0.8	1.0	0.5	0.2	-0.6	0.1	-0.2	-0.1	-0.4	-0.5	-0.7	-0.7

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

increasing use of more flexible forms of employment, such as short-term contracts and part-time working, together with moderate wage developments overall, may have contributed to fostering employment growth in the recent past.

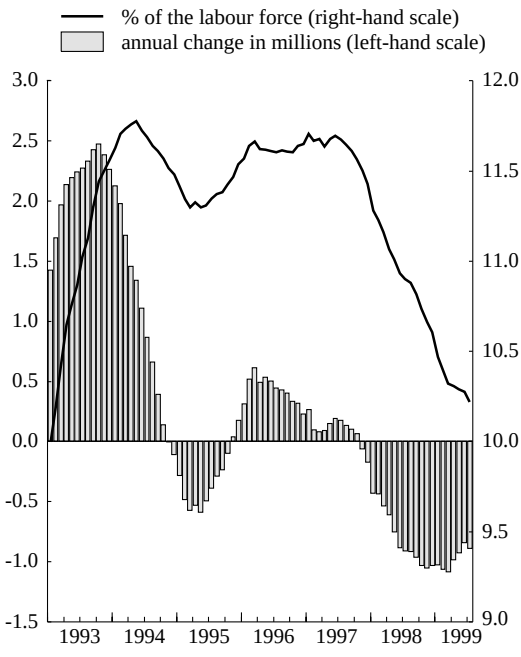
The standardised rate of unemployment for August was not yet available by the cut-off date of this issue of the ECB Monthly Bulletin. As reported in the September issue of the ECB Monthly Bulletin, the euro area unemployment rate stood at 10.2% in July 1999, i.e. 0.1 percentage point lower than in the four previous months. National data available suggest that the unemployment rate for the euro area in August was either unchanged from July or possibly slightly higher. This would be consistent with the picture of a slowdown in employment growth in the second quarter of 1999. The broadly unchanged rate of unemployment that has been observed since March 1999 might partly be a result of cuts in employment schemes which, in some countries, were implemented or enhanced last year. In particular, this factor could explain why the decline in youth unemployment slowed down in the second quarter of 1999.

To summarise, it seems that the temporary slowdown in economic activity which occurred at the turn of the year might have had a limited and short-lived impact on employment growth. However, the assessment of actual employment developments remains difficult owing to the fact that some data have still not become available. Overall, the decline in euro area unemployment appears to have been very limited since March, reflecting further reductions in the rate of unemployment in only a few euro area countries.

Chart 9

Unemployment in the euro area

(monthly data; seasonally adjusted)



Source: Eurostat.

Table 7

Unemployment in the euro area

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

	1996	1997	1998	1998 Q3	1998 Q4	1999 Q1	1999 Q2	1999 Feb.	1999 Mar.	1999 Apr.	1999 May	1999 June	1999 July
Total	11.6	11.6	10.9	10.9	10.7	10.4	10.3	10.4	10.3	10.3	10.3	10.3	10.2
Under 25 years [1]	23.9	23.3	21.4	21.3	20.9	20.1	19.5	20.1	19.8	19.6	19.5	19.4	19.3
25 years and over [2]	9.8	10.0	9.4	9.4	9.2	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.9

Source: Eurostat.
Note: According to ILO recommendations.
1) In 1998 this category represented 24.5% of total unemployment.
2) In 1998 this category represented 75.5% of total unemployment.

4 Exchange rate and balance of payments developments

Euro broadly stable in effective terms despite changes vis-à-vis major currencies

The rapid strengthening of the Japanese yen against other major currencies, which mainly occurred in the first half of September, continued to be the dominant theme in the currency markets during that month. The strengthening of the yen principally occurred against the background of an improved economic outlook and a generally more positive market sentiment in Japan. Towards late September the euro recovered somewhat against the yen and also rose against the US dollar as a result of further signs of a pick-up in euro area economic activity, tension in US stock markets and the release of US trade data. Foreign exchange markets in emerging market economies were broadly calm throughout the month amid a generally improved economic outlook in those economies.

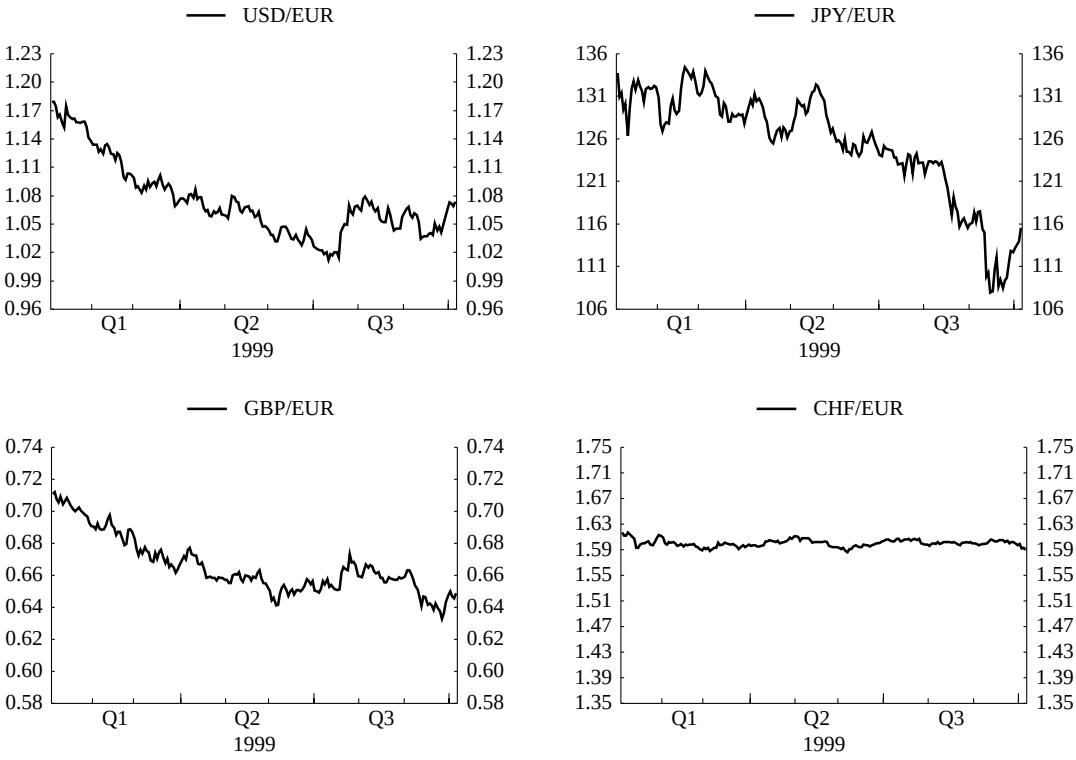
The euro initially weakened against the US dollar in September, but strengthened rapidly towards the end of the month (see Chart 10). The turn in the US dollar-euro exchange rate was mostly attributable to expectations in financial markets of rising interest rates in the euro area, against the background of further indications of an improvement in economic activity. At the same time, the downward correction in stock markets in the United States in late September and the release of trade data showing a further increased US trade deficit had a negative impact on the US dollar. Furthermore, the downward revision of US quarterly growth in the second quarter to 1.6% (from 1.8%, at annualised rates) contributed to the weakening of the dollar. On 6 October the euro stood at USD 1.07.

The Japanese yen, which has been strengthening against other major currencies since early August, continued its rally until mid-September. From early-September to mid-September alone the yen strengthened by 7½% against the euro and by 5% against the US dollar. By mid-September the yen had reached a peak of JPY 108 vis-à-vis the euro (24% higher than at the beginning of the year) and JPY 104 against the US dollar (9% higher than at the beginning of the year). Thus the yen reached its highest level against the US dollar in almost 4 years. The fundamental driving force behind the strengthening of the yen was the improvement in the economic situation and outlook for Japan. In addition to the turnaround in growth, the yen has also been boosted by a reversal in capital flows towards yen-denominated assets, a significant rise in the Nikkei stock market index this year and the rising current account surplus, which is projected by the IMF to reach 3½% of GDP in 1999. From mid-September onwards, however, the yen actually reversed its strengthening from earlier in the month in the context of significant exchange rate

Chart 10

Patterns in exchange rates

(daily data)



Source: ECB.

variability. The turnaround may also have been attributable to the statement issued by the G7 finance ministers expressing concern about the rapid appreciation of the yen. On 6 October the euro was quoted at JPY 116, i.e. around the same level as at the beginning of September.

The pound sterling also appreciated against the euro and the US dollar in the first half of September. The rapid strengthening of the pound against the euro was mainly a result of both the largely unexpected interest rate rise on 8 September and a better than expected outlook for the UK economy. The Bank of England expressed increasing concerns about the strong growth in private consumption and house prices, despite the fact that the current projection for the consumer price index remains below the 2.5% target level over the two-year horizon. In addition, the improving July trade figures provided further evidence that UK exporters may be adapting to the appreciating currency, as evidenced by strong exports to both non-euro area and euro area countries. On 6 October the euro stood at GBP 0.649. The Swiss franc moved very closely in line with the euro as in earlier months, with the daily deviations being at a maximum of about ½% from the average level of CHF 1.60 vis-à-vis the euro in the period under review.

The ERM II currencies changed very little against the euro in September (see Chart 11). However, the Greek drachma depreciated slightly (by around ½%) in the context of a substantial drop in the Athens stock market, which was mainly seen as a result of profit-taking in view of the surge in the stock market earlier this year.

Box 5

Effective exchange rates for the euro

This issue of the ECB Monthly Bulletin contains, for the first time, the effective exchange rate (EER) indices for the euro as compiled by the European Central Bank (ECB) in collaboration with the national central banks of the 15 EU Member States. The resulting EER series are regarded as appropriate indices for summarising exchange rate developments relevant for the euro area, and the Eurosystem intends to use them as a common means of measuring exchange rate movements. Until now, the Eurosystem has relied on the existing series calculated by the Bank for International Settlements (BIS). Given that the underlying method is broadly the same and the partner country coverage is very similar, the differences between the ECB and BIS series are only minor. The new EER series will be published regularly in the "Euro area statistics" section of the Monthly Bulletin and, together with complete backdata, on the ECB's Web site, which also contains further information on these series. The main features of the methodology for compiling the ECB's euro EER indices are explained below.

Effective exchange rates are important indicators for assessing the external economic conditions affecting a country or currency area. The *nominal* effective exchange rate is a summary measure of the external value of the currency of a country or area vis-à-vis the currencies of the most important trading partners of that country or area, while the *real* effective exchange rate – obtained by deflating the nominal rate with appropriate price indices – is the most commonly used indicator of international price and cost competitiveness. The monitoring of effective exchange rate developments constitutes an important element of the ECB's evaluation of the monetary situation in the euro area, in particular as part of the second pillar of the monetary policy strategy of the Eurosystem, i.e. the broadly based assessment of the outlook for price developments (the strategy was outlined in the article entitled "The stability-oriented monetary policy strategy of the Eurosystem" in the January 1999 issue of the ECB Monthly Bulletin).

At this stage two effective exchange rate indices will be published: a nominal EER and the corresponding real EER using consumer price indices as deflators. The *nominal* EER will be available on a daily basis and the *real* EER will be available on a monthly basis. The ECB's *nominal* EER is defined as a geometric weighted average of bilateral euro market exchange rates against the currencies of 13 partner countries (see the table below). The importance as a trading partner for the euro area as well as data availability constituted the principal criteria for selecting the partner countries. The ECB's *real* EER is the geometric weighted average of relative consumer prices between the euro area and each trading partner, expressed in common currency. The price indices used for the euro area, the other EU Member States and Norway are the Harmonised Indices of Consumer Prices (HICPs) published by Eurostat, while for the other countries the national consumer price indices (CPIs) are used.

The weights for the 13 trading partners are derived from the euro area's manufacturing trade (SITC 5-8) with these countries, averaged over the period from 1995 to 1997. Individual country weights are the average of export and import shares, whereby the method of "double-weighting" is adopted in the derivation of export shares in order to capture third-market effects, i.e. considering the fact that euro area exporters compete in foreign markets with both domestic producers and other exporters.[1] Although the weighting scheme is fixed, as the weights are applied uniformly over the whole period for which the index is computed, the weights will be updated every five years so that gradual shifts in trade patterns can be taken into account. For the period prior to the launch of the euro, the EER index uses trade weights to determine "theoretical" euro exchange rates. These weights are based on the three-year average (1995-97) of the manufacturing trade of each euro area Member State in extra-euro area trade (see the table below).

1 *For a detailed description of the double-weighting method to capture third-market effects, see P. Turner and J. Van't dack* "Measuring International Price and Cost Competitiveness*", BIS Economic Paper No. 39, 1993.*

Weights of the 13 major trading partners in the ECB's effective exchange rate index

(as percentages)

Partner countries	EER weights
United States	24.72
United Kingdom	23.92
Japan	14.78
Switzerland	8.71
Sweden	6.14
Korea	4.80
Hong Kong SAR [1]	3.83
Denmark	3.45
Singapore	3.44
Canada	1.93
Norway	1.68
Greece	1.47
Australia	1.12

Source: ECB.
Weights may not add up to 100% due to rounding.
1) Special administrative region.

Weights for the "theoretical" euro

(as percentages)

EMU legacy currencies	"Theoretical" euro weights
Deutsche Mark	34.66
French franc	17.83
Italian lira	14.34
Dutch guilder	9.19
Belgian and Luxembourg franc	8.01
Spanish peseta	4.95
Irish pound	3.75
Finnish markka	3.27
Austrian schilling	2.91
Portuguese escudo	1.08

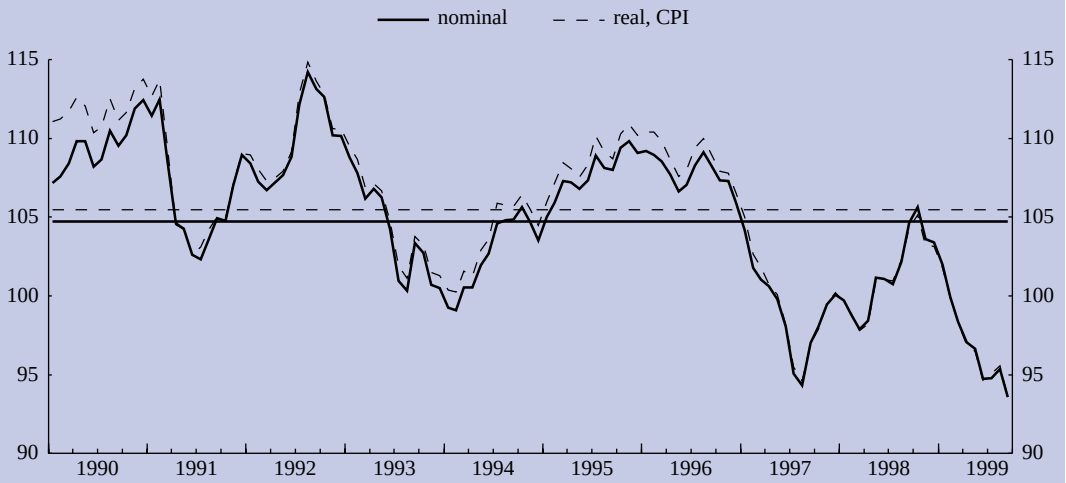
Source: ECB.
Weights may not add up to 100% due to rounding.

The base period for both effective exchange rate indicators in the ECB Monthly Bulletin is the first quarter of 1999 (1999 Q1 = 100). This enables a straightforward assessment of the performance of the euro since its introduction, while being sufficiently broad in order to minimise any bias when selecting a particular trading day as the base for the index. However, it should be noted that the choice of base period bears no relation to an "equilibrium value" of the euro and should not, therefore, be interpreted as such.

Both effective exchange rate series have been moving in parallel over the past couple of years (see the graph below), thus suggesting that price development patterns in the euro area have been closely in line with those in

Nominal and real effective exchange rates [1]

(monthly averages; index 1999 Q1 = 100)



Source: ECB.
1) Data are ECB calculations. An upward movement of the index represents an appreciation of the euro. Horizontal lines are averages over the period shown (January 1990 to September 1999).

its major trading partners. The effective exchange rate of the euro vis-à-vis the currencies of the euro area's 13 major trading partners deflated by consumer prices, which can be seen as one of the indicators of competitiveness, declined by around 5% in the third quarter when compared with the first quarter of 1999, thus indicating an improvement in competitiveness. From a historical perspective, in September 1999 the real effective exchange rate of the euro stood at around 12% below its 1990-98 average level.

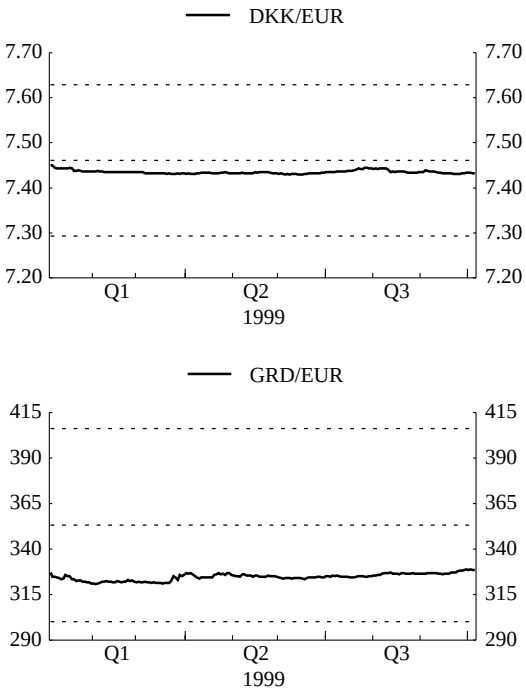
The ECB is planning to supplement the set of euro EER indicators against the group of 13 major partner countries by including additional deflators, in particular producer price indices, unit labour costs, GDP and import and export price deflators, to enable a more comprehensive assessment of euro area price and cost competitiveness to be carried out. In addition, a nominal and real effective exchange rate index against a broader group of partner countries is also planned for release in due course.

Despite significant variability in all major bilateral euro exchange rates, in nominal effective terms the euro stood at the same level at the end of the reporting period on 6 October as at the beginning of September. In mid-September, however, it fell 10.8% below the level recorded when the euro was launched. This fall in the effective exchange rate index was mostly due to the depreciation of the euro against both the Japanese yen and the pound sterling. On 6 October the effective exchange rate stood at around 8½% below the level recorded on 4 January 1999.

Chart 11

Patterns of exchange rates within ERM II

(daily data)



Source: ECB.
Note: The horizontal lines indicate the central parity and the respective fluctuation bands (±2.25% for DKK and ±15% for GRD).

Current account surplus lower in July compared with last year

The current account surplus of the euro area was €8.2 billion in July 1999, which was €4.1 billion lower than the surplus recorded for the same month last year. The decline was largely due to a smaller surplus in trade in goods and services combined with an increase in the deficit on current transfers. The current account surplus of the euro area for the first seven months of 1999 was €34.6 billion, i.e. €7.5 billion lower than that for the same period last year (see Table 8).

The balance on goods in the euro area recorded a surplus of €13.3 billion in July, compared with ECU 15.3 billion for the same month a year ago. During the first seven months of 1999 the surplus on trade in goods decreased to €58.9 billion, compared with the surplus of ECU 70.1 billion recorded in the first seven months of last year, as the value of exports and imports of goods fell by €20.5 billion and €9.2 billion respectively. However, recent data may suggest a reversal of this trend as, for each of the three months between May and July this year, imports increased compared with the same period last year, while exports in June and July were only

Table 8

Balance of payments of the euro area [1)]

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

	1998 Jan. - July	1999 Jan. - July	1999 May	1999 June	1999 July
Current account balance	42.1	34.6	2.5	5.1	8.2
Credits	759.3	727.7	101.0	111.3	111.9
Debits	717.3	693.1	98.5	106.2	103.7
Goods balance	70.1	58.9	6.5	8.9	13.3
Exports	460.5	440.0	60.6	66.9	69.4
Imports	390.4	381.2	54.1	57.9	56.0
Services balance	2.6	-4.1	0.1	-1.3	0.8
Exports	144.5	129.8	18.2	20.2	22.7
Imports	141.9	133.9	18.2	21.5	21.9
Income balance	-8.4	-1.4	-1.3	0.8	-1.5
Current transfers balance	-22.2	-18.7	-2.7	-3.3	-4.4
Capital account balance	6.9	5.8	0.9	0.8	0.7
Financial account balance	26.3	-37.3	-7.4	-10.6	-3.4
Direct investment	-34.5	-69.4	-17.0	-17.3	-5.7
Abroad	-88.8	-107.3	-25.4	-23.4	0.1
In the euro area	54.3	38.0	8.4	6.1	-5.8
Portfolio investment	-41.7	-88.5	-27.6	-11.6	3.0
Assets	-220.3	-152.7	-25.0	-28.9	-19.0
Liabilities	178.6	64.2	-2.6	17.3	22.1
Financial derivatives	-5.2	1.3	-3.2	1.5	1.8
Other investment	107.7	104.7	36.6	12.4	-1.8
Reserve assets	0.1	14.5	3.9	4.4	-0.7
Errors and omissions	-75.3	-3.1	4.0	4.7	-5.5

Source: ECB.
Note: For the financial account, a positive sign indicates an inflow, a negative sign an outflow. A more detailed set of tables may be found in Section 8 of the "Euro area statistics" section of this Monthly Bulletin.
1) Figures may not add up due to rounding.

marginally lower compared with the same months in 1998.

More detailed trade data, which are available only for the first five months of 1999, suggest that the decline in the trade surplus over this period, when compared with the first five months of 1998, was mostly due to movements on the imports side. A persistently high level of import volumes, combined with rising import prices from the beginning of the year, seem to explain the corresponding recovery in the value of imports compared with last year, whereas export values remained low as both export volumes and prices continued to be subdued. The sharp rise in import prices of goods thus far this year has mainly been due to both the rise in oil prices and the depreciation of the euro. However, after falling considerably last year, import prices remained at a lower level for the first five months of 1999 compared with the same period last year, which may partly explain the high level of import volumes recorded for this period.

In July 1999 trade in non-goods also contributed substantially to the decline in the current account surplus compared with last year as the deficit on current transfers increased by €2.1 billion, while the surplus on services declined by around €0.7 billion, compared with the same month a year ago. By contrast, the income account registered a

slightly smaller deficit of €1.5 billion compared with the deficit of ECU 2.3 billion recorded for July of last year. During the first seven months of 1999 the deficit on both current transfers and income accounts declined compared with the corresponding period in 1998, falling by €3.5 billion and €7 billion respectively. For the first seven months of this year, the balance on services registered a deficit of €4.1 billion, as opposed to a surplus of ECU 2.6 billion for the same period last year.

Combined net outflow for direct and portfolio investment in July significantly lower than in previous months

In parallel with a strengthening of the euro in July, the combined net outflow for direct and portfolio investment was significantly lower than in previous months (€2.7 billion, compared with €28.9 billion in June and €44.6 billion in May). Both a lower direct investment net outflow and a pronounced shift from net outflow to net inflow for portfolio investment contributed to this result.

Net direct investment outflows amounted to €5.7 billion in July, significantly lower than the level of around €17 billion reached in both June and May. The main reason for this was the fact that euro area residents marginally reduced their foreign direct investment holdings. This came in sharp contrast to June and May, when euro area residents increased their holdings by €23.4 billion and €25.4 billion respectively. Similarly, foreign investors reduced their direct investment holdings in the euro area in July, as reflected by outflows from the euro area amounting to €5.8 billion. In previous months, by contrast, inflows amounting to between €6 billion and €8 billion were observed. The July results appear to have been influenced by short-term financial transactions between multinational companies, e.g. the reduction of claims of resident "parent companies" vis-à-vis their non-resident affiliates. In accordance with international standards, these flows are recorded in the direct investment account.

Over the first seven months of this year net direct investment outflows more than doubled as compared with the same period last year. This was due to both lower foreign investment in the euro area amounting to €38.0 billion, compared with ECU 54.3 billion in 1998, and higher direct investment abroad by euro area residents of €107.3 billion, up from the level of ECU 88.8 billion recorded for the first seven months of 1998.

Portfolio investment recorded net inflows of €3.0 billion in July, in sharp contrast to the substantial net outflows reported in June (€11.6 billion), May (€27.6 billion) and for the year up to July (€88.5 billion). In particular, net purchases of assets abroad by euro area residents increased by less in July than in June, i.e. €19.0 billion as compared with €28.9 billion. At the same time, non-residents increased their net purchases of euro area securities to €22.1 billion, up from €17.3 billion in June. However, foreign portfolio investment in the euro area, although higher than in previous months, remained moderate in July, as compared with average monthly inflows observed last year.

The decrease in euro area residents' portfolio investment abroad recorded in July was most pronounced with regard to equities. After two months of strong outflows (€11.8 billion in June and €11.7 billion in May), net purchases of foreign equities fell sharply to €5.2 billion in July. At the same time, foreign net purchases of euro area equities were slightly lower than a month ago.

Furthermore, net outflows of debt instruments were far lower in July than in recent months, i.e. they amounted to €1.3 billion as compared with, for example, €12.4 billion in June. This was a result of lower net purchases by residents of foreign debt instruments (bonds and notes, and money market instruments) than a month ago (€13.9 billion as compared with €17.1 billion in June), and substantially increased net

purchases of euro area debt instruments (from €4.7 billion in June to €12.6 billion in July). Consequently, with regard to the composition of inflows, for the first time since April foreign residents were net investors in longer-term euro area bonds and notes. In both May and June foreign investors had been net sellers of longer-term euro area debt instruments. The move in July into longer-term investments coincided with a significant strengthening of the euro vis-à-vis the US dollar in that month and a narrowing of the yield differential between euro area and US long-term government bonds.

Inflation differentials in a monetary union

The single monetary policy is directed at maintaining price stability in the euro area as a whole. The move to the single currency and the adoption of the euro were based on the successful completion of a convergence process towards low inflation rates in all participating countries. However, monetary union per se does not necessarily imply that, at any given point in time, all of the participating countries will experience the same rate of inflation. At present, differences in the rate of change of the Harmonised Index of Consumer Prices (HICP) across euro area countries can be observed, although they are very small by historical standards.

Moreover, by comparison with the experience within the United States, a long-established monetary union of comparable size, current levels of inflation differentials do not appear to be unusually high. With regard to the factors explaining the current pattern of inflation differentials across the euro area, it is concluded that – in addition to cyclical factors – the convergence of price levels resulting from greater market integration, enhanced price transparency and real convergence appears to play an important role. However, if sizable and protracted inflation differentials not justified by the effects of market integration and real convergence were to emerge, this could result in disproportionate changes in competitiveness and in economic imbalances in individual euro area countries. In such cases, a national policy response – especially in terms of structural policy – would be warranted.

1 Inflation differentials across the euro area

As documented in the July issue of the Monthly Bulletin, differences in inflation rates across euro area countries following the convergence process in the run-up to Stage Three of Economic and Monetary Union (EMU) are, by historical standards, remarkably small. As of July this year, the difference between the highest and the lowest national rate of HICP increase (measured by the 12-month average of annual rates) is 2 percentage points (see Table 1). This is substantially below the differences of over 10 percentage points recorded in the 1980s.

While the pattern of inflation differentials across euro area countries can be linked to a number of "fundamental" economic factors, a detailed examination of the differences across product categories also suggests that "erratic" factors have played a role in generating cross-country differences in the rate of HICP increase. For example, the

Table 1

HICP inflation for the euro area

(12-month average, July 1998-99/July 1997-98)

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI	Euro area
Overall index	0.8	0.4	1.8	0.4	2.3	1.6	0.5	1.8	0.4	2.4	1.1	0.9
Goods prices	0.3	0.1	1.1	-0.2	1.4	1.2	0.2	1.2	-0.3	2.0	0.3	0.4
Food prices	0.8	0.1	1.6	1.0	3.7	1.5	2.2	2.3	0.1	3.9	0.5	1.0
Unprocessed food	1.1	-0.9	1.5	0.3	4.7	1.9	2.3	3.9	-0.6	4.9	1.5	0.9
Processed food	0.6	0.7	1.6	1.5	3.3	1.2	2.2	1.5	0.6	2.7	0.1	1.1
Industrial goods prices	-0.0	0.0	0.7	-0.9	-0.6	1.0	-0.6	0.7	-0.5	0.7	0.1	0.1
Non-energy industrial goods	1.0	0.6	1.6	-0.1	-0.2	1.6	0.1	1.1	0.3	1.2	0.4	0.8
Energy	-3.2	-1.7	-3.1	-3.4	-1.7	-2.1	-4.6	-1.1	-3.4	-1.0	-0.7	-2.3
Services	2.1	0.9	3.6	1.5	3.8	2.6	1.2	2.8	1.5	3.4	2.7	1.8

Sources: Eurostat and ECB calculations.

largest dispersions across countries are evident in the case of the two categories (food and energy) which are considered the most erratic components of price indices in that they are strongly influenced by special factors such as weather conditions, oil prices and indirect taxes. Excluding these volatile components, which have a weight of just over 30% in the HICP, differences across countries in the rate of HICP increases are more marked in the case of services prices than in the case of non-energy industrial goods prices.

2 The euro area compared with the United States

Given that Monetary Union represents a major change by comparison with the past, in that all euro area Member States are now subject to a single monetary policy directed towards price stability, past differentials are not an appropriate benchmark against which to assess inflation differentials which may occur across Member States in Stage Three of EMU. A more relevant benchmark is obtained by examining the pattern of regional inflation differentials within a long-standing monetary union. For this purpose, the experience of the United States provides a useful basis for comparison.

Fortunately, data on regional (specifically major city) inflation rates are available for the United States from 1919 onwards (see Box 1). These data suggest that substantial differences in inflation rates can arise even within a long-standing monetary union. While inflation differentials recorded in the United States are typically persistent, they are not generally permanent, and the evidence suggests that price levels in the regions of the United States tend to revert to their initial relative levels. The magnitude of these differentials observed in recent years (measured using both the range and the standard deviation of inflation) is very close to the magnitudes currently prevailing within the euro area.

The similarity of these results in the two areas is to an extent surprising. The United States is highly integrated politically and economically, shares a common language and culture and shows a high level of labour mobility. All these factors would be expected to reduce the scope for large and protracted inflation differentials. The current euro area is notably less integrated than the regional economies in the United States. Furthermore, fiscal policy remains predominantly a national responsibility, and productivity levels and living standards are more divergent across euro area countries than they are in the United States. Thus, it could be argued that the scope for the emergence of inflation differentials in the euro area is likely to be larger than in the case of the regional economies in the United States. By contrast, it may also be argued that euro area countries are more diversified economically than US regions and thus less vulnerable to sector-specific shocks. This might imply that the scope for inflation differentials within the euro area would be more limited than within individual countries.

Nonetheless, the US experience is telling, indicating that differences in inflation rates in different regions are normal even in a long-established monetary union. Viewed against the background of the US experience, the current size of the inflation differentials within the euro area (of around 2 percentage points between the highest and the lowest rate of HICP increase) does not appear particularly large or unusual.

Box 1

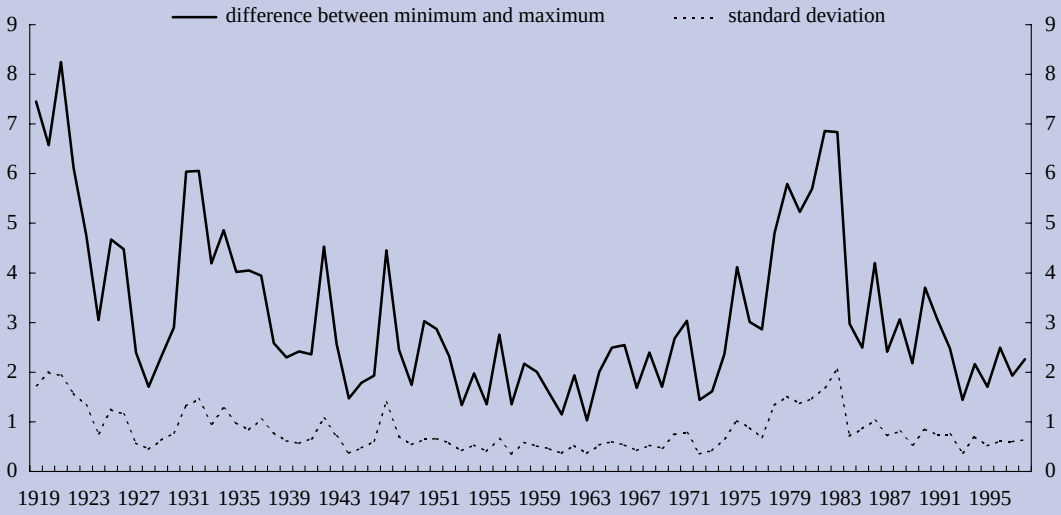
Inflation differentials across the United States

It is interesting to compare the pattern of inflation differentials across the euro area with the US experience. The Bureau of Labor Statistics (BLS) has published a dataset of annual observations on consumer price indices in 17 US cities for the period 1919-98. A graphical presentation of the extent of inflation dispersion across the US cities is given in the chart below, which shows, on an annual basis, the range (i.e. the difference between the highest (maximum) and lowest (minimum) city inflation rate) and the standard deviation of inflation across these cities.

As is clear from the chart, inflation differentials within the United States have been, at times, very substantial, with divergences of 7 percentage points being recorded in the early 1980s. In the more recent past, the divergences (as measured by the range) in consumer price inflation rates have been over 2 percentage points. Over the same period the standard deviation of inflation across US cities has been 0.6%. Both figures are almost identical to the corresponding current values for the euro area.

Interestingly, empirical studies of the behaviour of US inflation divergences suggest that such divergences are persistent. However, they are not permanent, and there is a tendency for price levels in individual cities to converge back towards their initial levels relative to the national average.

Inflation dispersion across US cities



Sources: Bureau of Labor Statistics (US) and ECB calculations.

3 Factors underlying inflation differentials within a monetary union

There are a number of special factors which could be expected to generate differences in the rate of HICP increase across euro area countries. First, since patterns of consumption are not the same in all participating countries, the weights used in the construction of the national HICP components differ. This could mechanically generate measured differentials across countries even if inflation rates for individual goods were equal in all these countries. Second, a lack of synchronisation of national policy actions could also play a role. In the euro area, for example, changes in indirect

taxation, liberalisation measures and administrative price changes are typically not of the same magnitude in all countries, nor is their timing synchronised. Finally, country-specific factors such as different weather conditions could also create "noise" in national consumer price indices, giving rise to differences in measured inflation rates, which would be of limited economic significance.

However, it is also likely that a number of deeper economic factors are currently playing a role in contributing to different rates of HICP increase across euro area countries. If prices are initially different across countries in the monetary union, the convergence of prices to a common level could give rise, in the transition period, to differences in inflation rates. Such price level convergence could be expected to take place in the euro area for two reasons. First, the completion of the internal market and increased cross-border price transparency contribute to reducing differences across countries in the prices of traded goods (i.e. goods which, in principle, can be easily traded across borders). Second, with regard to goods which are less easily traded across national borders (e.g. housing and many kinds of services), convergence of productivity and living standards across the euro area would create a tendency towards price level convergence. This latter effect is commonly known as the Balassa-Samuelson effect after the two economists, B. Balassa and P. A. Samuelson, who introduced the hypothesis simultaneously in 1964 (see Box 3). In both cases, convergence of *price levels* within the euro area would, of course, give rise to some differentials in *inflation rates* across countries in the transition period, with "low price level" countries tending to experience somewhat faster rates of price increase than "high price level" countries. In addition to price level convergence, differences in demand determinants, in particular cyclical positions, could play a role in generating differences in inflation across euro area countries.

Price level convergence: market integration and price transparency

Surveys of price levels in different euro area countries have been carried out by a number of international organisations and private sector institutions. These surveys involve detailed comparisons at the level of individual products and services (e.g. well-known consumer brands, specific car models and standard services such as hairdressing). The evidence shows that – even for fairly standard consumer goods which are homogeneous and, potentially, easily transferred across borders – substantial differences in prices (adjusted for differences in indirect taxes) can be observed across countries. Indeed, in a small number of cases the differences between high and low prices for particular commodities can be observed to exceed 50%. The differences across countries are far higher than those which are typically found within individual countries.

In principle, the observed magnitudes of the difference in prices for standard products which are easily tradable across borders cannot be expected to be sustained in a monetary union in which markets are integrated. Ultimately, the ability in a single market to make use of arbitrage across national borders would severely limit the scope for the existence of substantial price differentials. Indeed, the limited evidence available indicates that some convergence in the prices of "traded goods" is already taking place. One example of such price convergence which has attracted considerable public attention of late relates to car prices; this is discussed more fully in Box 2. Of course, there are a number of reasons why such price convergence may not be fully completed. For example, continuing differences in indirect taxes across the euro area could prevent full convergence of tax-inclusive "traded goods" prices across countries.

Box 2

Car prices in the euro area

The behaviour of car prices in the euro area in recent years provides one example of the effect of increasing market integration on reducing price differentials across countries. Traditionally, car manufacturers charged significantly different prices for the same models in different national markets. In so doing, they took into account factors such as relative income levels and differences in indirect taxes. In practice, this usually meant that higher prices were charged in high income countries. From a profit maximisation point of view, this strategy of segmenting markets was clearly advantageous to the manufacturers.

For this pricing strategy to be sustainable over the longer term, however, the capacity to segment markets and to minimise opportunities for arbitrage (reselling) across borders was essential. This was ensured by a number of practices which, inter alia, placed restrictions on the applicability of warranties, servicing, the sale of spare parts and dealer arrangements. However, in order to promote the integration of the retail car market, in 1995 the European Commission adopted Regulation (EC) No. 1475/95 of 28 June 1995 on the application of Article 85 (3) of the Treaty establishing the European Community to certain categories of motor vehicle distribution and servicing agreements. This Regulation prohibits a number of these practices. At the same time, a burgeoning industry of resellers – i.e. companies which buy cars in the cheaper national markets and sell them to consumers in more expensive markets – emerged and consumers became increasingly aware of the possibilities of purchasing bargains across borders.

The result of this new environment is that car price differentials have declined sharply across countries in the euro area. Since 1997 the European Commission has conducted surveys of prices for over 70 of the best selling models. These surveys show that car manufacturers applied pricing strategies which in many cases resulted in lower price differentials. However, contrary to the popular view that price convergence will generally result in the lowest prices being the point of convergence, the European Commission notes that "there are indications that many car producers increased prices in so-called cheap markets rather than reducing prices in expensive markets".[1]

Looking forward to the impact of the single currency on car price differentials, the Commission notes that "the introduction of the euro on 1 January 1999 is going to increase price transparency in 'euroland' and should thereby promote cross-border trade and further diminish price differences".[1]

1 *European Commission DG IV, "Car prices in the European Union on 1 November 1998 – differences decrease sharply", DN: IP/99/60.*

Price level convergence: convergence in productivity and living standards

While market integration and increased price transparency can be expected to lead to a narrowing of divergence in "traded" goods prices, a large part of the HICP is accounted for by goods and services which cannot readily be traded across borders, i.e. "non-traded" goods and services. Prominent examples are housing and a number of services such as, to take a simple example, hairdressing. The process of market integration and enhanced price transparency cannot be assumed to lead automatically to greater convergence of this group of prices.

In the euro area, however, there are forces at work which can still be expected to lead to a degree of convergence, even of these prices. To understand why, it is necessary to consider why non-traded goods prices differ across countries in the first place. Here a number of factors play a role (e.g. differences in taste and demand conditions), but the empirical evidence available suggests that over longer periods the dominant factor which explains cross-country differences in non-

Box 3

The Balassa-Samuelson effect

In theory, if all goods and services were freely tradable across borders, arbitrage would lead to a situation in which price levels (expressed in common currency) would be equal and strict purchasing power parity would hold. However, this is rarely the case in practice and a number of studies have shown that price levels do differ markedly across countries. These differences cannot be accounted for by factors such as transport costs, taxes and tariffs. In fact, there is a systematic tendency for prices to be lower in poorer countries than in richer countries and, when examined more closely, this pattern seems to be accounted for by differences in the prices of "non-traded" goods and services, e.g. housing and personal services. Moreover, there is a tendency for countries which are experiencing more rapid growth of productivity – and, therefore, improvements in living standards – to experience faster rates of increase in their price levels (again, correcting for exchange rate movements). The Balassa-Samuelson approach[1] explains these differences by linking the behaviour of non-traded goods prices to productivity growth.

In order to explore this issue in more detail, let us take the case of two countries within a monetary union denoted as country A and country B. Looking first at what happens within one of the countries (A), let us consider the simple example of an economy with two goods (one traded and the other non-traded), two factors of production (capital and labour), competitive markets, constant returns to scale production functions in the two sectors and free access to global capital markets. On the basis of these assumptions, it can be shown that the rate of price increase in non-traded goods compared with traded goods in any country will be given by:

$$\Delta(P_{NT} - P_T) = \frac{SL_{NT}}{SL_T}\Delta PROD_T - \Delta PROD_{NT}$$

where ΔP_{NT} and ΔP_T are the rates of change in non-traded and traded goods prices respectively, $\Delta PROD_{NT}$ and $\Delta PROD_T$ are the productivity growth rates in the two sectors, and SL_{NT} and SL_T are the shares of labour in each sector's output. Since non-traded goods production (e.g. services) is more labour-intensive than traded goods production (e.g. manufacturing), the ratio SL_{NT}/SL_T typically exceeds 1. However, for ease of exposition, we shall assume that this ratio is unity, implying:

$$\Delta(P_{NT} - P_T) = \Delta PROD_T - \Delta PROD_{NT}$$

This equation states that if productivity growth in the traded goods sector is faster than in the non-traded goods sector, non-traded goods prices will tend to rise more rapidly than traded goods prices. The mechanism through which this occurs is straightforward. A rise in productivity in the traded goods sector will tend to drive up wages in this sector, but since this increase in wages is matched by increased productivity, it will not give rise to higher traded goods prices. However, since labour is assumed to be mobile across sectors, firms in the non-traded goods sector will have no option but to offer higher wages in order to retain their workers. In the non-traded goods sector the increase in wages will not be matched by a productivity increase, thereby raising costs. This increase in costs will lead to an increase in prices in the non-traded goods sector.

By construction, the overall rate of change in the consumer price index (ΔPC) in this country will be given by a weighted average of the rates of change in traded and non-traded goods prices:

$$\Delta PC = \alpha\Delta P_T + (1-\alpha)\Delta P_{NT} = \Delta P_T + (1-\alpha)(\Delta PROD_T - \Delta PROD_{NT})$$

where α is the share of traded goods in consumption. Thus, the overall increase in the consumer price index will be determined by the increase in traded goods prices and by the difference in productivity growth between the two sectors. The more rapid the growth in productivity in the traded goods sector (relative to the non-traded goods sector), the higher the increase in the consumer price index will be (ceteris paribus).

1 *B. Balassa (1964), "The purchasing power parity doctrine: a reappraisal", Journal of Political Economy, 72, and P. A. Samuelson (1964), "Theoretical notes on trade problems", Review of Economics and Statistics, 46.*

Similar relations can be derived for country B. By definition, the rate of increase in traded goods prices will be equal across countries. For the sake of simplicity, two additional assumptions are made: first, that productivity growth in the non-traded goods sector is equal in the two countries and, second, that the share of traded goods in consumption is also identical in both countries. In this case, the difference in the rate of change in consumer prices between country A and country B will be given by:

$$\Delta PC - \Delta PC^{B} = (1-\alpha)(\Delta PROD_{T} - \Delta PROD^{B}{}_{T})$$

Thus, the difference between the rates of change in consumer prices between the two countries will, given the assumptions made, depend on differences in the rate of productivity growth between the traded goods sectors of both countries. If productivity growth in the traded goods sector is higher in country A, wages will be rising more rapidly and, for the reason given above, non-traded goods prices will be increasing at a faster pace. As a result, overall inflation will be higher in country A than in country B.

A number of recent papers have found evidence in favour of the Balassa-Samuelson hypothesis. Typically, these studies have used econometric techniques to detect the existence of long-run relationships (co-integration) between relative price levels and relative productivity. In this framework, the direction of the applied studies has been twofold. A first class of studies focuses on the relationship between long-run changes in relative prices and productivity differentials across countries, while others analyse the link between the productivity differentials and inflation differentials across sectors within countries. The general conclusion of the first approach is that there is evidence of a relationship between the evolution of the relative price levels across countries and that of productivity differentials. Following the second approach, a clear causality between productivity growth in the traded goods sector and inflation in the non-traded goods sector has been identified.

Indeed, recent studies show that, while some of the more restrictive assumptions of the hypothesis are not supported by the data, there is still clear evidence that the Balassa-Samuelson effect has been at work within the euro area.

traded prices is that of differences in the level of economic development (or living standards) across countries. Countries with higher levels of economic development tend to have higher non-traded prices. The reason for this is that high living standards are largely a reflection of high levels of productivity in the traded goods sector of the economy (e.g. manufacturing, agriculture and internationally traded services). Given integrated national labour markets, this implies that wages in the economy as a whole will typically be higher in more developed countries. However, in the non-traded goods sector the scope for increasing productivity growth is usually more limited than in the traded goods sector (compare, for example, the personal services sector with automobile production). Thus, a general increase in wages, as a result of increased productivity in the traded goods sector, will raise the cost of producing non-traded goods, leading to higher relative prices for non-traded goods. This is a static picture. In a dynamic context in which a less developed country is catching up with its neighbours (i.e. is experiencing more rapid growth in productivity and living standards), costs in its non-traded goods sector will be rising more rapidly than in other countries (i.e. in accordance with the aforementioned Balassa-Samuelson effect). As a result, the overall level of prices will be increasing – in relative terms – at a faster pace.

In the European context this argument implies that any process whereby differences in productivity levels and living standards are reduced over time would lead to non-traded prices increasing more rapidly in those countries which are catching up and to their

converging towards the levels prevailing in the more advanced economies. There is clear evidence from the experience of the past 20 years that such a "catching-up" process has been in operation in the euro area, with productivity and living standards in the less prosperous countries growing more rapidly than in the other countries. Given the increasing integration of markets, and more specifically the introduction of the single currency, the free movement of capital and technology transfer should facilitate further "real convergence". In this case, it can be expected that those countries which are catching up will experience a faster pace of increase in non-traded goods prices. Since traded goods prices should be increasing at a broadly uniform rate across the European Union, this would imply that the overall price level (which is a weighted average of traded and non-traded prices) in those countries which are catching up should be increasing at a faster pace.

Indeed, the empirical studies available show that the Balassa-Samuelson factor has been of relevance in the past within the euro area.

Cyclical conditions

Focusing on the demand side of the economy, it is clear that there are a number of factors which could generate inflation differentials within a monetary union in the short term. In particular, differences in cyclical positions across the countries participating in a monetary union could give rise to differences in price behaviour. The bulk of such effects would come via impacts on non-traded goods prices which, in the short run, depend on domestic rather than external demand. By contrast, since, by definition, traded goods prices should be closely linked to developments in the area as a whole rather than to the situation in a specific country, domestic cyclical conditions could be expected to have a more limited effect on traded goods prices. As is well known, the measurement of the cyclical position of an economy presents considerable difficulties, which tend to be aggravated when cross-country comparisons are made. Despite the fact that cyclical movements have become more synchronised over time in the euro area, as indicated in the July issue of the ECB Monthly Bulletin, the available evidence does point to some dispersion of cross-country cyclical positions within the area.

4 Explaining the current pattern of inflation differentials in the euro area

As outlined above, the principal factors underlying potential inflation differentials are, apart from a number of erratic factors, price level convergence (due both to market integration and to the Balassa-Samuelson effect) and cyclical divergence.

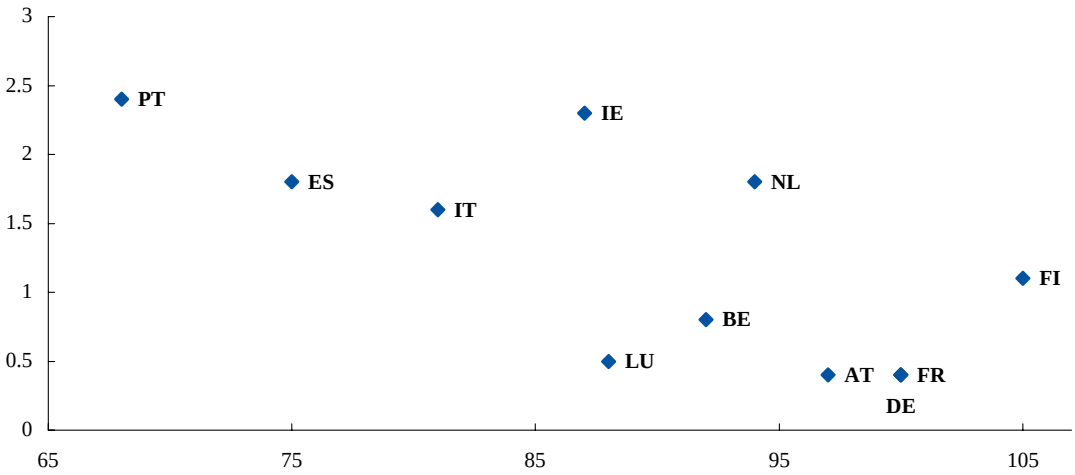
With regard to price level convergence, Chart 1 compares inflation rates in euro area countries with the comparative level of consumer prices (on the basis of OECD data). There is a strong and significant negative relation between this measure of relative price levels and relative inflation rates in the euro area (with a correlation coefficient of -0.7). This evidence supports the idea that price level convergence does indeed play an important role in explaining different rates of HICP inflation across the euro area countries.

With regard to cyclical divergence, the appropriate measure of the relative cyclical position would, in principle, be the relative output gaps (i.e. the differences between actual and potential output). There are, however, serious measurement problems relating to the calculation of output gaps, and different approaches can yield significantly different measures. In view of these problems, the relationship between inflation and real GDP growth rates is considered here. Chart 2 compares individual country inflation rates with the growth in GDP in 1998. As can be seen from the chart, there is some evidence of a

Chart 1

Relative consumer price levels and inflation in the euro area

(inflation rate: 12-month average, July 1998-99/July 1997-98; price level: January 1999 (Germany = 100))



Sources: Eurostat and OECD.

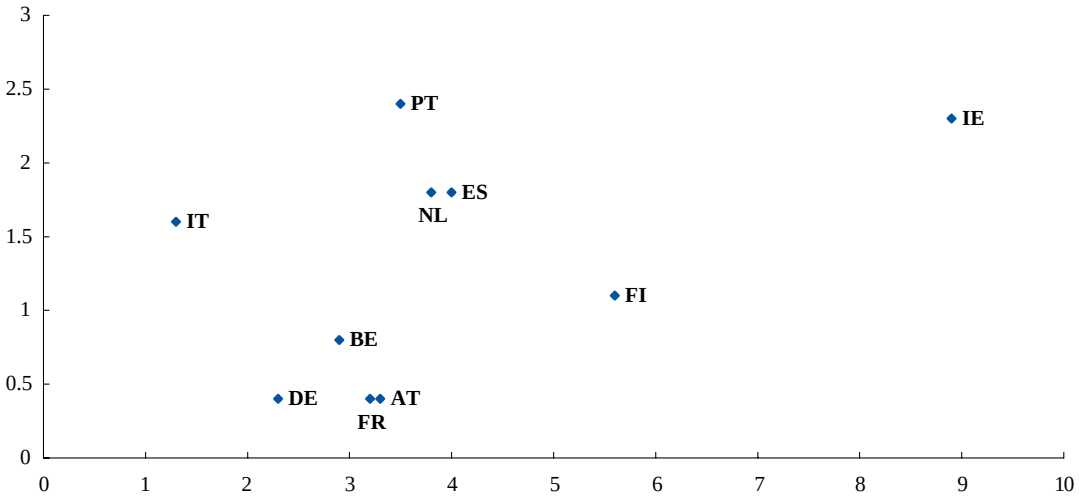
positive relationship between inflation rates and real growth in individual euro area countries, but it is relatively weak and, on its own, not statistically significant (with a correlation coefficient of 0.4).

Taken together, both factors – price level convergence and differences in cyclical positions – appear to account for a substantial proportion of the current differences in HICP inflation rates across countries. A simple equation linking relative HICP inflation to relative price levels and cyclical conditions can explain around 80% of the variation of HICP inflation across euro area countries, with both factors proving highly significant.

Chart 2

Output growth and inflation in the euro area

(inflation rate: 12-month average, July 1998-99/July 1997-98; output growth 1998)



Source: Eurostat.

5 Concluding remarks

While the adoption of the single currency will ensure that the evolution of the euro area price level will ultimately be determined by the single monetary policy of the Eurosystem, this does not imply that inflation rates in individual countries will always be identical to the common area-wide rate. Indeed, different rates of HICP increase can already be observed within the euro area and have attracted increasing public attention. However, these differentials are small by historical standards, and a comparison with the United States suggests that their magnitude is by no means atypical even for a long-established monetary union. A number of statistical and erratic factors could generate noise in price indices, which would show up as differences in measured inflation rates across countries. However, deeper economic forces also play a role. In the current circumstances, two main generic factors can be identified under this heading. First, the convergence of price levels towards a common level due to greater market integration, enhanced price transparency and real convergence could give rise to inflation differentials. To the extent that convergence of prices is a natural consequence of the integration of markets, the resulting inflation differentials need not be viewed as posing problems for economic policy. Second, cyclical divergences across countries may also play a role in generating inflation differentials. In practice, the evidence available suggests that both factors play an important role in explaining the current pattern of inflation differentials across the participating countries.

While the analysis of such cross-country differences is of interest in the context of assessing the evolution of the economy both on a cyclical and longer-term basis, it has to be stressed that the single monetary policy of the Eurosystem can only be geared towards the objective of price stability on an area-wide basis. As a result, monetary policy is not in a position to influence the dispersion of rates of HICP increase across euro area countries. However, if sizable and protracted inflation differentials not justified by the effects of market integration and real convergence were to emerge, this could result in undue changes in competitiveness and in economic imbalances in individual euro area countries. In such cases, a national policy response – especially in terms of structural policy – would be warranted.

ESCB preparations for the year 2000

The European System of Central Banks (ESCB) has been concentrating significant efforts and resources on issues related to the year 2000 transition, although the degree of year 2000 compliance of the systems used by the European Central Bank (ECB) and the national central banks (NCBs) participating in Monetary Union was expected to be relatively high owing to the recent establishment of the institution. Following intensive testing, the ECB is confident that the systems of the ESCB – whether it be the technical systems used for the data transfers necessary for the preparation of monetary policy decisions or those used for the execution of monetary policy operations, the Trans-European Real-time Gross settlement Express Transfer system (TARGET) or the correspondent central banking model (CCBM) – will continue to function properly when entering into the year 2000. Nonetheless, the ECB and the NCBs have tested their contingency procedures to ensure business continuity, even in the event of unexpected problems. At the same time, the monetary and economic implications of the year 2000 transition have been analysed and are not very likely to be of relevance to the ECB's medium-term oriented monetary policy strategy. In any case, the monetary policy operational framework of the Eurosystem (comprising the ECB and the NCBs of the Member States participating in the euro area) ensures high flexibility in the implementation of monetary policy and has built-in mechanisms designed to accommodate any level of liquidity demand from market participants. The ECB sees no need for the public to hold excess cash around the turn of the year. However, should such extraordinary precautionary demand for banknotes arise, NCBs will have sufficient stocks of banknotes available to cover it.

1 Facing the year 2000 issue

The year 2000 issue is a phenomenon that is affecting individuals and companies all over the world. While it is widely recognised that the responsibility for preparing for the transition to the year 2000 lies mainly with each individual institution, many initiatives have been launched in the last two years to co-ordinate activities at industry, national and global levels. In particular, since early 1999, following the completion of the preparations for the introduction of the euro, the European financial community has devoted significant efforts to resolving year 2000-related issues. Of particular relevance to the financial industry are the initiatives of the Global 2000 Co-ordinating Group, for private institutions, and the Joint Year 2000 Council, for financial market authorities. In addition, the providers of utilities such as water and electricity and of telecommunications facilities have, in general, been able to demonstrate a satisfactory level of year 2000 compliance in their services.

The global banking and financial community has faced a major challenge in its efforts to ensure a smooth transition of financial systems to the year 2000. With the support of infrastructure providers, financial institutions in the euro area – including the Eurosystem – have carried out extensive testing to make sure that their IT applications are year 2000 compliant. Like many other institutions, the Eurosystem has, over the past year, given high priority to year 2000-related tasks and ensured, through extensive testing, that its systems are year 2000 compliant. Since mid-1999 the Eurosystem's focus has been on the review and testing of contingency procedures, the assessment of potential monetary policy and legal implications, and the establishment of an efficient communications infrastructure for the ESCB for the year 2000 transition period.

Box 1

Year 2000 compliance

The year 2000 compliance problem stems primarily from the data field defining the year, which permeates files, reports, screens, databases, environmental programs and work areas. Programs to determine time-dependent information and business events use this field. In programs that use only a two-digit field, it may not be possible for the system to differentiate between the 1900s and the 2000s. The year 2000 problem may also affect "non-IT" systems such as utilities, entry control systems, machine management functions, etc. through the use of date data in chips embedded within these systems.

It is therefore necessary to test and, where problems are identified, to remediate systems in order to ensure that the computer correctly recognises the new date as 2000. In line with the definition of year 2000 compliance as specified by the British Standards Institution, the ECB has assessed its level of compliance against the following criteria:

1. No value for current date will cause any interruption in operation.
2. Date-based functionality must behave consistently for dates prior to, during and after year 2000.
3. In all interfaces and data storage, the century in any date must be specified either explicitly or by unambiguous algorithms or inferencing rules.
4. The year 2000 must be recognised as a leap year.

2 Technical compliance activities of the ESCB

As the year 2000 issue has its roots in computer technology, initial work was aimed at achieving year 2000 compliance for IT systems, with a particular focus on the systems needed to conduct monetary policy and on TARGET.

Testing and remedial activities for systems used for the conduct of monetary policy

The Eurosystem employs a sophisticated technical infrastructure to link together the ECB and the NCBs. The applications used in the conduct of monetary policy operations, such as open market tender operations and bilateral interventions, have been added to this infrastructure, as have the applications used for the exchange of the statistical and non-statistical information needed for the preparation of monetary policy decisions.

The monetary policy operations of the Eurosystem are conducted in a decentralised manner by the NCBs, following instructions from the ECB. The ECB receives statistical information from all 11 NCBs in order to establish a basis for its monetary policy decisions. Owing to the integrated nature of the systems used for such operations, a decision was made to conduct both local and ESCB-wide testing.

Each NCB was responsible for carrying out a series of tests designed to assess the compliance status of its internal systems as well as location-specific parts of the ESCB systems. In addition to its internal system compliance tests, the ECB conducted the initial testing of the ESCB-wide systems, to the extent that this was possible within a closed environment at the ECB. In this way, all the individual components of the Eurosystem-wide systems were tested for their year 2000 compliance in the first months of 1999.

Following the completion of the individual tests, a series of bilateral tests was conducted between the ECB and all the NCBs of the Eurosystem, as well as other NCBs which chose to participate. These tests were carried out in a simulated year 2000 environment, in order to test the continued business

functionality of the applications. During testing, only a very small number of year 2000-related problems were found, which can be largely attributed to the relative newness of the Eurosystem's integrated and individual systems. In the few cases in which non-compliance issues were detected, remedial work was successfully carried out. It can therefore be confirmed with an acceptable level of certainty that the systems used by the Eurosystem for monetary policy purposes are year 2000 compliant.

Testing and remedial activities for TARGET and the CCBM

TARGET is a decentralised system connecting the national real-time gross settlement (RTGS) systems via an interlinking infrastructure, the purpose of which is to conduct payments efficiently throughout Europe.

In line with other year 2000 compliance activities of the ESCB, TARGET has undergone a period of intensive testing. The approach used in these tests was based on the testing procedure which proved successful for the testing of TARGET before it went into operation on 4 January 1999.

The TARGET testing was carried out in a number of distinct phases. In the first phase, the NCBs and the ECB individually tested the national components and the connections to the S.W.I.F.T. FIN service. Following the successful completion of this phase, "cross-system" tests were conducted, in which all the NCBs' and the ECB's systems ran for the full TARGET business day in a simulated year 2000 environment, including starting the systems, payments processing, end-of-day procedures, closing the systems and, finally, preparations for the next business day. During this second phase a number of credit institutions were involved in the testing of the national RTGS system in each country. In addition, some major EU national RTGS systems participated successfully in the Global Year 2000 test organised by the New York Clearing House in June 1999.

Finally, TARGET's year 2000 compliance was demonstrated on Saturday, 25 September 1999. Several hundred credit institutions demonstrated their ability to carry out operations for sending and receiving TARGET cross-border payments in a "dress rehearsal" of a full business day in a simulated year 2000 environment. In several countries domestic payment systems have also been tested with third parties.

In parallel, tests were carried out on the correspondent central banking model (CCBM). The CCBM is a system for mobilising collateral across borders in order to ensure the availability of collateral for monetary policy operations and for payment systems needs. The CCBM is based on multilateral agreements between the NCBs and the ECB. Since all message flows are bilateral, year 2000 compliance testing was carried out by pairs of institutions that utilise computer systems for this procedure. The testing did not reveal any problems.

Monitoring EU payment systems

The ESCB is also monitoring the progress made by other large-value and major retail EU payment systems, in particular those settling their end-of-day balances in TARGET. By introducing the TARGET year 2000 strategy as the norm, country reporting procedures were established to verify that all payment systems had completed internal testing by the end of April 1999 and multilateral testing by the end of July 1999. The general verdict is that all major payment and securities settlement systems in the EU area are making good progress with their year 2000 preparations and are able to comply with the defined framework. According to the available information, the electronic retail payment systems and the automated teller machines (ATMs) in the euro area have been successfully tested and are therefore expected to function smoothly. The ESCB is closely monitoring the progress in the few cases of individual retail systems being slightly behind in their preparations.

3 Other precautionary measures

Following such intensive testing, it is essential that the level of compliance is maintained and not jeopardised by further changes to the systems. Therefore, the Eurosystem has placed a moratorium on any changes to its systems from 1 October 1999 to 1 March 2000. Nonetheless, the ECB cannot rule out unexpected problems that might affect the smooth functioning of its systems. As a precautionary measure, the ECB is therefore reviewing the contingency procedures developed for the euro changeover in order to ensure their viability in the event of any problems arising during the year 2000 transition. In this respect, it is worth noting that the recent reports on the year 2000 testing carried out by major European utility companies, such as gas, electricity and water, and by telecommunications service providers have been very positive.

Box 2

Closing of TARGET on 31 December 1999

In order to ensure a smooth transition, not only for the institutions of the European System of Central Banks (ESCB) but also for the other European financial institutions, on 31 March 1999 the ECB announced its decision to close TARGET on 31 December 1999. This day can thus be kept free to enable banking institutions to conduct end-of-year operations and produce full backups of the relevant systems prior to the transition to 2000.

4 Monetary, financial and other economic implications

In addition to its intensive internal compliance activities, the ECB has also analysed the impact that the year 2000 transition could have on the euro area. As a result of this exercise, it sees no need for the public to hold higher amounts of banknotes during the transition period than is normally the case at year-ends. Nonetheless, NCBs have built up excess stocks of national banknotes to cover the period up to 2002, in order to be able to free capacities for the production of euro banknotes. Therefore, should some extraordinary precautionary demand for banknotes arise around the turn of the year, NCBs will have available sufficient stocks of banknotes to cover it.

An increase in the demand for banknotes around the turn of the year would be unlikely to have more than a small, temporary impact on the broad monetary aggregate (M3) (this monetary aggregate having been assigned a prominent role in the Eurosystem's monetary policy strategy), since it is expected that any additional demand for currency in circulation would be drawn mostly from short-term bank deposits which form part of M3. In addition, households can be expected to gradually reduce their holdings of currency to more normal levels as soon as fears of major disruption arising from IT problems subside following the transition to 2000.

There are a few other economic effects to be expected from this transition to the year 2000. Beside the sectoral effects resulting from the diversion of resources to cope with the year 2000 problem, temporary economic effects could result from malfunctions leading to disruption in production processes. For this reason, the year 2000 problem could induce some hoarding of products by firms in an effort to ensure uninterrupted supply in early 2000. Households may also increase their stocks of food, etc. In addition, fixed investment could be affected by an advancement of purchases of IT equipment. Overall, these factors may somewhat distort the pattern of economic growth, tending to boost growth at the end of 1999 and to weaken it in early 2000. In addition, these factors could have monetary effects in the

form of a temporary increase in bank lending. While none of these effects can be estimated with any reasonable degree of precision, they are likely to be limited in size and are unlikely to affect the long-term growth and inflation outlook for the euro area.

The monetary and economic implications of the year 2000 transition are therefore not very likely to be of relevance for a medium term-oriented monetary policy strategy. However, financial markets have been affected by the perception of increased risks when lending short-term funds during the transition to the year 2000, in particular if such lending is undertaken without collateral. In fact, over the past months the interest rate implied in the three-month EURIBOR futures contract maturing in December 1999 has traded above the notional interest rate which would be obtained by linear interpolation between the September 1999 and March 2000 contracts. This "year 2000 spike" has tended to grow over the summer, but has diminished significantly more recently.

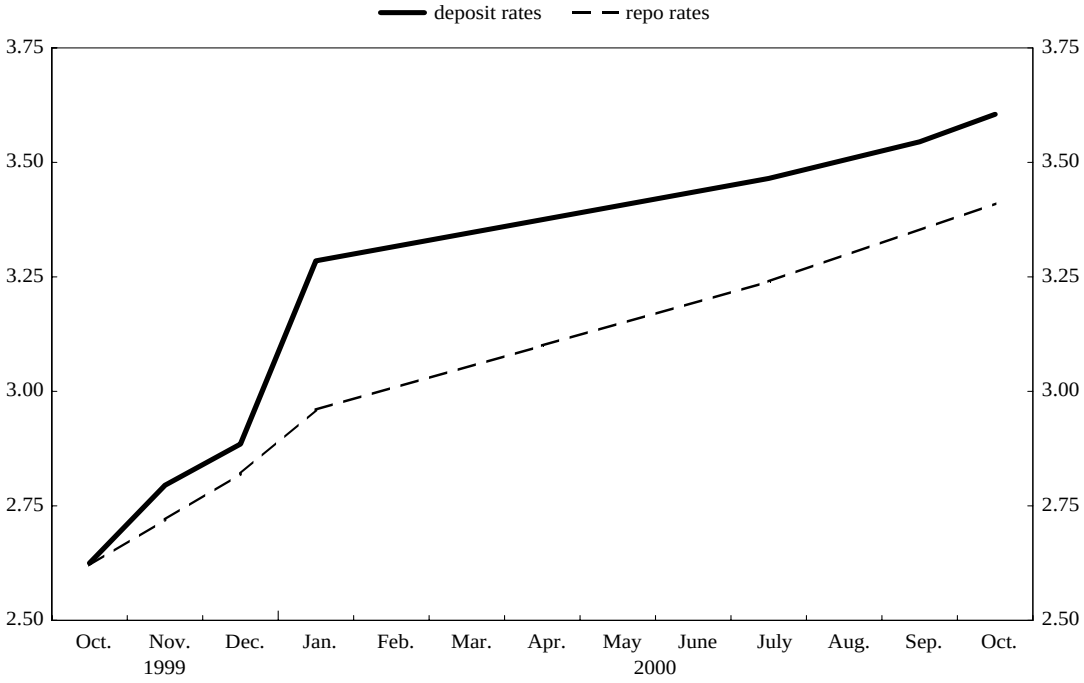
The existence of the "year 2000 spike" is visible from the chart below, which shows interest rates on uncollateralised interbank deposits with different maturities as at 6 October 1999.

However, it should be emphasised that the year 2000 effect on short-term interest rates is significantly lower for secured transactions, i.e. for transactions carried out with the protection of collateral. In the chart below it is apparent that the deposit curve shifts up between December and January, incorporating the expected spike at the turn of the year. Instead, the yield curve for collateralised instruments shows a far more regular pattern. This suggests that market participants are confident with regard to the provision of sufficient liquidity by the Eurosystem. At the same time, however, the significant difference between expected interest rates on secured and unsecured transactions reflects a heightened awareness of the credit risk considerations around the turn of the year.

Chart 1

Deposit and repo market yield curve

(as at 6 October 1999; percentage per annum, by maturity)



Source: Reuters.

Note: The rates shown in the chart are spot rates. Accordingly, the abnormally high level of the implied overnight rate for unsecured transactions at the turn of the century affects all rates with a maturity beyond that date, through a simple actuarial effect.

The Eurosystem announced in August 1999 that it does not see a need to introduce any systemic changes to its operational framework because of the changeover to the year 2000. Indeed, the operational framework of the Eurosystem was, from the outset, designed with a view to ensuring maximum flexibility in the implementation of monetary policy and thus allows for any technical adaptation that may be considered worthwhile. The Eurosystem's operational framework already has built-in mechanisms designed to accommodate any level of liquidity demand from market participants.

First, since fluctuations in liquidity are a frequent occurrence in money markets, the averaging mechanism applied to the one-month maintenance period of the minimum reserve system generally contributes to smoothing out temporary liquidity fluctuations, which may occur, for example, because of technical delays in payment systems or unforeseen changes in the demand for banknotes. The aggregate reserve requirement of the euro area banking system amounted to around EUR 100 billion in the first half of 1999 and provides a considerable buffer of liquidity to cover exceptional liquidity needs at the turn of the year. Second, the very large amount of around EUR 5,700 billion of assets in the list of collateral eligible for the refinancing operations of the Eurosystem, together with the CCBM (which allows the cross-border use of collateral), should ensure that there is a sufficient amount of eligible assets available as collateral even under rather exceptional circumstances. Third, the Eurosystem has at its disposal a diverse range of fine-tuning instruments that may, if necessary, complement its main and longer-term refinancing operations. The Eurosystem's fine-tuning operations can take various forms, such as outright purchases or sales, collection of fixed-term deposits and foreign exchange swaps. Finally, the Eurosystem's standing facilities (marginal lending facility and deposit facility) offer credit institutions in the euro area an automatic means of dealing with any potential fluctuation in the demand for liquidity, and thereby limit any impact that these fluctuations may have on short-term interest rates.

Taking the above into account, only a minor technical change has been introduced in the indicative calendar of the main refinancing operations for the year 2000 in order to eliminate any potential problems that may arise as a result of the maturing and renewal of a main refinancing operation in the first week of 2000. The ECB announced on 23 September 1999 that no new main refinancing operation will be initiated in the first week of 2000, and that no such operation will mature during that week. This adaptation is considered useful to minimise any potential problems for counterparties and for the financial markets which could result from the conduct and settlement of a large operation directly after the transition to 2000.

5 Legal implications

Legislative measures

The ECB also discussed and was instrumental in bringing forward legislative initiatives by the Member States of the European Union (EU) with regard to year 2000 liability issues, in order to ensure the stability of the financial markets.

In order to facilitate the performance of end-of-year procedures and the full backup of all systems before midnight on 31 December 1999 by all market participants – including credit institutions, securities markets, clearing systems and depositories, and associated bodies within the financial industries – the governors of the NCBs of the euro area unanimously agreed in March 1999 that the ECB should recommend to the members of the ECOFIN Council that 31 December 1999 be declared a non-business day throughout the EU.

At their informal meeting on 17 April 1999 the Ministers of Finance endorsed a communiqué which urged the Member States of the EU to ensure that payment and delivery obligations of financial institutions and other agents neither fall due nor are enforceable on 31 December 1999 in the financial markets. In this communiqué each Member State undertook a political commitment to take appropriate measures in order to ensure the stability of financial markets in its jurisdiction and to mitigate potential liability issues for market players if amounts in euro fall due on 31 December 1999. In addition, this measure should provide clarity as to when such obligations should be payable. The result depends, as for any public holidays, on the provisions made in the legislation in each jurisdiction in relation to obligations due on a public holiday: some stipulate that the obligation shall be deferred, others that it shall be advanced. The communiqué did not take a position on this issue, which can be settled pursuant to the national rules of procedure.

Review of contracts at the ECB

In addition, existing agreements of the ECB have been reviewed and, where necessary, updated to ensure their operability in any year 2000 scenario. The ECB's stance is that year 2000-related malfunctions and problems involving hardware or software cannot be viewed as cases of *force majeure*, since the year 2000 is a foreseeable risk that can be mitigated with enough planning and resources. Therefore, counterparties should take all necessary measures to ensure the preparedness of their IT systems and business continuity into 2000.

Box 3

Communiqué endorsed by the Ministers of Finance on 17 April 1999 concerning the transition to the year 2000

With a view to minimising the risks for the European financial industry related to the year 2000 changeover, the ECOFIN Ministers, the European Commission and the ECB discussed whether any measures should be taken in order to ensure a smooth transition to the first day of operation in 2000. In this respect, the Ministers and the European Commission took note of the ECB's decision to close its TARGET system on 31 December 1999 in order to enhance the safety of the transition to the year 2000.

Against this background and following requests by a number of market participants, the Ministers agreed that, with a view to facilitating the performance of end-of-year procedures and completing the full backup of all systems before midnight on 31 December 1999, Member States should ensure by appropriate means that, as on a normal public holiday, the fulfilment of any contractual obligations on the part of credit institutions or other agents in the financial markets, at least for transactions in euro, shall neither fall due nor be enforceable on 31 December 1999.

6 Communication infrastructure

The ESCB's co-ordination is characterised by a number of expert committees which prepare Decisions of the Governing Council, submitted via the Executive Board, in their area of competence. These committees have devoted significant resources to the year 2000 preparations over the past year. In order to ensure the overall consistency of year 2000 preparations within the ESCB, the Governing Council decided to establish an ESCB Year 2000 Co-ordination Committee consisting of year 2000 co-ordinators from each NCB. The aim of this Committee is to determine practical arrangements for the year 2000 transition.

The ESCB Year 2000 Co-ordination Committee is responsible for co-ordination among the ESCB institutions and between the ESCB and international bodies dealing directly with year 2000 issues. Its main tasks include analysing the suitability and feasibility of contingency measures and the procedures for activating such measures, as well as defining ESCB milestones that will be monitored before, during and after the transition to the year 2000. The ESCB Year 2000 Co-ordination Committee will form the core of an efficient communications infrastructure between the ECB and the NCBs, which will be established specifically to monitor the developments over the year 2000 transition period. During the year 2000 transition period (from 31 December 1999 until the first day of normal operation and around the leap year date) the Committee will be at the centre of an "early warning" procedure for alerting the decision-making bodies of the ECB. In emergency situations, the Committee will be responsible for consulting the relevant business experts to expedite the decision-making process in order to ensure that critical functions can be performed. It will regularly exchange information on global issues of relevance to the year 2000 transition, with particular reference to major unexpected events (should they occur) concerning the ESCB internal systems and infrastructures, as well as the Eurosystem financial markets.

The ECB will also exchange information with the Joint Year 2000 Council in an effort to contribute to mitigating year 2000-related risks beyond the Eurosystem at a global level.

Box 4

Major year 2000 initiatives

Joint Year 2000 Council

In April 1998 the sponsoring committees, i.e. the Basel Committee on Banking Supervision (Basel Committee), the Committee on Payment and Settlement Systems (CPSS), the International Association of Insurance Supervisors (IAIS), and the International Organisation of Securities Commissions (IOSCO) established the Joint Year 2000 Council. The Council comprises senior representatives from the sponsoring committees. Roger W. Ferguson Jr., a Governor on the Board of Governors of the Federal Reserve System, chairs the Council and its secretariat is provided by the Bank for International Settlements (BIS).

The Council has agreed on a range of initiatives to ensure a high level of awareness of the year 2000 computer challenge within the global financial supervisory community, to share information on regulatory and supervisory strategies and approaches, to discuss possible contingency measures, and to serve as a point of contact with national and international private sector initiatives.

The Joint Year 2000 Council recognises that efficient cross-border communication between Financial Market Authorities (FMAs) will be an essential ingredient for a smooth transition to the year 2000 in financial markets. During this critical period, to the extent possible, the resolution of cross-border issues and other information gathering and decision-making by FMAs is expected to be carried out according to normal procedures. As such, existing arrangements among market authorities – bilateral and multilateral contacts with regulatory counterparts in foreign markets – are expected to handle most developments. Nevertheless, there remain a number of ways in which communication efficiency can be organised by a central hub. The Council Secretariat plans to facilitate and support cross-border exchanges of information among key financial market authorities during the transition period by setting up an information sharing platform which would provide various services. These central services would include maintaining up-to-date contact lists, collecting and disseminating information on the operational status of core infrastructure components, enabling FMAs to announce emerging developments and facilitating the organisation of conference calls. The Secretariat will

co-ordinate with the sponsors of other international information exchange initiatives to ensure that duplication of communication channels and multiple reporting by FMAs are minimised.

Global 2000

The Global 2000 Co-ordinating Group (Global 2000), an informal organisation of banks, securities firms and insurance companies, is a voluntary private sector financial industry grouping consisting of 630 institutions representing 70 countries. The overall objective of Global 2000 is to identify and resource areas where co-ordinated initiatives will facilitate efforts by the global financial community to minimise the risks to global financial markets arising from the year 2000 date change.

Euro area statistics

Contents

I Monetary policy statistics

Table 1.1

Consolidated financial statement of the Eurosystem

(EUR millions)

1. Assets

	Gold and gold receivables	Claims on non-euro area residents in foreign currency	Claims on euro area residents in foreign currency	Claims on non-euro area residents in euro	Lending to financial sector counterparties in the euro area			
						Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
	1	2	3	4	5	6	7	8
1999 7 May	105,323	239,350	12,366	4,018	166,184	119,944	44,984	0
14	105,323	238,483	12,091	4,088	166,060	119,953	44,981	0
21	105,323	240,921	11,904	4,265	167,728	120,953	44,981	0
28	105,323	237,639	12,383	4,350	185,070	138,992	45,008	0
4 June	105,307	236,031	12,428	4,345	184,680	139,032	44,997	0
11	105,307	238,154	12,499	4,216	174,876	129,020	44,997	0
18	105,307	237,871	12,156	4,031	170,664	125,012	44,997	0
25	105,307	238,361	11,927	3,941	170,641	125,020	44,997	0
2 July	101,753	244,594	12,827	3,832	188,687	142,963	44,991	0
9	101,753	244,546	12,415	4,002	198,094	152,001	44,991	0
16	101,753	245,833	12,344	4,140	193,768	148,065	45,001	0
23	101,754	247,105	11,717	4,364	194,138	146,956	45,001	0
30	101,754	245,380	12,802	4,162	214,012	166,954	45,001	0
6 Aug.	101,754	245,853	13,027	4,162	194,731	149,018	45,001	0
13	101,754	245,650	12,724	4,107	189,871	143,990	45,001	0
20	101,754	246,057	12,640	4,261	186,895	141,042	45,001	0
27	101,754	245,415	12,580	4,116	205,150	159,071	44,996	0
3 Sep.	101,754	245,588	11,915	4,281	197,748	152,043	44,996	0
10	101,754	245,034	12,887	4,686	193,931	147,991	44,996	0
17	101,754	245,923	12,472	5,028	188,657	142,932	44,994	0
24	101,754	246,058	13,054	4,919	198,458	152,955	44,994	0
1 Oct.	114,988	240,223	13,357	5,066	192,534	146,988	44,994	0

2. Liabilities

	Banknotes in circulation	Liabilities to financial sector counterparties in the euro area in euro						Debt certificates issued
			Current accounts (covering the minimum reserves system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	
	1	2	3	4	5	6	7	8
1999 7 May	335,708	101,663	101,459	197	0	0	7	10,158
14	337,375	99,361	99,229	118	0	0	14	10,158
21	335,245	102,373	99,795	2,561	0	0	17	10,158
28	335,148	109,331	109,194	134	0	0	3	10,158
4 June	338,980	106,950	106,826	101	0	0	23	10,158
11	338,947	96,441	96,278	155	0	0	8	10,158
18	337,865	103,238	103,141	91	0	0	6	10,158
25	337,877	97,499	97,383	101	0	0	15	10,158
2 July	342,556	112,235	112,120	95	0	0	20	10,158
9	344,694	102,529	102,185	316	0	0	28	10,158
16	344,405	104,586	104,499	68	0	0	19	10,158
23	342,580	94,151	92,351	1,788	0	0	12	10,158
30	345,768	109,826	109,789	27	0	0	10	10,158
6 Aug.	348,034	106,144	105,807	292	0	0	45	10,158
13	346,223	103,115	103,001	96	0	0	18	10,158
20	342,257	100,588	95,691	4,883	0	0	14	10,158
27	340,626	110,453	110,439	13	0	0	1	10,158
3 Sep.	344,193	106,110	106,037	49	0	0	24	10,158
10	344,254	100,011	99,984	20	0	0	7	10,158
17	342,188	98,993	98,237	750	0	0	6	10,158
24	340,327	103,953	103,863	76	0	0	14	10,158
1 Oct.	343,179	109,898	109,679	154	0	0	65	8,606

Source: ECB.

Structural reverse operations 9	Marginal lending facility 10	Credits related to margin calls 11	Other lending 12	Securities of euro area residents in euro 13	General government debt in euro 14	Other assets 15	Total 16	
0	481	52	723	26,047	60,186	78,650	692,124	7 May
0	366	55	705	26,030	60,186	75,266	687,527	14
0	950	65	779	25,945	60,186	74,813	691,085	21
0	479	63	528	25,873	60,180	74,249	705,060	28
0	229	32	390	25,957	60,156	77,522	706,426	4 June
0	397	30	432	26,137	60,156	75,708	697,053	11
0	193	29	433	25,929	60,156	75,657	691,771	18
0	165	29	430	26,088	60,156	79,223	695,644	25
0	177	29	527	25,806	60,156	78,537	716,192	2 July
0	440	79	583	25,882	60,156	75,867	722,715	9
0	108	133	461	25,700	60,156	77,875	721,569	16
0	1,562	156	463	26,009	60,156	76,639	721,882	23
0	1,465	103	489	25,775	60,156	75,684	739,725	30
0	240	47	425	25,939	60,156	77,342	722,964	6 Aug.
0	149	70	661	26,033	60,156	75,965	716,260	13
0	186	99	567	26,087	60,156	75,529	713,379	20
0	304	115	664	25,966	60,156	78,829	733,966	27
0	3	52	654	25,838	60,156	79,848	727,128	3 Sep.
0	236	43	665	25,551	60,156	77,271	721,270	10
0	46	125	560	25,163	60,156	78,761	717,914	17
0	36	102	371	25,414	60,156	78,787	728,600	24
0	151	90	311	24,700	60,156	79,592	730,616	1 Oct.

Liabilities to other euro area residents in euro 9	Liabilities to non-euro area residents in euro 10	Liabilities to euro area residents in foreign currency 11	Liabilities to non-euro area residents in foreign currency 12	Counterpart of special drawing rights allocated by the IMF 13	Revaluation accounts 14	Capital and reserves 15	Other liabilities 16	Total 17	
36,822	6,993	998	7,925	6,043	78,479	54,666	52,669	692,124	7 May
35,681	7,557	896	7,199	6,043	78,479	54,694	50,084	687,527	14
35,029	8,111	948	8,847	6,042	78,479	54,694	51,159	691,085	21
43,906	7,751	938	8,838	6,043	78,479	54,809	49,659	705,060	28
44,070	7,457	902	7,269	6,042	78,479	54,858	51,261	706,426	4 June
45,428	7,275	776	9,603	6,042	78,479	53,227	50,677	697,053	11
36,035	6,918	733	9,028	6,042	78,479	53,226	50,049	691,771	18
40,939	7,075	734	9,265	6,042	78,479	53,227	54,349	695,644	25
40,446	7,158	782	8,994	6,192	82,510	53,231	51,930	716,192	2 July
56,382	6,962	757	8,559	6,192	82,510	53,217	50,755	722,715	9
52,128	6,924	741	9,611	6,192	82,510	53,217	51,097	721,569	16
61,172	7,265	716	9,924	6,192	82,510	53,217	53,997	721,882	23
62,055	6,727	871	10,606	6,192	82,510	53,218	51,794	739,725	30
45,219	6,988	1,037	10,032	6,192	82,510	53,218	53,432	722,964	6 Aug.
44,255	8,186	924	9,604	6,192	82,510	53,219	51,874	716,260	13
47,592	7,618	952	9,701	6,192	82,510	53,220	52,591	713,379	20
57,773	7,545	1,000	9,264	6,192	82,510	53,220	55,225	733,966	27
53,401	7,509	905	8,372	6,192	82,510	53,221	54,557	727,128	3 Sep.
54,393	7,398	904	8,958	6,192	82,510	53,221	53,271	721,270	10
52,897	7,180	855	9,696	6,192	82,510	53,221	54,024	717,914	17
58,991	7,260	872	10,460	6,192	82,510	53,222	54,655	728,600	24
45,950	7,433	1,078	9,840	6,229	89,826	53,220	55,357	730,616	1 Oct.

Table 1.2

ECB interest rates on standing facilities

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

		Deposit facility		Marginal lending facility	
		Level	Change	Level	Change
		1	2	3	4
1999	1 Jan.	2.00	-	4.50	-
	4 [1]	2.75	0.75	3.25	-1.25
	22	2.00	-0.75	4.50	1.25
	9 Apr.	1.50	-0.50	3.50	-1.00

Source: ECB.

1) On 22 December 1998 the ECB announced that, as an exceptional measure between 4 January and 21 January 1999, a narrow corridor of 50 basis points would be applied between the interest rates for the marginal lending facility and the deposit facility, aimed at facilitating the transition to the new regime by market participants.

Table 1.3

Eurosystem monetary policy operations allotted through tenders [1]

(EUR millions; interest rates in percentages per annum)

Main refinancing operations

Date of settlement		Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		
				Fixed rate	Marginal rate	Weighted average rate	Running for [...] days
		1	2	3	4	5	6
1999	2 June	698,358	43,000	2.50			14
	9	907,145	86,000	2.50			14
	16	922,203	39,000	2.50			14
	23	1,165,521	86,000	2.50			14
	30	1,222,128	57,000	2.50			14
	7 July	1,282,746	95,000	2.50			14
	14	1,247,454	53,000	2.50			14
	21	1,479,409	94,000	2.50			14
	28	1,342,169	73,000	2.50			14
	4 Aug.	1,412,815	76,000	2.50			14
	11	1,346,203	68,000	2.50			14
	18	1,538,142	73,000	2.50			14
	25	1,431,145	86,000	2.50			14
	1 Sep.	1,490,635	66,000	2.50			14
	8	1,334,847	82,000	2.50			14
	15	1,051,251	61,000	2.50			14
	22	660,532	92,000	2.50			14
	29	926,416	55,000	2.50			14
	6 Oct.	1,655,341	90,000	2.50			14

Longer-term refinancing operations

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

Other tender operations

Date of settlement		Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders		
					Fixed rate	Marginal rate	Weighted average rate	Running for [...] days
		1	2	3	4	5	6	7
1999								

Source: ECB.

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

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	Jan.	8,607.9	4,838.9	83.1	146.0	1,105.4	510.6	1,923.9
	Feb.	8,638.7	4,801.1	86.9	148.9	1,111.6	543.9	1,946.5
	Mar.	8,685.3	4,803.5	88.8	151.2	1,125.6	549.8	1,966.4
	Apr.	8,741.2	4,827.7	93.3	160.3	1,129.3	542.0	1,988.6
	May	8,797.6	4,867.2	101.1	158.7	1,130.8	541.0	1,999.0
	June	8,857.3	4,916.6	106.3	152.0	1,145.5	517.6	2,019.3
	July	8,848.9	4,895.7	109.2	155.5	1,153.5	513.8	2,021.2
	Aug. [(p)]	8,851.6	4,892.1	113.3	165.4	1,165.2	481.0	2,034.5

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 2 years and of money market paper held by the institutions mentioned above, it may deduct 10% of these liabilities from its reserve base.

2) Maintenance periods start on the 24th of the month and run to the 23rd of the following month; the required reserve is calculated from the reserve base as at the end of the preceding month.

2. Reserve maintenance [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	Feb.	98.3	99.3	1.1	0.1	3.00
	Mar.	100.6	101.5	0.9	0.1	3.00
	Apr.	100.1	100.7	0.6	0.0	2.84
	May	100.2	101.0	0.8	0.0	2.50
	June	100.9	101.5	0.6	0.0	2.50
	July	102.0	102.7	0.8	0.0	2.50
	Aug.	102.8	103.5	0.6	0.0	2.50
	Sep.	102.6	103.0	0.5	0.0	2.50
	Oct. [(p)]	102.8				

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									
		Eurosystem's net assets in gold and foreign currency	Main refinancing operations	Longer-term refinancing operations	Other operations [2)]	Marginal lending facility	Deposit facility	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) [3)]		
		1	2	3	4	5	6	7	8	9	10	11
1999	Feb.	328.2	104.6	34.2	30.6	3.8	1.3	329.3	41.1	29.5	100.2	430.8
	Mar.	323.6	136.4	45.0	0.0	0.4	1.4	326.9	49.9	25.0	102.2	430.5
	Apr.	338.4	130.1	45.0	0.0	0.7	0.3	331.0	42.9	38.9	101.1	432.4
	May	342.5	121.6	45.0	0.0	0.8	0.4	333.8	36.3	38.1	101.3	435.5
	June	339.8	132.0	45.0	0.0	0.3	0.6	337.0	40.4	37.2	101.9	439.5
	July	342.4	143.1	45.0	0.0	0.4	0.6	342.1	45.7	39.5	103.0	445.6
	Aug.	343.2	150.1	45.0	0.0	0.5	1.0	344.8	47.3	42.1	103.6	449.4
	Sep.	343.5	150.4	45.0	0.0	0.2	0.7	342.1	51.4	41.6	103.3	446.1

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

2 Monetary developments in the euro area

Table 2.1

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

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

1. Assets

		Loans to euro area residents				Holdings of securities other than shares issued by euro area residents				Holdings of shares/ other equity issued by euro area residents			External assets [3)]	Fixed assets	Remaining assets	Total
			MFIs	General government	Other euro area residents		MFIs	General government	Other euro area residents		MFIs	Other euro area residents				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1998	Jan.	230.0	208.4	21.2	0.4	111.7	1.0	109.3	1.5	2.9	0.3	2.6	300.8	7.2	43.0	695.7
	Feb.	252.9	231.1	21.2	0.7	108.2	1.0	105.8	1.5	2.9	0.4	2.5	301.1	7.3	44.3	716.7
	Mar.	237.9	216.5	21.2	0.2	106.6	1.2	104.2	1.3	3.0	0.4	2.6	300.4	7.5	41.3	696.7
	Apr.	232.7	211.2	21.2	0.4	102.5	1.4	100.2	0.9	3.0	0.4	2.6	304.0	7.6	45.7	695.5
	May	234.8	213.4	21.2	0.3	101.9	1.6	99.4	0.9	3.0	0.4	2.6	307.2	7.7	48.8	703.5
	June	325.0	303.7	21.1	0.2	105.4	4.8	99.7	0.8	3.2	0.6	2.6	289.7	7.8	49.8	781.0
	July	338.2	316.9	21.1	0.2	87.8	1.1	85.9	0.8	4.8	2.1	2.8	293.6	8.0	51.9	784.4
	Aug.	339.9	318.5	21.1	0.2	88.1	0.9	86.3	0.9	4.8	2.0	2.8	291.4	8.0	56.9	789.1
	Sep.	326.8	305.5	21.1	0.2	82.7	1.0	81.0	0.7	4.8	2.0	2.8	289.1	8.0	52.1	763.5
	Oct.	326.6	305.3	21.1	0.2	73.3	0.9	71.7	0.7	4.8	1.9	2.9	298.9	8.1	51.7	763.3
	Nov.	322.2	300.7	21.1	0.4	78.0	1.0	76.3	0.6	4.8	1.9	2.9	306.1	8.1	53.4	772.5
	Dec.	225.1	204.5	20.4	0.1	87.8	1.1	86.2	0.5	5.5	1.8	3.7	317.2	7.9	49.4	692.9
1999	Jan.	490.9	470.3	20.4	0.2	89.2	1.3	87.3	0.6	8.2	4.1	4.1	416.8	9.3	57.1	1,071.4
	Feb.	587.2	566.6	20.4	0.2	90.7	1.5	88.6	0.5	8.3	4.2	4.1	365.3	9.3	56.8	1,117.6
	Mar.	582.8	562.2	20.4	0.2	94.0	1.5	91.9	0.6	8.1	4.0	4.1	426.0	9.3	52.2	1,172.5
	Apr.	532.6	512.1	20.4	0.2	93.2	1.2	91.3	0.7	8.1	4.0	4.1	435.7	9.6	52.8	1,132.1
	May	465.9	445.3	20.4	0.2	93.1	1.6	90.8	0.7	8.2	4.0	4.2	387.3	9.6	51.1	1,015.3
	June	751.5	730.9	20.4	0.2	92.4	1.5	90.0	0.9	8.7	4.4	4.3	499.2	9.7	48.1	1,409.5
	July	744.3	723.7	20.4	0.2	92.3	1.5	89.9	0.9	8.7	4.4	4.4	451.8	9.8	52.6	1,359.6
	Aug. [(p)]	512.7	492.2	20.4	0.1	91.9	1.1	90.0	0.7	8.8	4.4	4.4	423.0	9.9	53.8	1,100.0

2. Liabilities

		Currency in circulation	Deposits of euro area residents				Money market paper	Debt securities issued	Capital and reserves	External liabilities [3)]	Remaining liabilities	Total
			MFIs	Central government	Other general government/ other euro area residents							
		1	2	3	4	5	6	7	8	9	10	11
1998	Jan.	339.9	136.3	83.4	50.7	2.2	15.5	14.8	109.2	17.7	62.3	695.7
	Feb.	339.9	159.2	93.7	61.5	4.0	15.2	14.6	107.4	16.7	63.7	716.7
	Mar.	340.5	137.9	88.4	46.8	2.7	14.0	14.5	106.6	17.0	66.3	696.7
	Apr.	343.8	131.3	84.8	44.3	2.2	14.6	14.4	105.6	17.5	68.4	695.5
	May	346.1	141.8	90.9	47.0	4.0	14.7	13.7	105.3	17.0	64.8	703.5
	June	345.4	209.1	150.4	54.2	4.5	14.4	13.3	113.4	20.8	64.5	781.0
	July	350.4	200.9	133.9	64.0	3.0	15.1	13.0	112.1	24.0	68.8	784.4
	Aug.	344.6	209.8	136.6	69.7	3.5	13.4	12.5	112.0	21.6	75.1	789.1
	Sep.	341.5	197.0	125.4	67.1	4.5	11.9	12.0	108.2	23.2	69.7	763.5
	Oct.	342.3	199.1	130.1	64.7	4.3	11.8	11.7	108.5	22.6	67.2	763.3
	Nov.	344.1	211.5	148.3	56.8	6.4	13.0	11.0	105.1	20.0	67.8	772.5
	Dec.	359.1	146.9	89.0	55.0	2.9	8.5	5.3	97.1	18.6	57.4	692.9
1999	Jan.	343.8	434.2	377.7	50.3	6.2	6.3	5.3	125.7	99.3	56.8	1,071.4
	Feb.	342.4	534.1	472.4	55.0	6.7	6.3	5.3	122.9	50.5	56.0	1,117.6
	Mar.	348.3	523.8	460.8	55.1	7.9	4.9	5.3	138.0	97.9	54.5	1,172.5
	Apr.	349.6	477.9	432.8	38.8	6.4	4.9	5.3	138.9	105.0	50.5	1,132.1
	May	353.0	404.4	354.2	42.7	7.5	4.9	5.3	137.4	61.2	49.2	1,015.3
	June	355.8	686.9	635.0	44.1	7.8	4.9	5.3	140.8	171.1	44.7	1,409.5
	July	363.6	671.7	609.5	56.4	5.8	4.9	5.3	139.9	124.1	50.2	1,359.6
	Aug. [(p)]	358.6	445.7	385.1	54.5	6.1	4.9	5.3	139.9	93.7	52.0	1,100.0

Source: ECB.

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

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

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

Table 2.2

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

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

1. Assets

		Loans to euro area residents	MFIs	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	MFIs	General government	Other euro area residents	Money market paper	Holdings of shares/ other equity issued by euro area residents	MFIs	Other euro area residents	External assets	Fixed assets	Remaining assets	Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	Jan.	8,501.3	2,974.4	806.4	4,720.6	1,909.4	646.6	1,074.0	188.9	106.4	351.2	102.2	249.0	1,597.3	236.4	826.4	13,528.4
	Feb.	8,538.7	2,986.8	807.9	4,744.0	1,930.2	649.9	1,086.2	194.1	108.2	363.7	106.6	257.1	1,623.6	236.7	831.4	13,632.5
	Mar.	8,561.6	2,979.8	806.0	4,775.8	1,954.5	652.3	1,103.7	198.6	107.8	384.4	110.9	273.5	1,676.7	238.0	811.3	13,734.4
	Apr.	8,617.1	2,999.7	810.9	4,806.5	1,975.6	661.8	1,114.8	199.1	108.2	396.1	114.0	282.1	1,634.0	238.2	830.8	13,800.1
	May	8,618.2	2,994.0	799.7	4,824.4	1,998.3	669.1	1,126.5	202.7	107.4	404.0	116.4	287.7	1,632.9	247.0	845.6	13,853.4
	June	8,752.6	3,070.5	805.8	4,876.4	2,013.7	680.5	1,137.6	195.5	104.9	401.0	118.2	282.8	1,674.8	240.2	736.3	13,923.5
	July	8,732.2	3,013.8	801.4	4,917.0	2,034.4	696.2	1,137.2	201.0	105.3	392.2	117.2	275.1	1,632.7	235.3	779.7	13,911.9
	Aug.	8,756.1	3,035.8	803.9	4,916.4	2,040.5	702.9	1,136.1	201.6	104.7	386.4	118.2	268.3	1,641.1	236.3	768.9	13,933.9
	Sep.	8,836.2	3,071.9	807.8	4,956.5	2,047.7	707.5	1,136.4	203.9	106.9	380.3	108.9	271.4	1,654.4	236.9	783.4	14,045.8
	Oct.	8,972.3	3,167.7	813.7	4,990.9	2,074.5	715.9	1,151.2	207.4	106.0	387.3	115.0	272.3	1,636.3	239.0	781.5	14,196.9
	Nov.	9,100.8	3,245.0	817.8	5,038.0	2,071.5	721.9	1,147.2	202.4	113.5	401.9	116.0	285.8	1,681.3	241.2	798.4	14,408.5
	Dec.	9,082.9	3,171.3	820.4	5,091.2	2,016.9	728.0	1,095.4	193.6	107.1	422.1	120.9	301.2	1,590.2	243.8	783.6	14,246.8
1999	Jan.	9,302.2	3,380.9	820.4	5,100.9	2,047.0	736.8	1,103.2	206.9	108.0	430.4	112.9	317.5	1,633.9	244.6	936.0	14,701.9
	Feb.	9,199.0	3,268.3	820.9	5,109.8	2,063.4	744.9	1,115.5	202.9	112.2	441.5	117.5	324.0	1,589.3	243.4	954.6	14,603.2
	Mar.	9,254.9	3,282.9	818.7	5,153.3	2,086.4	759.3	1,129.4	197.6	99.1	468.1	125.7	342.4	1,644.1	244.6	883.7	14,680.9
	Apr.	9,299.7	3,308.5	811.4	5,179.8	2,103.8	773.3	1,128.5	201.9	104.8	481.1	126.0	355.0	1,632.5	246.3	846.6	14,714.6
	May	9,314.4	3,289.1	810.3	5,214.9	2,141.3	786.0	1,147.1	208.3	102.8	496.7	127.8	368.9	1,620.9	247.5	829.9	14,753.4
	June	9,453.8	3,338.2	816.0	5,299.5	2,137.5	799.6	1,127.2	210.7	101.6	482.9	124.6	358.3	1,640.5	249.3	840.7	14,906.3
	July	9,463.9	3,327.0	807.6	5,329.3	2,129.9	799.3	1,117.2	213.4	107.8	481.5	126.3	355.2	1,628.7	253.9	826.7	14,892.4
	Aug.[p)]	9,485.2	3,356.2	804.2	5,324.8	2,151.1	806.2	1,123.6	221.3	110.5	481.1	127.3	353.7	1,629.4	254.6	807.5	14,919.4

2. Liabilities

		Currency in circulation	Deposits of euro area residents	MFIs	Central government	Other general government/ other euro area residents	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units	Debt securities issued	Money market paper	Capital and reserves	External liabilities	Remaining liabilities	Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	Jan.	0.4	7,791.3	3,038.7	95.9	4,656.6	1,179.9	1,917.8	1,341.8	217.1	253.7	1,946.6	145.2	690.8	1,426.8	1,273.7	13,528.4
	Feb.	0.4	7,838.6	3,075.0	98.4	4,665.2	1,181.7	1,922.1	1,345.1	216.3	255.7	1,969.9	147.2	696.0	1,460.8	1,263.9	13,632.5
	Mar.	0.4	7,845.7	3,086.2	92.8	4,666.7	1,210.8	1,897.2	1,346.4	212.2	255.5	1,987.2	149.5	710.3	1,512.0	1,273.7	13,734.4
	Apr.	0.4	7,876.4	3,088.8	97.2	4,690.3	1,225.3	1,912.4	1,346.0	206.6	258.3	2,001.5	156.3	702.6	1,483.3	1,321.3	13,800.1
	May	0.4	7,898.9	3,101.7	88.2	4,709.0	1,242.3	1,910.6	1,347.9	208.2	261.2	2,013.3	150.9	712.2	1,476.3	1,340.2	13,853.4
	June	0.4	7,999.4	3,174.8	94.0	4,730.5	1,289.8	1,890.8	1,346.5	203.4	259.8	2,042.4	145.9	718.7	1,496.1	1,260.8	13,923.5
	July	0.4	7,961.8	3,163.3	92.4	4,706.1	1,250.8	1,893.9	1,345.9	215.5	259.8	2,063.1	152.8	720.1	1,472.9	1,281.2	13,911.9
	Aug.	0.4	7,982.1	3,183.7	95.4	4,702.9	1,241.8	1,905.4	1,347.6	208.2	264.7	2,074.7	152.9	720.1	1,475.8	1,263.3	13,933.9
	Sep.	0.4	8,038.0	3,234.8	90.0	4,713.2	1,263.5	1,890.8	1,347.6	211.3	260.3	2,093.9	154.1	721.7	1,489.4	1,288.0	14,045.8
	Oct.	0.4	8,136.8	3,315.0	90.8	4,731.0	1,268.8	1,889.2	1,350.8	222.3	258.4	2,096.9	161.1	725.9	1,530.3	1,287.2	14,196.9
	Nov.	0.4	8,245.3	3,399.8	91.9	4,753.6	1,308.8	1,888.9	1,353.5	202.4	259.6	2,112.8	169.5	727.6	1,598.0	1,295.3	14,408.5
	Dec.	0.4	8,262.1	3,312.8	95.7	4,853.6	1,382.2	1,908.3	1,385.9	177.2	241.1	2,113.9	160.8	737.7	1,506.3	1,224.3	14,246.8
1999	Jan.	0.4	8,396.8	3,456.5	81.8	4,858.5	1,402.8	1,974.2	1,310.3	171.2	272.0	2,148.5	169.6	748.5	1,591.4	1,374.8	14,701.9
	Feb.	0.4	8,297.2	3,367.9	85.3	4,844.0	1,375.9	1,971.5	1,312.6	183.9	286.5	2,173.7	174.7	753.2	1,590.5	1,326.9	14,603.2
	Mar.	0.5	8,345.6	3,407.8	79.1	4,858.7	1,382.0	1,987.0	1,310.8	178.9	279.8	2,193.6	180.5	759.3	1,612.9	1,308.8	14,680.9
	Apr.	0.5	8,347.3	3,397.1	77.8	4,872.4	1,402.1	1,983.8	1,314.2	172.3	297.4	2,223.8	190.1	769.5	1,631.6	1,254.5	14,714.6
	May	0.5	8,374.2	3,406.5	78.8	4,889.0	1,428.3	1,974.1	1,314.1	172.5	296.7	2,247.9	190.2	777.5	1,656.1	1,210.3	14,753.4
	June	0.5	8,443.1	3,442.2	82.0	4,919.0	1,473.8	1,959.9	1,318.5	166.8	305.3	2,269.4	182.8	786.0	1,667.2	1,251.9	14,906.3
	July	0.5	8,448.3	3,443.4	78.8	4,926.1	1,464.3	1,976.9	1,320.8	164.0	302.2	2,276.0	183.7	792.2	1,648.5	1,240.9	14,892.4
	Aug. [p)]	0.6	8,447.1	3,458.3	83.1	4,905.7	1,436.1	1,987.1	1,320.0	162.5	307.1	2,290.9	194.3	791.9	1,681.5	1,206.1	14,919.4

Source: ECB.

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

Table 2.3

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

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

1. Assets: levels outstanding

		Loans to euro area residents	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government	Other euro area residents	Holdings of shares/other equity issued by other euro area residents	External assets [4)]	Fixed assets	Remaining assets	Total
		1	2	3	4	5	6	7	8	9	10	11
1998	Jan.	5,548.5	827.5	4,721.0	1,373.6	1,183.2	190.4	251.6	1,898.1	243.6	840.5	10,155.9
	Feb.	5,573.8	829.1	4,744.7	1,387.6	1,192.0	195.6	259.6	1,924.7	244.0	847.1	10,236.7
	Mar.	5,603.2	827.2	4,776.0	1,407.7	1,207.9	199.8	276.1	1,977.1	245.5	823.5	10,333.1
	Apr.	5,639.0	832.1	4,806.9	1,414.9	1,215.0	199.9	284.7	1,938.0	245.8	847.0	10,369.4
	May	5,645.6	820.9	4,824.7	1,429.4	1,225.9	203.5	290.3	1,940.1	254.7	865.1	10,425.3
	June	5,703.4	826.9	4,876.6	1,433.7	1,237.3	196.4	285.4	1,964.5	248.0	755.8	10,390.9
	July	5,739.7	822.5	4,917.2	1,424.9	1,223.1	201.8	277.9	1,926.3	243.3	801.4	10,413.6
	Aug.	5,741.6	825.0	4,916.6	1,424.8	1,222.4	202.4	271.1	1,932.5	244.3	795.6	10,409.9
	Sep.	5,785.6	828.9	4,956.7	1,421.9	1,217.3	204.5	274.2	1,943.4	245.0	805.4	10,475.5
	Oct.	5,825.9	834.8	4,991.1	1,431.0	1,222.9	208.1	275.2	1,935.2	247.1	803.7	10,518.0
	Nov.	5,877.2	838.8	5,038.4	1,426.5	1,223.5	203.0	288.7	1,987.3	249.3	821.4	10,650.5
	Dec.	5,932.1	840.8	5,091.3	1,375.7	1,181.6	194.1	304.9	1,907.4	251.8	797.1	10,569.0
1999	Jan.	5,941.9	840.8	5,101.0	1,398.0	1,190.5	207.6	321.6	2,050.6	253.9	962.0	10,928.0
	Feb.	5,951.3	841.3	5,110.0	1,407.6	1,204.1	203.5	328.1	1,954.5	252.7	981.2	10,875.4
	Mar.	5,992.7	839.1	5,153.5	1,419.5	1,221.3	198.2	346.6	2,070.1	253.9	904.6	10,987.4
	Apr.	6,011.8	831.8	5,180.0	1,422.4	1,219.8	202.6	359.2	2,068.1	255.9	868.8	10,986.3
	May	6,045.8	830.8	5,215.0	1,446.8	1,237.9	209.0	373.1	2,008.2	257.1	848.8	10,979.8
	June	6,136.1	836.4	5,299.7	1,428.8	1,217.2	211.6	362.6	2,139.7	259.0	856.1	11,182.2
	July	6,157.4	828.0	5,329.5	1,421.4	1,207.1	214.4	359.5	2,080.5	263.7	847.0	11,129.6
	Aug. [(p)]	6,149.5	824.6	5,325.0	1,435.6	1,213.6	222.0	358.1	2,052.4	264.4	828.3	11,088.5

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	Redeem-able at notice	Repur-chase agree-ments	Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities [4)]	Re-maining liabilities	Excess of inter-MFI liabilities	Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1998	Jan.	311.4	146.6	4,658.8	1,182.1	1,917.8	1,341.8	217.1	308.0	1,313.8	697.6	1,444.4	1,336.0	-60.6	10,155.9
	Feb.	311.7	160.0	4,669.2	1,185.6	1,922.1	1,345.1	216.3	309.8	1,333.6	696.5	1,477.5	1,327.6	-49.1	10,236.7
	Mar.	311.8	139.6	4,669.4	1,213.6	1,897.2	1,346.4	212.2	311.2	1,348.3	705.7	1,528.9	1,340.0	-21.7	10,333.1
	Apr.	314.8	141.6	4,692.5	1,227.5	1,912.4	1,346.0	206.6	321.0	1,352.6	693.8	1,500.8	1,389.7	-37.3	10,369.4
	May	317.2	135.1	4,713.0	1,246.3	1,910.6	1,347.9	208.2	319.4	1,356.2	700.8	1,493.3	1,405.0	-14.9	10,425.3
	June	315.5	148.2	4,735.0	1,294.3	1,890.8	1,346.5	203.4	315.1	1,370.3	713.4	1,516.9	1,325.3	-49.0	10,390.9
	July	320.6	156.4	4,709.1	1,253.8	1,893.9	1,345.9	215.5	322.3	1,378.7	713.1	1,496.9	1,349.9	-33.5	10,413.6
	Aug.	314.9	165.2	4,706.4	1,245.3	1,905.4	1,347.6	208.2	326.3	1,383.4	712.0	1,497.4	1,338.4	-34.1	10,409.9
	Sep.	311.7	157.1	4,717.7	1,268.0	1,890.8	1,347.6	211.3	319.5	1,397.5	719.1	1,512.5	1,357.7	-17.2	10,475.5
	Oct.	313.3	155.5	4,735.3	1,273.1	1,889.2	1,350.8	222.3	325.3	1,391.8	717.4	1,552.9	1,354.4	-27.9	10,518.0
	Nov.	314.2	148.8	4,759.9	1,315.1	1,888.9	1,353.5	202.4	328.7	1,400.9	714.8	1,618.0	1,363.0	2.4	10,650.5
	Dec.	323.6	150.7	4,856.5	1,385.1	1,908.3	1,385.9	177.2	303.4	1,390.2	712.1	1,524.9	1,281.7	26.0	10,569.0
1999	Jan.	313.2	132.1	4,864.7	1,409.0	1,974.2	1,310.3	171.2	339.9	1,415.6	757.3	1,690.7	1,431.6	-17.1	10,928.0
	Feb.	312.6	140.4	4,850.7	1,382.6	1,971.5	1,312.6	183.9	355.3	1,432.5	754.4	1,641.1	1,382.9	5.4	10,875.4
	Mar.	317.5	134.2	4,866.6	1,389.9	1,987.0	1,310.8	178.9	366.0	1,438.0	767.5	1,710.8	1,363.3	23.4	10,987.4
	Apr.	319.5	116.6	4,878.8	1,408.4	1,983.8	1,314.2	172.4	387.5	1,454.5	778.4	1,736.6	1,305.0	9.3	10,986.3
	May	321.3	121.5	4,896.4	1,435.7	1,974.1	1,314.1	172.6	388.9	1,465.6	783.1	1,717.3	1,259.5	26.2	10,979.8
	June	323.7	126.1	4,926.8	1,481.6	1,959.9	1,318.5	166.8	391.3	1,473.7	797.7	1,838.3	1,296.7	8.0	11,182.2
	July	331.7	135.2	4,931.9	1,469.9	1,976.9	1,320.8	164.2	382.9	1,480.5	801.4	1,772.6	1,291.1	2.1	11,129.6
	Aug. [(p)]	326.2	137.7	4,911.7	1,442.0	1,987.1	1,320.0	162.7	395.7	1,488.8	800.1	1,775.2	1,258.1	-5.0	11,088.5

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 the Member States in the euro area.

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

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

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

(EUR billions (not seasonally adjusted))

3. Assets: flows [3)]

		Loans to euro area residents	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government	Other euro area residents	Holdings of shares/other equity issued by other euro area residents	External assets [4)]	Fixed assets	Remaining assets	Total
		1	2	3	4	5	6	7	8	9	10	11
1998	Feb.	28.6	2.4	26.3	14.1	8.8	5.3	8.0	33.3	0.4	6.2	90.7
	Mar.	30.9	-1.9	32.8	19.2	15.1	4.2	16.4	40.5	1.5	-23.6	85.0
	Apr.	39.8	5.0	34.8	7.8	7.5	0.3	8.6	-5.6	0.3	23.2	74.1
	May	8.3	-11.1	19.4	14.8	11.1	3.7	5.6	15.9	9.0	17.9	71.4
	June	66.7	5.9	60.8	2.9	10.7	-7.8	-6.0	8.2	-6.7	-104.5	-39.4
	July	40.0	-4.2	44.2	-11.7	-17.3	5.6	-6.8	-15.6	-4.7	46.0	47.2
	Aug.	1.5	2.4	-0.9	-0.4	-0.9	0.5	-6.7	-3.9	1.0	-6.0	-14.6
	Sep.	50.8	4.2	46.6	-2.5	-5.0	2.6	3.1	81.9	0.6	-4.3	129.8
	Oct.	40.2	5.8	34.4	7.7	4.5	3.2	0.9	-17.4	2.2	-1.6	32.1
	Nov.	53.4	3.9	49.5	-4.7	0.5	-5.2	13.5	24.8	2.4	17.5	106.9
	Dec.	64.9	2.1	62.8	-49.9	-41.0	-8.9	16.2	-72.7	2.6	-23.9	-62.8
1999	Jan.	70.9	0.9	70.0	17.5	17.1	0.4	10.5	112.8	-0.2	151.8	363.4
	Feb.	7.1	0.3	6.8	9.1	13.4	-4.3	6.5	-132.2	-1.2	19.1	-91.6
	Mar.	36.2	-2.9	39.1	28.0	25.5	2.5	18.2	65.9	1.3	-87.1	62.8
	Apr.	17.7	-8.9	26.6	3.7	-0.6	4.3	12.6	-17.0	2.0	-35.8	-16.8
	May	33.1	-1.1	34.2	24.2	18.0	6.2	14.0	-72.1	1.2	-20.0	-19.7
	June	91.5	5.6	85.9	-19.3	-21.7	2.5	-11.2	116.5	1.7	6.9	186.6
	July	23.8	-8.3	32.1	-7.0	-10.0	3.0	-3.0	-21.3	4.7	-9.2	-12.0
	Aug. [p]	-10.6	-3.5	-7.1	13.5	6.1	7.4	-1.6	-50.0	0.7	-18.6	-66.6

4. Liabilities: flows [3)]

		Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeem-able at notice	Repur-chase agree-ments	Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities [4)]	Re-maining liabilities	Excess of inter-MFI liabilities	Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1998	Feb.	0.4	13.3	11.0	3.8	4.8	3.2	-0.8	1.9	20.5	0.5	38.8	-7.9	12.2	90.7
	Mar.	0.0	-20.4	-0.8	27.6	-25.6	1.3	-4.1	1.3	14.7	12.5	40.9	9.2	27.4	85.0
	Apr.	3.0	2.0	26.1	15.0	17.0	-0.4	-5.6	10.1	8.2	-11.2	-1.3	52.8	-15.6	74.1
	May	2.4	-6.5	21.8	19.3	-1.1	1.9	1.6	-1.4	6.2	7.4	2.6	16.6	22.3	71.4
	June	-1.7	13.1	20.8	47.4	-20.5	-1.4	-4.8	-4.4	14.5	15.5	11.9	-77.3	-31.8	-39.4
	July	5.2	8.2	-23.6	-39.7	4.4	-0.6	12.2	7.4	11.6	-1.0	-2.5	25.0	17.0	47.2
	Aug.	-5.7	8.8	-3.8	-8.9	10.8	1.7	-7.3	3.8	3.1	-0.1	-8.4	-11.7	-0.5	-14.6
	Sep.	-3.2	-8.1	17.8	24.8	-10.5	0.2	3.2	-6.2	6.9	8.1	73.6	24.2	16.6	129.8
	Oct.	1.5	-1.6	16.9	4.7	-2.0	3.2	11.0	5.9	-9.0	-1.2	36.6	-6.1	-10.9	32.1
	Nov.	0.9	-6.7	22.2	41.2	-1.7	2.6	-19.9	3.1	7.6	-1.8	40.4	10.9	30.3	106.9
	Dec.	9.4	1.9	99.0	70.5	21.3	32.4	-25.2	-24.8	-10.9	-2.9	-82.7	-76.1	24.2	-62.8
1999	Jan.	-9.4	-6.6	34.1	23.7	-2.2	14.6	-1.9	13.6	26.8	14.7	157.8	159.7	-27.3	363.4
	Feb.	-0.6	8.3	-24.1	-27.6	-11.5	2.2	12.7	15.1	13.0	-1.9	-83.6	-47.0	29.3	-91.6
	Mar.	4.8	-6.0	12.7	5.9	13.7	-1.9	-5.1	6.5	7.5	12.4	42.8	-29.6	11.7	62.8
	Apr.	2.0	-17.6	11.0	18.1	-3.9	3.4	-6.6	20.9	15.3	11.3	12.9	-58.9	-13.8	-16.8
	May	1.8	4.9	16.4	26.8	-10.4	-0.2	0.2	1.3	9.6	5.5	-31.4	-44.7	16.9	-19.7
	June	2.4	4.6	28.8	45.4	-15.1	4.4	-5.8	1.2	6.5	16.3	106.2	39.7	-19.1	186.6
	July	8.1	9.1	8.2	-10.6	18.9	2.4	-2.5	-7.9	9.8	4.0	-31.0	-5.9	-6.4	-12.0
	Aug. [p]	-5.6	2.5	-22.3	-28.8	8.9	-0.9	-1.5	12.6	5.9	-1.1	-15.6	-35.2	-7.7	-66.6

Table 2.4

Monetary aggregates [1] [2]

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

1. Levels outstanding at the end of the period

		M1						M2				
				Total	Index, Dec. 98 = 100 [3]	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index, Dec. 98 = 100 [3]	Repurchase agreements	Money market fund shares/ units and money market paper	Debt securities up to 2 years
		Currency in circulation	Overnight deposits									
		1	2	3	4	5	6	7	8	9	10	11
1998	Jan.	311.4	1,253.6	1,565.0	87.97	908.4	1,177.5	3,650.9	93.59	217.1	308.0	74.8
	Feb.	311.7	1,254.1	1,565.8	88.03	905.1	1,181.6	3,652.5	93.65	216.3	309.8	79.6
	Mar.	311.8	1,283.8	1,595.5	89.68	878.8	1,183.4	3,657.7	93.76	212.2	311.2	85.8
	Apr.	314.8	1,295.9	1,610.7	90.59	892.6	1,185.1	3,688.4	94.60	206.6	321.0	86.4
	May	317.2	1,313.0	1,630.2	91.71	888.8	1,189.2	3,708.3	95.14	208.2	319.4	88.7
	June	315.5	1,361.7	1,677.2	94.32	871.2	1,189.0	3,737.4	95.86	203.4	315.1	87.8
	July	320.6	1,321.7	1,642.3	92.41	872.5	1,189.7	3,704.6	95.07	215.5	322.3	93.5
	Aug.	314.9	1,312.6	1,627.5	91.56	879.3	1,192.9	3,699.7	94.92	208.2	326.3	88.8
	Sep.	311.7	1,333.9	1,645.6	92.70	864.8	1,193.8	3,704.2	95.18	211.3	319.5	80.5
	Oct.	313.3	1,337.8	1,651.1	92.98	867.2	1,197.3	3,715.6	95.46	222.3	325.3	81.5
	Nov.	314.2	1,379.6	1,693.8	95.34	871.1	1,199.9	3,764.8	96.66	202.4	328.7	80.0
	Dec.	323.6	1,452.5	1,776.1	100.00	885.1	1,231.6	3,892.8	100.00	177.2	303.4	67.9
1999	Jan.	313.2	1,476.8	1,790.0	100.83	881.7	1,247.6	3,919.3	100.61	171.2	339.9	55.0
	Feb.	312.6	1,446.8	1,759.4	99.04	868.0	1,251.6	3,879.0	99.50	183.9	355.3	56.8
	Mar.	317.5	1,463.4	1,780.9	100.17	878.3	1,250.4	3,909.5	100.21	178.9	366.0	48.5
	Apr.	319.5	1,478.7	1,798.2	101.12	871.9	1,255.3	3,925.4	100.59	172.4	387.5	53.2
	May	321.3	1,503.5	1,824.7	102.59	862.5	1,259.3	3,946.5	101.11	172.6	388.9	59.0
	June	323.7	1,545.6	1,869.3	105.07	842.2	1,265.1	3,976.6	101.85	166.8	391.3	55.1
	July	331.7	1,539.9	1,871.6	105.26	854.0	1,269.9	3,995.5	102.40	164.2	382.9	60.2
	Aug. (p)	326.2	1,511.3	1,837.5	103.30	856.9	1,270.1	3,964.5	101.56	162.7	395.7	62.0

2. Flows [4]

		M1						M2				
				Total	Annual percentage change [4]	Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual percentage change [4]	Repurchase agreements	Money market fund shares/ units and money market paper	Debt securities up to 2 years
		Currency in circulation	Overnight deposits									
		1	2	3	4	5	6	7	8	9	10	11
1998	Feb.	0.4	0.7	1.1	8.3	-3.1	4.1	2.1	4.2	-0.8	1.9	4.9
	Mar.	0.0	29.3	29.4	8.8	-26.8	1.8	4.3	4.4	-4.1	1.3	6.2
	Apr.	3.0	13.2	16.2	10.3	15.1	1.8	33.1	5.1	-5.6	10.1	0.9
	May	2.4	17.6	20.0	10.1	-3.1	4.1	21.0	5.3	1.6	-1.4	2.6
	June	-1.7	48.1	46.4	9.6	-18.2	-0.2	28.0	5.3	-4.8	-4.4	-1.0
	July	5.2	-39.2	-34.1	8.2	2.4	0.7	-31.0	4.4	12.2	7.4	6.0
	Aug.	-5.7	-9.4	-15.2	8.3	6.3	3.2	-5.7	4.3	-7.3	3.8	-4.8
	Sep.	-3.2	23.5	20.3	8.0	-11.3	1.1	10.1	4.7	3.2	-6.2	-7.5
	Oct.	1.5	3.5	5.1	8.1	2.2	3.5	10.7	4.5	11.0	5.9	0.7
	Nov.	0.9	41.0	41.8	8.4	2.7	2.5	47.0	5.0	-19.9	3.1	-1.8
	Dec.	9.4	73.4	82.8	9.6	15.6	31.4	129.9	6.0	-25.2	-24.8	-12.2
1999	Jan.	-9.4	24.2	14.8	14.6	-6.7	15.6	23.6	7.5	-1.9	13.6	-1.2
	Feb.	-0.6	-31.2	-31.8	12.5	-15.2	3.9	-43.1	6.3	12.7	15.1	1.3
	Mar.	4.8	15.2	20.1	11.7	9.0	-1.4	27.7	6.9	-5.1	6.5	-1.7
	Apr.	2.0	14.9	16.9	11.6	-7.0	5.0	14.9	6.3	-6.6	20.9	1.8
	May	1.8	24.4	26.1	11.9	-9.8	3.9	20.2	6.3	0.2	1.3	5.7
	June	2.4	41.6	44.0	11.4	-21.0	5.8	28.8	6.2	-5.8	1.2	-4.0
	July	8.1	-4.6	3.4	13.9	13.1	4.9	21.4	7.7	-2.5	-7.9	5.4
	Aug. (p)	-5.6	-29.3	-34.9	12.8	1.9	0.2	-32.8	7.0	-1.5	12.6	1.5

Source: ECB.

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

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

3) *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.*

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 on page 17*.*

M3			Memo: Non-monetary liabilities of MFIs							
Total	Index, Dec. 98 = 100 [3]		Deposits			Debt securities over 2 years	Capital and reserves	Total		
				With agreed maturity over 2 years	Redeemable at notice over 3 months					
12	13	14	15	16	17	18	19	20		
4,250.9	95.49		1,227.7	1,010.0	217.7	1,239.0	697.6	3,164.2	1998	Jan.
4,258.3	95.67		1,235.2	1,017.7	217.5	1,254.0	696.5	3,185.7		Feb.
4,267.0	95.84		1,235.8	1,019.1	216.8	1,262.5	705.7	3,204.0		Mar.
4,302.4	96.71		1,235.2	1,020.5	214.7	1,266.2	693.8	3,195.3		Apr.
4,324.6	97.24		1,235.3	1,022.3	213.0	1,267.5	700.8	3,203.7		May
4,343.8	97.65		1,232.2	1,020.2	212.0	1,282.5	713.4	3,228.0		June
4,335.9	97.52		1,232.6	1,021.8	210.8	1,285.2	713.1	3,230.9		July
4,323.0	97.21		1,236.5	1,026.6	209.9	1,294.6	712.0	3,243.0		Aug.
4,315.5	97.20		1,235.8	1,026.5	209.3	1,317.0	719.1	3,271.9		Sep.
4,344.8	97.84		1,231.5	1,022.4	209.1	1,310.2	717.4	3,259.2		Oct.
4,375.9	98.48		1,227.8	1,018.3	209.5	1,320.9	714.8	3,263.5		Nov.
4,441.3	100.00		1,238.4	1,023.7	214.6	1,322.3	712.1	3,272.8		Dec.
4,485.4	100.77		1,216.4	1,093.2	123.1	1,360.7	757.3	3,334.3	1999	Jan.
4,475.1	100.45		1,226.2	1,104.3	121.8	1,375.7	754.4	3,356.2		Feb.
4,502.9	101.07		1,230.4	1,109.5	120.9	1,389.5	767.5	3,387.4		Mar.
4,538.4	101.76		1,231.6	1,112.9	118.7	1,401.4	778.4	3,411.4		Apr.
4,567.0	102.38		1,227.7	1,112.5	115.2	1,406.6	783.1	3,417.4		May
4,589.7	102.83		1,232.9	1,118.7	114.2	1,418.5	797.7	3,449.1		June
4,602.8	103.20		1,235.6	1,123.6	112.0	1,420.3	801.4	3,457.3		July
4,584.8	102.74		1,241.9	1,130.9	111.0	1,426.8	800.1	3,468.8		Aug. [p]

M3			Memo: Non-monetary liabilities of MFIs							
Total	Annual percentage change [4]	3-month moving average (centred)	Deposits			Debt securities over 2 years	Capital and reserves	Total		
				With agreed maturity over 2 years	Redeemable at notice over 3 months					
12	13	14	15	16	17	18	19	20		
8.0	4.6	4.7	7.6	7.8	-0.2	15.6	0.5	23.7	1998	Feb.
7.7	4.7	4.9	0.5	1.2	-0.8	8.5	12.5	21.6		Mar.
38.6	5.2	5.0	-0.1	1.9	-2.0	7.2	-11.2	-4.1		Apr.
23.8	5.0	5.1	0.2	1.9	-1.7	3.6	7.4	11.2		May
17.9	4.9	4.9	-3.3	-2.3	-1.0	15.5	15.5	27.7		June
-5.4	4.8	4.8	0.7	1.9	-1.2	5.6	-1.0	5.4		July
-14.1	4.5	4.6	3.6	4.5	-0.9	7.9	-0.1	11.4		Aug.
-0.3	4.5	4.7	0.3	0.8	-0.6	14.4	8.1	22.7		Sep.
28.4	4.9	4.7	-4.4	-4.1	-0.2	-9.7	-1.2	-15.4		Oct.
28.4	4.7	4.7	-4.0	-4.4	0.4	9.4	-1.8	3.6		Nov.
67.7	4.6	4.9	11.2	5.7	5.5	1.3	-2.9	9.6		Dec.
34.1	5.5	5.0	3.7	4.7	-1.0	28.0	14.7	46.4	1999	Jan.
-14.0	5.0	5.3	2.4	3.7	-1.3	11.6	-1.9	12.1		Feb.
27.4	5.5	5.2	3.9	4.7	-0.8	9.2	12.4	25.5		Mar.
31.0	5.2	5.3	1.0	3.3	-2.2	13.5	11.3	25.9		Apr.
27.3	5.3	5.3	-4.2	-0.7	-3.5	4.0	5.5	5.4		May
20.2	5.3	5.5	4.9	5.9	-1.0	10.5	16.3	31.7		June
16.4	5.8	5.6	3.3	5.4	-2.2	4.4	4.0	11.7		July
-20.2	5.7	-	6.0	7.0	-1.0	4.4	-1.1	9.2		Aug. [p]

Table 2.4 (cont.)

Monetary aggregates [1] [2]

(EUR billions and percentage changes, unless otherwise indicated)

3. Seasonally adjusted levels

		M1		Other short-term deposits [4]		M2		Marketable instruments [5]		M3	
										Total	
		Total	Index [3]	Total		Total	Index [3]	Total			Index [3]
		1	2	3	4	5	6	7	8	9	10
1998	Jan.	1,566.8	88.07	2,058.0		3,624.8	92.96	606.6		4,231.4	95.15
	Feb.	1,589.5	89.36	2,063.3		3,652.8	93.69	601.8		4,254.6	95.68
	Mar.	1,606.6	90.30	2,063.9		3,670.5	94.12	605.4		4,275.9	96.14
	Apr.	1,626.3	91.46	2,063.8		3,690.1	94.69	604.0		4,294.1	96.62
	May	1,634.7	91.97	2,071.4		3,706.1	95.13	601.7		4,307.8	96.96
	June	1,650.0	92.80	2,074.0		3,724.0	95.56	603.2		4,327.2	97.37
	July	1,643.3	92.47	2,068.9		3,712.3	95.31	629.1		4,341.3	97.74
	Aug.	1,651.6	92.91	2,074.0		3,725.7	95.63	611.5		4,337.2	97.62
	Sep.	1,660.4	93.53	2,077.5		3,737.9	96.09	613.3		4,351.2	98.10
	Oct.	1,673.5	94.25	2,078.4		3,751.9	96.43	634.5		4,386.5	98.88
	Nov.	1,681.0	94.62	2,094.6		3,775.6	96.98	615.1		4,390.7	98.91
	Dec.	1,696.7	95.53	2,106.7		3,803.4	97.74	578.3		4,381.7	98.76
1999	Jan.	1,786.9	100.66	2,100.7		3,887.6	99.84	573.4		4,461.1	100.32
	Feb.	1,781.5	100.28	2,096.8		3,878.3	99.52	592.7		4,471.0	100.46
	Mar.	1,798.8	101.18	2,129.6		3,928.4	100.74	590.1		4,518.5	101.52
	Apr.	1,814.9	102.06	2,113.1		3,927.9	100.70	602.1		4,530.0	101.68
	May	1,828.7	102.82	2,119.0		3,947.7	101.18	605.4		4,553.1	102.17
	June	1,843.9	103.64	2,119.9		3,963.7	101.56	609.6		4,573.3	102.57
	July	1,866.9	104.99	2,132.0		3,998.9	102.53	605.4		4,604.3	103.33
	Aug. [p]	1,867.4	104.98	2,128.7		3,996.1	102.41	608.7		4,604.9	103.30

4. Seasonally adjusted flows [6]

		M1		Other short-term deposits [4]		M2		Marketable instruments [5]		M3	
										Total	
		Total	Change on previous month (%)	Total	Change on previous month (%)	Total	Change on previous month (%)	Total	Change on previous month (%)		Change on previous month (%)
		1	2	3	4	5	6	7	8	9	10
1998	Jan.	19.8	1.3	7.2	0.4	27.0	0.8	0.4	0.1	27.4	0.7
	Feb.	22.9	1.5	5.6	0.3	28.5	0.8	-4.7	-0.8	23.8	0.6
	Mar.	16.7	1.1	0.1	0.0	16.8	0.5	3.5	0.6	20.3	0.5
	Apr.	20.7	1.3	1.3	0.1	22.0	0.6	-0.7	-0.1	21.4	0.5
	May	8.9	0.5	8.3	0.4	17.2	0.5	-1.8	-0.3	15.4	0.4
	June	14.7	0.9	2.0	0.1	16.7	0.5	1.3	0.2	18.1	0.4
	July	-5.9	-0.4	-4.0	-0.2	-9.8	-0.3	26.4	4.4	16.6	0.4
	Aug.	8.0	0.5	4.6	0.2	12.5	0.3	-17.9	-2.8	-5.3	-0.1
	Sep.	11.0	0.7	6.9	0.3	17.9	0.5	3.4	0.6	21.3	0.5
	Oct.	12.7	0.8	0.6	0.0	13.3	0.4	21.0	3.4	34.3	0.8
	Nov.	6.6	0.4	15.0	0.7	21.5	0.6	-20.0	-3.1	1.6	0.0
	Dec.	16.2	1.0	13.4	0.6	29.6	0.8	-36.5	-5.9	-6.8	-0.2
1999	Jan.	91.1	5.4	-9.7	-0.5	81.4	2.1	-12.1	-2.1	69.3	1.6
	Feb.	-6.7	-0.4	-5.5	-0.3	-12.2	-0.3	18.4	3.2	6.3	0.1
	Mar.	15.9	0.9	31.3	1.5	47.3	1.2	-0.3	0.0	47.0	1.1
	Apr.	15.7	0.9	-17.1	-0.8	-1.5	0.0	8.6	1.5	7.2	0.2
	May	13.4	0.7	5.4	0.3	18.8	0.5	3.0	0.5	21.8	0.5
	June	14.6	0.8	0.2	0.0	14.8	0.4	2.9	0.5	17.7	0.4
	July	24.1	1.3	13.5	0.6	37.6	0.9	-3.3	-0.5	34.3	0.8
	Aug. [p]	-0.3	0.0	-4.3	-0.2	-4.5	-0.1	2.8	0.5	-1.7	0.0

Source: ECB.

1) *Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.*
2) *Data have been revised in the light of new information.*
3) *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 6. The percentage change in the index between any two dates corresponds to the change in the aggregate excluding such reclassifications, etc. For the calculation of growth rates, see the technical notes opposite.*
4) *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.*
5) *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.*
6) *Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions.*

Table 2.5

Outstanding MFI loans to households and non-financial corporations by type and maturity at issue [1)]

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

		Non-financial corporations [2)]				Households [2)]							Non-profit institutions serving households [2)]
							Consumer credit [3)]			Lending for house purchase [3)]			
			Up to 1 year	Over 1 and up to 5 years	Over 5 years		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Up to 1 year	Over 1 and up to 5 years	Over 5 years	
		1	2	3	4	5	6	7	8	9	10	11	12
1998	June	2,192.9	786.0	317.3	1,089.6	2,374.5	78.0	122.3	190.2	28.5	51.0	1,344.2	37.6
	Sep.	2,214.5	774.8	323.5	1,116.2	2,419.2	80.3	126.1	195.1	28.9	50.5	1,376.9	36.7
	Dec.	2,284.2	810.5	319.9	1,153.8	2,478.7	84.9	128.4	199.8	28.2	46.2	1,415.6	37.0
1999	Mar.	2,278.4	816.0	346.8	1,115.5	2,526.2	86.2	147.5	187.2	15.4	70.5	1,460.4	35.8
	June [p]	2,336.0	843.0	351.5	1,141.5	2,590.8	88.8	150.3	190.2	15.3	70.0	1,508.2	35.8

Source: ECB.

1) Data have been revised in the light of new information. Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated for periods before December 1998.

2) Corresponding ESA 95 sector codes: non-financial corporations, S11; households, S14; non-profit institutions serving households, S15.

3) The definitions of consumer credit and lending for house purchase are not fully consistent across the euro area. Column 5 includes other lending to households.

Table 2.4 – Technical notes

Seasonal adjustment of the euro area monetary aggregates

Multiplicative versions of X-12-ARIMA (version 0.2.2[1]) and TRAMO/SEATS[2] (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) $a_t = ((X_t * X_{t-1} * X_{t-2} * X_{t-3} * X_{t-4} * X_{t-5} * X_{t-6} * X_{t-7} * X_{t-8} * X_{t-9} * X_{t-10} * X_{t-11}) - 1) * 100$

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

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

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

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

Table 2.6

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	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	June	3,270.1	2,919.7	41.8	308.6	223.0	21.8	43.6	20.1	4,887.4	4,734.8	18.6	134.0	99.1	15.6	10.1	9.3
	Sep.	3,302.5	2,913.7	42.4	346.4	241.3	27.9	45.2	32.0	4,876.1	4,725.5	19.5	131.2	94.0	12.6	13.6	11.0
	Dec.	3,401.4	3,005.6	43.3	352.6	247.0	27.5	51.3	26.8	5,007.2	4,862.9	19.4	124.8	89.6	13.0	13.2	9.0
1999	Mar.	3,867.9	3,403.3	47.9	416.7	296.1	31.2	54.8	34.6	4,999.5	4,849.0	23.2	127.3	87.9	14.3	14.5	10.7
	June [p)]	4,074.9	3,636.2	42.8	396.0	284.7	30.7	51.6	28.9	5,048.4	4,891.3	24.6	132.5	94.4	15.3	12.5	10.4

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

		Banks [3)]								Non-banks							
		All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	June	1,150.4	470.0	122.6	557.7	435.9	42.7	51.3	27.8	366.1	140.5	34.6	191.1	142.8	18.4	11.5	18.3
	Sep.	1,173.8	468.1	129.0	576.7	443.3	47.4	54.1	31.9	332.5	143.1	30.6	158.8	122.3	13.8	11.2	11.6
	Dec.	1,158.4	457.4	125.7	575.3	441.3	55.8	52.5	25.7	365.7	153.5	33.4	178.8	130.9	23.2	12.1	12.6
1999	Mar.	1,286.7	554.5	130.9	601.3	463.9	53.3	53.4	30.8	417.4	179.2	39.2	199.0	147.3	25.1	12.5	13.9
	June [p)]	1,382.3	613.9	137.3	631.1	500.0	41.3	52.5	37.2	444.0	188.2	40.3	215.6	164.4	24.4	11.7	14.8

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

		Debt securities								Money market paper							
		All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2)]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	June	2,055.0	1,835.8	22.5	196.7	112.5	37.4	30.5	16.3	160.2	144.2	0.7	15.3	11.0	1.8	1.3	1.3
	Sep.	2,105.1	1,892.6	26.0	186.5	104.7	33.3	32.7	15.8	166.1	147.9	0.6	17.6	15.5	1.0	0.7	0.3
	Dec.	2,119.3	1,904.2	26.4	188.6	106.3	34.4	33.0	14.9	169.4	155.4	0.6	13.4	11.3	0.9	1.1	0.1
1999	Mar.	2,175.0	1,967.8	26.3	180.9	99.3	24.2	26.6	30.8	185.4	169.8	0.8	14.9	12.6	0.8	1.3	0.2
	June [p)]	2,248.7	2,031.7	31.3	185.8	102.5	23.4	27.7	32.2	187.6	170.7	1.3	15.6	12.8	1.1	1.5	0.2

Source: ECB.

1) Data have been revised in the light of new information. Outstanding amounts are not adjusted for reclassifications, other revaluations or exchange rate variations. Data are partially estimated for periods before December 1998.

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	USD	JPY	CHF	Other	All currencies	Euro [2]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	June	3,374.2	.	.	.	.	.	.	.	5,704.2	5,541.9	25.6	136.8	81.6	13.9	38.2	3.0
	Sep.	3,377.4	.	.	.	.	.	.	.	5,786.7	5,624.1	26.4	136.3	77.8	12.7	42.8	3.0
	Dec.	3,375.8	.	.	.	.	.	.	.	5,932.1	5,758.9	26.3	147.0	79.2	15.1	48.9	3.7
1999	Mar.	3,845.1	.	.	.	.	.	.	.	5,991.9	5,797.2	19.9	174.9	98.2	18.7	53.7	4.3
	June [p]	4,069.1	.	.	.	.	.	.	.	6,134.8	5,925.5	21.4	187.9	107.8	19.6	57.8	2.8

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

		MFIs								Non-MFIs							
		All currencies	Euro [2]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	June	685.4	657.0	6.2	23.2	14.7	2.6	1.2	4.7	1,433.7	1,390.2	10.7	34.7	17.2	7.2	2.7	7.5
	Sep.	708.5	680.3	7.4	21.1	13.7	3.0	1.4	3.0	1,421.9	1,384.4	10.8	27.3	15.0	7.6	2.4	2.3
	Dec.	729.0	686.0	18.0	25.0	16.9	3.7	1.8	2.6	1,375.7	1,338.8	10.6	26.4	14.4	8.6	2.3	1.1
1999	Mar.	760.9	725.5	8.0	27.8	18.2	5.8	1.3	2.5	1,419.5	1,387.0	4.0	28.9	15.4	10.7	2.0	0.9
	June [p]	801.1	767.6	6.6	26.9	17.6	5.4	1.1	2.9	1,428.8	1,398.6	3.3	27.1	13.7	10.5	2.1	0.9

6. Loans to non-residents of the euro area

		Banks [3]								Non-banks							
		All currencies	Euro [2]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	June	1,053.1	429.6	88.5	535.0	404.9	66.8	29.6	33.8	377.1	171.7	23.0	182.4	162.8	4.5	11.2	3.9
	Sep.	1,026.9	423.6	100.6	502.6	365.2	67.5	26.7	43.2	380.2	174.6	26.0	179.6	156.5	5.3	11.9	5.9
	Dec.	971.9	377.3	81.4	513.3	373.5	73.9	27.1	38.8	378.9	152.3	27.0	199.6	173.4	8.3	13.4	4.6
1999	Mar.	1,008.0	437.2	109.6	461.2	328.5	62.9	26.9	43.3	384.9	140.4	27.3	217.2	189.9	7.8	14.3	5.4
	June [p]	990.3	418.4	107.5	464.4	343.0	53.3	26.2	42.2	414.7	142.4	33.3	239.0	209.0	8.0	16.0	6.1

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

		Banks [3]								Non-banks							
		All currencies	Euro [2]	Other EU currencies	Other currencies	USD	JPY	CHF	Other	All currencies	Euro [2]	Other EU currencies	Other currencies	USD	JPY	CHF	Other
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1998	June	88.2	17.1	4.7	66.4	38.1	4.4	0.7	23.2	285.2	49.5	28.2	207.5	146.9	20.2	3.8	36.6
	Sep.	73.2	19.5	4.7	49.0	35.0	5.2	1.0	7.8	295.8	41.4	33.7	220.7	165.6	29.9	4.3	20.8
	Dec.	65.1	18.7	5.1	41.3	27.9	5.0	0.8	7.6	315.0	47.2	33.3	234.5	176.8	34.3	4.2	19.3
1999	Mar.	76.2	21.5	5.1	49.6	35.0	5.2	0.9	8.4	409.4	56.7	32.5	320.2	250.6	37.3	4.4	27.9
	June [p]	82.4	23.4	5.6	53.4	38.4	5.5	1.2	8.4	415.0	71.0	35.2	308.8	245.9	36.7	4.7	21.5

3 Financial markets and interest rates in the euro area

Table 3.1

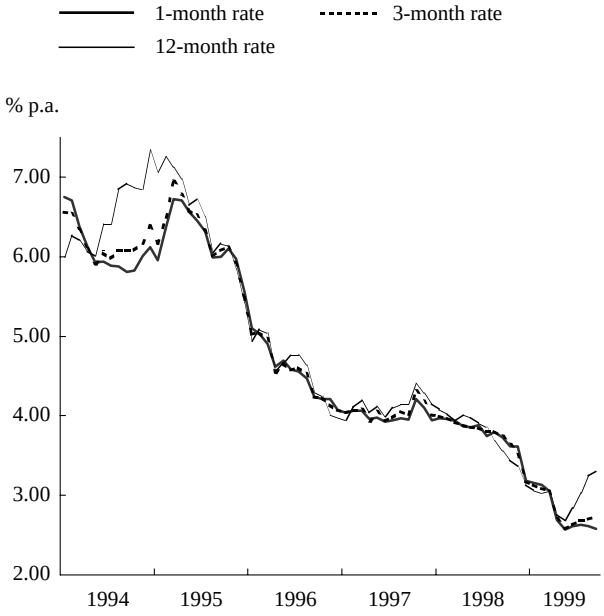
Money market interest rates [1]

(percentages per annum) [2]

		Euro area [3] [4]					United States [5]	Japan [5]
		Overnight deposits 1	1-month deposits 2	3-month deposits 3	6-month deposits 4	12-month deposits 5	3-month deposits 6	3-month deposits 7
1994		5.24	6.12	6.38	6.83	7.34	6.37	2.34
1995		5.62	5.57	5.49	5.62	5.42	5.44	0.50
1996		4.04	4.08	4.08	4.06	3.98	5.43	0.31
1997		3.98	3.94	4.01	4.05	4.15	5.62	0.36
1998		3.09	3.18	3.17	3.14	3.13	5.00	0.18
1998	Sep.	3.81	3.73	3.73	3.64	3.55	5.20	0.12
	Oct.	3.66	3.61	3.63	3.53	3.44	5.12	0.68
	Nov.	3.40	3.62	3.51	3.43	3.36	5.12	0.68
	Dec.	3.09	3.18	3.17	3.14	3.13	5.00	0.18
1999	Jan.	3.14	3.16	3.13	3.10	3.06	4.99	0.35
	Feb.	3.12	3.13	3.09	3.04	3.03	5.00	0.38
	Mar.	2.93	3.05	3.05	3.02	3.05	4.99	0.20
	Apr.	2.71	2.69	2.70	2.70	2.76	4.97	0.18
	May	2.55	2.57	2.58	2.60	2.68	4.98	0.12
	June	2.56	2.61	2.63	2.68	2.84	5.17	0.10
	July	2.52	2.63	2.68	2.90	3.03	5.30	0.12
	Aug.	2.44	2.61	2.70	3.05	3.24	5.46	0.13
	Sep.	2.43	2.58	2.73	3.11	3.30	5.56	0.14
1999	3 Sep.	2.54	2.60	2.70	3.10	3.29	5.51	0.15
	10	2.51	2.58	2.69	3.11	3.31	5.51	0.11
	17	2.46	2.58	2.69	3.11	3.31	5.52	0.15
	24	2.52	2.58	2.69	3.10	3.29	5.50	0.11
	1 Oct.	2.57	2.64	3.13	3.18	3.40	6.07	0.22

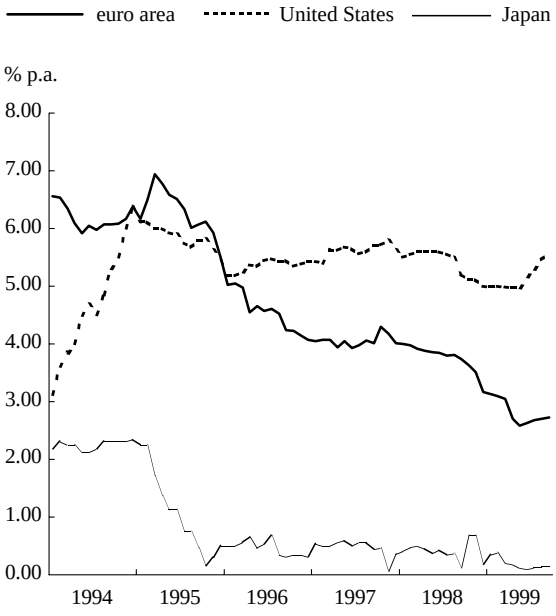
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

1) *Interbank deposit bid rates to December 1998; offered rates thereafter.*
2) *End-of-period rates to December 1998; period averages thereafter.*
3) *Before January 1999 synthetic euro area rates were calculated on the basis of national rates weighted by GDP.*
4) *From January 1999 column 1 shows the euro overnight interest average (EONIA); other euro area money market rates from January 1999 are euro interbank offered rates (EURIBOR).*
5) *From February 1999, London interbank offered rate (LIBOR).*

Table 3.2

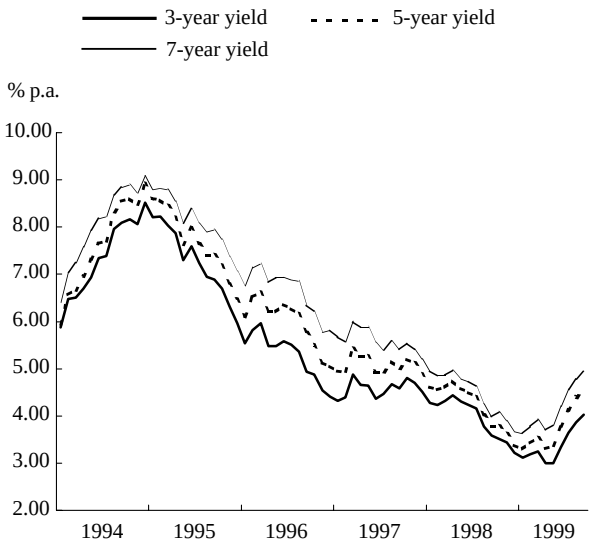
Government bond yields [1)]

(percentages per annum)

	Euro area [2)]					United States	Japan
	2 years	3 years	5 years	7 years	10 years	10 years	10 years
	1	2	3	4	5	6	7
1994	8.08	8.52	8.91	9.08	8.18	7.21	4.24
1995	5.69	5.97	6.48	7.06	8.73	6.69	3.32
1996	4.17	4.41	5.06	5.82	7.23	6.54	3.03
1997	4.33	4.51	4.87	5.20	5.99	6.45	2.15
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1998 Sep.	3.55	3.58	3.77	3.98	4.27	4.87	0.88
Oct.	3.39	3.51	3.77	4.09	4.25	4.58	0.82
Nov.	3.33	3.44	3.62	3.90	4.24	4.89	0.89
Dec.	3.16	3.22	3.38	3.67	3.95	4.69	1.39
1999 Jan.	2.98	3.11	3.30	3.64	3.82	4.78	2.07
Feb.	3.05	3.19	3.43	3.78	3.98	4.99	2.09
Mar.	3.08	3.25	3.53	3.92	4.18	5.23	1.72
Apr.	2.83	3.00	3.31	3.70	4.04	5.18	1.55
May	2.82	3.00	3.37	3.81	4.21	5.54	1.36
June	3.09	3.34	3.77	4.20	4.53	5.90	1.60
July	3.30	3.64	4.13	4.55	4.86	5.80	1.69
Aug.	3.56	3.87	4.39	4.78	5.06	5.94	1.89
Sep.	3.68	4.02	4.55	4.94	5.24	5.91	1.75
1999 3 Sep.	3.97	3.92	4.46	4.83	5.13	5.89	1.84
10	3.67	4.03	4.55	4.94	5.23	5.89	1.79
17	3.62	3.98	4.52	4.93	5.22	5.87	1.71
24	3.58	3.91	4.43	4.84	5.15	5.77	1.70
1 Oct.	3.89	4.22	4.71	5.07	5.36	5.99	1.68

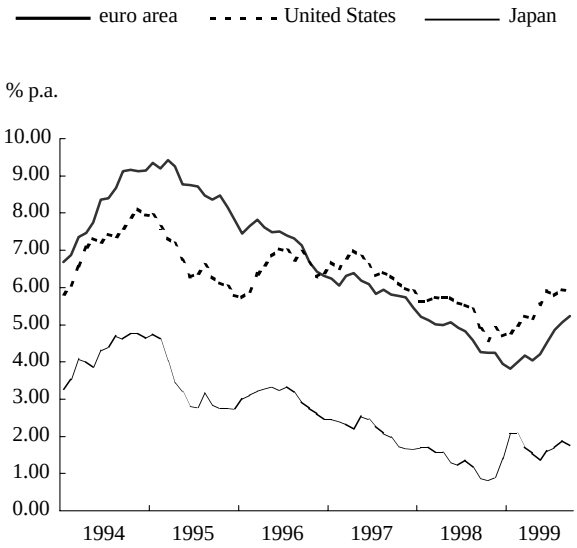
Euro area government bond yields

(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. Therafter, 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

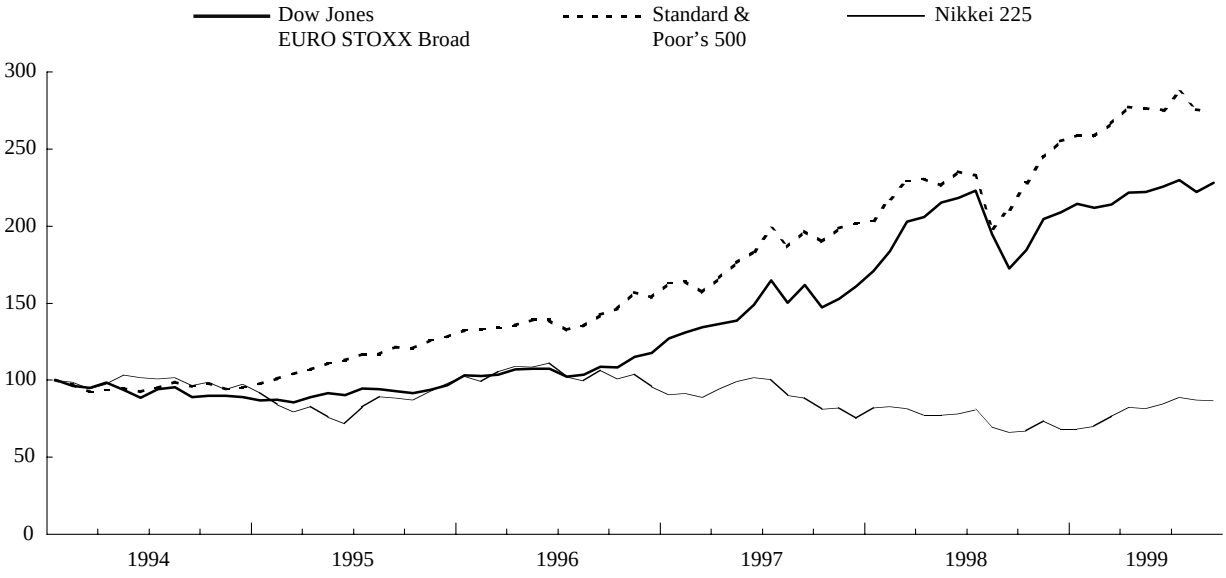
Stock market indices

(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	Conglom-erates	Industrial	Techno-logy	Utilities	Standard & Poor's 500	Nikkei 225
		1	2	3	4	5	6	7	8	9	10	11	12	13
1994		127.33	1,320.59	145.88	107.82	143.90	125.92	109.29	125.91	132.31	128.66	122.60	455.19	19,299.47
1995		138.37	1,506.82	137.78	111.06	181.13	145.46	117.66	133.05	136.18	145.57	152.09	614.57	19,417.95
1996		167.75	1,850.32	145.11	120.25	274.94	180.64	137.84	156.11	171.05	153.17	192.40	743.25	20,147.27
1997		229.86	2,531.99	166.33	159.82	324.06	249.22	188.87	210.33	204.75	248.37	225.11	962.37	15,917.07
1998		298.37	3,342.32	147.10	156.74	485.39	232.87	250.29	218.78	283.76	353.38	329.50	1,229.23	13,842.17
1998	Sep.	246.31	2,670.97	131.62	137.37	379.55	230.22	187.86	182.29	240.51	279.90	277.86	1,020.64	14,140.69
	Oct.	263.49	2,887.11	138.21	147.48	419.19	223.71	206.17	197.45	250.98	300.39	295.80	1,098.67	13,564.51
	Nov.	291.73	3,232.44	147.95	153.01	442.91	237.51	236.66	208.39	270.40	339.22	306.30	1,176.46	14,883.70
	Dec.	298.37	3,342.32	147.10	156.74	485.39	232.87	250.29	218.78	283.76	353.38	329.50	1,229.23	13,842.17
1999	Jan.	306.01	3,486.40	146.59	152.92	498.08	226.40	254.13	229.20	301.23	367.41	339.23	1,246.89	13,859.26
	Feb.	302.69	3,450.87	149.74	152.16	496.17	225.01	246.99	229.33	312.25	366.43	330.00	1,244.93	14,168.83
	Mar.	305.52	3,524.19	153.81	155.94	480.73	254.11	249.73	229.77	311.75	374.45	318.57	1,284.56	15,459.81
	Apr.	316.39	3,671.80	172.06	162.67	493.62	276.64	257.18	238.42	334.72	403.94	306.87	1,335.79	16,689.65
	May	317.05	3,669.07	176.93	167.47	482.10	291.29	253.77	257.12	344.94	413.34	300.15	1,330.72	16,533.26
	June	321.66	3,749.45	177.95	168.33	487.77	299.00	251.77	268.06	365.11	440.22	300.26	1,325.93	17,135.96
	July	328.07	3,846.24	190.82	168.19	487.34	316.01	246.24	277.97	379.94	481.62	302.28	1,380.99	18,008.62
	Aug.	316.78	3,691.33	204.66	162.31	468.57	314.74	235.93	278.08	365.94	455.23	289.80	1,327.49	17,670.31
	Sep.	325.88	3,772.79	199.93	161.67	500.44	312.33	242.61	273.47	380.45	480.77	296.06	1,318.21	17,532.77
1999	3 Sep.	327.22	3,809.11	200.91	165.24	507.96	312.38	244.25	279.83	378.85	469.97	301.14	1,319.11	17,629.99
	10	334.10	3,887.09	206.99	167.13	509.55	327.32	247.02	276.35	389.40	499.12	303.67	1,351.66	17,711.02
	17	326.19	3,748.75	201.02	161.01	501.33	312.28	244.61	271.64	376.53	477.67	296.68	1,335.42	17,342.27
	24	320.18	3,688.79	192.14	155.77	488.21	299.75	238.50	267.11	376.89	475.99	291.43	1,277.36	16,871.73
	1 Oct.	316.90	3,642.34	189.43	156.43	477.26	297.42	235.98	257.88	379.05	469.86	283.12	1,282.81	17,712.56

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

(base month: January 1994 = 100; monthly)



Source: Reuters.

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

Table 3.4

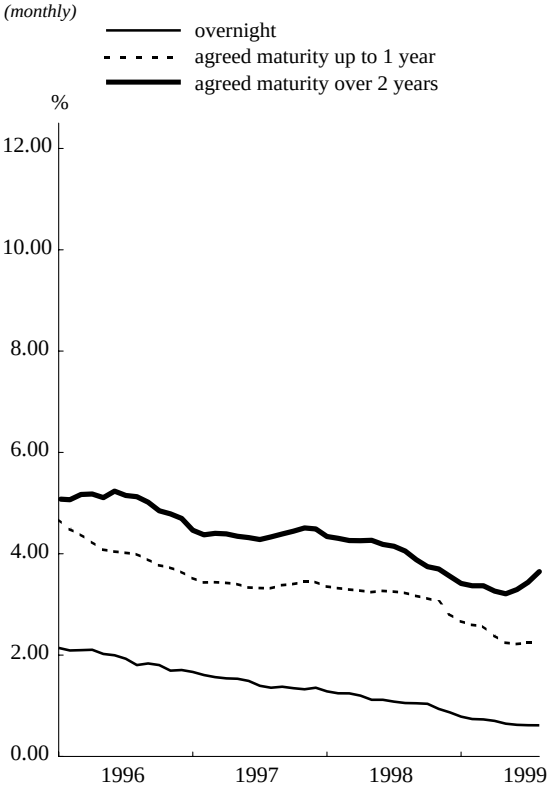
Retail bank interest rates

(percentages per annum; period averages)

		Deposit interest rates						Lending interest rates			
		Overnight	With agreed maturity			Redeemable at notice		To enterprises		To households	
			Up to 1 year	Up to 2 years	Over 2 years	Up to 3 months	Over 3 months	Up to 1 year	Over 1 year	Consumer lending	For house purchase
		1	2	3	4	5	6	7	8	9	10
1996		1.94	4.08	4.68	5.04	3.05	3.16	8.82	.	11.56	7.46
1997		1.46	3.41	3.63	4.40	2.80	3.09	7.56	6.64	10.61	6.63
1998		1.10	3.20	3.22	4.06	2.61	3.25	6.74	5.80	10.05	5.87
1998	Aug.	1.05	3.23	3.24	4.05	2.55	3.30	6.61	5.76	10.03	5.79
	Sep.	1.05	3.17	3.18	3.88	2.53	3.21	6.60	5.65	10.00	5.66
	Oct.	1.04	3.12	3.13	3.74	2.49	3.14	6.50	5.52	9.79	5.49
	Nov.	0.94	3.06	3.05	3.70	2.48	3.12	6.38	5.43	9.68	5.43
	Dec.	0.87	2.81	2.81	3.56	2.44	3.03	6.22	5.11	9.61	5.29
1999	Jan.	0.79	2.67	2.67	3.41	2.37	2.86	6.07	5.04	9.61	5.10
	Feb.	0.74	2.60	2.59	3.37	2.34	2.78	5.98	5.00	9.54	5.02
	Mar.	0.73	2.57	2.56	3.37	2.31	2.79	5.85	4.99	9.50	5.05
	Apr.	0.70	2.39	2.39	3.26	2.27	2.61	5.68	4.82	9.37	4.91
	May	0.65	2.25	2.25	3.21	2.16	2.48	5.57	4.73	9.31	4.84
	June	0.62	2.22	2.22	3.29	2.15	2.45	5.50	4.78	9.29	4.96
	July	0.62	2.24	2.24	3.44	2.15	2.63	5.41	4.97	9.21	5.18
	Aug.	0.61	2.24	2.25	3.65	2.01	2.73	5.43	5.16	9.30	5.46

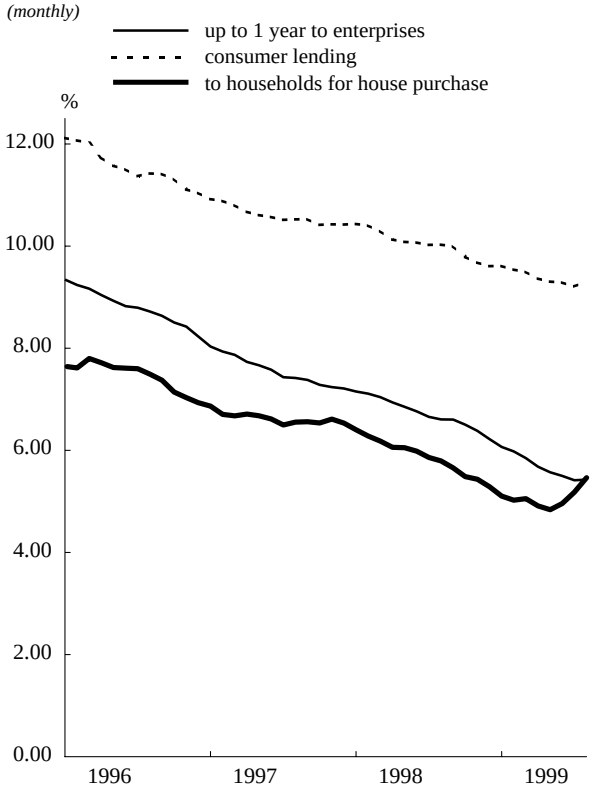
Deposit interest rates

(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.

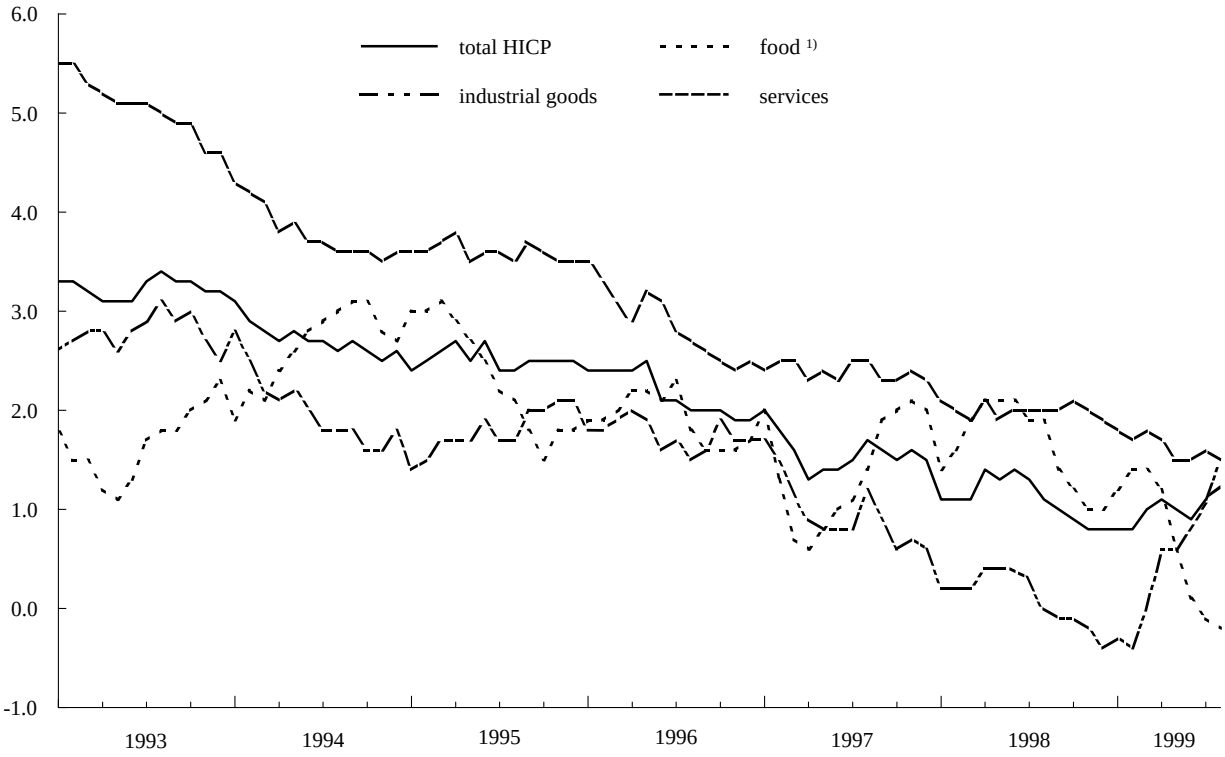
4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices

(annual percentage changes, unless otherwise indicated)

		Total (index, 1996 = 100)	Total	Goods				Services			
					Food [1]			Industrial goods			
						Processed food [1]	Unprocessed food		Non-energy industrial goods	Energy	
	Weight in the total (%) [2]	100.0	100.0	63.7	22.4	13.4	9.0	41.3	32.5	8.8	36.3
		1	2	3	4	5	6	7	8	9	10
1995		97.9	2.5	.	2.4	2.4	2.2	1.8	1.9	1.4	3.6
1996		100.0	2.2	1.8	1.9	2.0	1.7	1.8	1.4	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	2.0	0.1	0.9	-2.6	2.0
1998	Q2	102.8	1.3	1.0	2.1	1.6	2.8	0.4	0.9	-1.4	2.0
	Q3	102.9	1.1	0.6	1.7	1.4	2.1	0.1	1.0	-3.2	2.0
	Q4	102.8	0.8	0.2	1.1	1.2	0.8	-0.2	0.9	-4.4	2.0
1999	Q1	103.1	0.8	0.3	1.3	1.2	1.5	-0.2	0.8	-3.8	1.7
	Q2	103.8	1.0	0.6	0.6	0.9	0.3	0.6	0.6	0.8	1.6
1998	Aug.	102.9	1.1	0.6	1.9	1.5	2.4	0.0	1.0	-3.8	2.0
	Sep.	102.9	1.0	0.4	1.4	1.3	1.5	-0.1	1.0	-3.9	2.0
	Oct.	102.8	0.9	0.3	1.2	1.3	1.1	-0.1	1.0	-4.0	2.1
	Nov.	102.8	0.8	0.1	1.0	1.2	0.6	-0.2	0.9	-4.4	2.0
	Dec.	102.9	0.8	0.1	1.0	1.1	0.9	-0.4	0.9	-4.8	1.9
1999	Jan.	102.8	0.8	0.2	1.2	1.3	1.1	-0.3	0.8	-4.4	1.8
	Feb.	103.1	0.8	0.2	1.4	1.3	1.5	-0.4	0.7	-4.3	1.7
	Mar.	103.4	1.0	0.4	1.4	1.1	1.8	0.0	0.7	-2.8	1.8
	Apr.	103.7	1.1	0.7	1.2	1.1	1.2	0.6	0.6	0.3	1.7
	May	103.8	1.0	0.6	0.6	0.8	0.4	0.6	0.6	0.5	1.5
	June	103.8	0.9	0.5	0.1	0.7	-0.7	0.8	0.6	1.4	1.5
	July	104.0	1.1	0.7	-0.1	0.7	-1.4	1.1	0.6	3.2	1.6
	Aug.	104.1	1.2	0.9	-0.2	0.7	-1.6	1.5	0.6	5.0	1.5



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

1) Including alcoholic beverages and tobacco.

2) Referring to index period 1999.

Table 4.2

Selected other price indicators

(annual percentage changes, unless otherwise indicated)

1. Industry and commodity prices

		Industrial producer prices									World market prices of raw materials [2]		Oil prices [3] (EUR per barrel)
		Total excluding construction		Manufacturing						Construction [1]	Total	Total excluding energy	
		Index, 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	11	12
1995		100.0	3.6	3.9	5.0	1.8	.	.	2.4	.	0.2	2.1	13.0
1996		100.4	0.4	1.0	-1.1	1.2	1.7	1.7	1.7	1.3	6.5	-6.9	15.9
1997		101.4	1.1	0.6	1.2	0.3	0.8	0.1	1.2	1.3	10.0	12.9	17.1
1998		100.6	-0.8	-0.7	-2.2	0.5	0.4	0.1	0.6	0.2	-21.2	-12.5	12.0
1998	Q3	100.4	-1.3	-1.1	-2.9	0.6	0.3	0.3	0.3	0.0	-24.2	-18.2	11.7
	Q4	99.4	-2.3	-2.2	-4.5	0.3	-0.2	0.1	-0.3	0.1	-30.0	-20.5	10.1
1999	Q1	98.8	-2.6	-2.1	-4.8	0.2	0.0	0.2	-0.2	0.8	-17.6	-16.0	10.3
	Q2	99.7	-1.3	-1.0	-2.8	0.1	-0.2	0.1	-0.3	.	5.9	-8.2	15.0
	Q3	.	.	.	.	.	.	.	.	.	31.0	1.1	19.7
1998	Sep.	100.2	-1.6	-1.5	-3.4	0.5	0.1	0.2	0.0	-	-25.2	-21.0	11.9
	Oct.	99.8	-2.0	-1.9	-4.1	0.4	-0.1	0.1	-0.2	-	-30.5	-23.5	11.2
	Nov.	99.4	-2.4	-2.2	-4.6	0.3	-0.2	0.1	-0.4	-	-28.6	-18.4	10.2
	Dec.	99.1	-2.6	-2.3	-4.9	0.3	-0.1	0.2	-0.3	-	-30.8	-19.5	8.8
1999	Jan.	98.8	-2.7	-2.4	-5.1	0.2	-0.1	0.3	-0.3	-	-23.4	-17.3	9.6
	Feb.	98.7	-2.7	-2.3	-5.1	0.2	-0.1	0.2	-0.2	-	-20.6	-16.0	9.4
	Mar.	99.0	-2.3	-1.8	-4.4	0.2	-0.1	0.2	-0.2	-	-8.4	-14.6	11.8
	Apr.	99.6	-1.6	-1.2	-3.3	0.3	-0.1	0.2	-0.3	-	0.3	-12.5	14.4
	May	99.7	-1.4	-1.0	-2.8	0.0	-0.2	0.1	-0.3	-	5.1	-7.8	14.9
	June	99.8	-1.0	-0.7	-2.2	0.1	-0.1	0.0	-0.2	-	12.8	-4.2	15.6
	July	100.3	-0.4	-0.2	-1.0	0.1	0.0	0.1	-0.1	-	22.7	-2.3	18.1
	Aug.	.	.	.	.	.	.	.	.		29.2	-0.5	19.2
	Sep.	.	.	.	.	.	.	.	.	-	41.4	6.6	21.8

2. Deflators of gross domestic product

		Deflators of GDP [4] (s.a.)							
		GDP		Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports	Imports
		Index, 1995 = 100							
		13	14	15	16	17	18	19	20
1995		100.0	2.6	2.5	2.7	2.9	1.6	2.6	2.3
1996		102.1	2.1	2.1	2.5	2.2	0.8	0.9	0.8
1997		103.7	1.6	1.6	1.9	1.8	1.0	2.2	2.7
1998		105.3	1.6	1.2	1.3	1.5	0.5	-0.1	-1.6
1997	Q1	103.1	1.6	1.6	2.0	1.8	0.9	1.5	1.7
	Q2	103.5	1.6	1.6	1.8	2.0	0.9	2.0	2.3
	Q3	103.8	1.5	1.8	2.0	1.7	1.0	2.9	4.0
	Q4	104.2	1.5	1.6	1.9	1.8	1.1	2.5	3.0
1998	Q1	104.8	1.6	1.5	1.7	1.3	0.6	1.4	0.9
	Q2	105.2	1.6	1.3	1.5	1.5	0.8	0.4	-0.5
	Q3	105.5	1.6	1.0	1.2	1.7	0.3	-0.6	-2.7
	Q4	105.8	1.5	0.9	1.0	1.5	0.1	-1.7	-4.0
1999	Q1	106.2	1.4	1.0	0.9	1.8	0.2	-2.3	-3.9

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

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

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

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

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

5 Real economy indicators in the euro area

Table 5.1

National accounts [1]

1. Current prices

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

		GDP	Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories [2]	Exports [3]	Imports [3]
		1	2	3	4	5	6	7	8
1995		5,302.3	5,203.2	2,993.9	1,089.4	1,093.4	26.7	1,568.0	1,469.0
1996		5,524.9	5,397.0	3,136.1	1,138.8	1,118.9	3.9	1,658.3	1,530.4
1997		5,643.4	5,492.2	3,189.4	1,142.8	1,135.6	24.6	1,823.7	1,672.6
1998		5,871.3	5,724.0	3,309.5	1,168.0	1,186.8	59.8	1,925.5	1,778.2
1998	Q2	1,459.8	1,421.5	822.0	291.9	291.8	15.9	485.0	446.7
	Q3	1,475.5	1,436.1	832.0	292.4	299.2	12.7	485.0	445.6
	Q4	1,489.7	1,456.1	841.6	294.1	302.3	17.9	475.3	441.7
1999	Q1	1,504.1	1,471.1	851.6	299.3	310.8	8.9	472.0	439.0
	Q2	.	.	.	.	.	.	.	.

2. Constant prices [4]

(EUR billions (ECU billions to end-1998), seasonally adjusted, at 1995 prices)

		GDP	Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories [2]	Exports [3]	Imports [3]
		9	10	11	12	13	14	15	16
1995		5,247.7	5,150.7	2,964.4	1,076.8	1,083.8	25.7	1,560.3	1,463.2
1996		5,317.1	5,196.5	3,005.1	1,096.2	1,093.6	1.5	1,629.4	1,508.8
1997		5,434.9	5,283.9	3,045.6	1,099.9	1,117.0	21.4	1,790.6	1,639.7
1998		5,583.3	5,459.8	3,129.0	1,113.2	1,163.6	53.9	1,902.8	1,779.3
1998	Q2	1,393.2	1,358.8	779.9	278.4	286.8	13.7	479.2	444.8
	Q3	1,400.7	1,369.1	785.4	278.6	293.5	11.6	479.0	447.4
	Q4	1,402.8	1,378.7	788.9	277.9	293.9	18.0	471.8	447.8
1999	Q1	1,409.1	1,386.9	794.7	281.6	301.4	9.2	472.3	450.1
	Q2	1,413.5	1,390.9	795.8	282.5	301.8	10.8	480.1	457.6
(annual percentage changes)									
1995		2.2	2.0	1.8	0.5	2.6	-	7.9	7.4
1996		1.3	0.9	1.4	1.8	0.9	-	4.4	3.1
1997		2.2	1.7	1.3	0.3	2.1	-	9.9	8.7
1998		2.7	3.3	2.7	1.2	4.2	-	6.3	8.5
1998	Q2	2.8	3.0	2.6	1.3	2.9	-	8.9	10.1
	Q3	2.6	3.6	3.2	1.1	4.6	-	4.4	7.6
	Q4	1.9	3.1	2.8	1.0	3.2	-	1.0	4.6
1999	Q1	1.6	2.5	2.6	1.2	4.2	-	-0.1	2.4
	Q2	1.5	2.4	2.0	1.5	5.2	-	0.2	2.9

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.

4) Data at constant prices have been revised and are at present not consistent with those at current prices in Table 5.1.1.

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	11
1995		100.0	2.7	100.1	3.4	3.5	2.6	7.3	0.8	-1.1	1.8	-0.4
1996		99.9	-0.1	100.5	0.4	0.1	-0.1	1.6	0.0	0.1	-0.2	-2.5
1997		103.6	3.6	104.9	4.4	5.0	5.4	4.8	2.7	2.7	2.6	-1.0
1998		107.2	3.5	109.3	4.2	4.7	3.9	6.7	3.0	6.3	1.4	-0.6
1998	Q2	107.2	3.9	109.5	4.7	5.4	4.7	7.1	3.8	6.8	2.5	-0.2
	Q3	107.7	3.1	109.6	4.1	4.4	3.2	6.7	3.3	6.4	1.8	-1.5
	Q4	106.8	1.0	109.2	1.6	1.5	0.4	4.1	1.3	4.5	-0.3	-3.6
1999	Q1	107.1	0.5	109.1	0.1	-0.2	-0.8	0.7	0.9	1.4	0.7	-1.1
	Q2	.	.	109.3	-0.2	-0.5	-1.0	-0.1	0.2	0.4	-0.1	-2.0
1998	July	108.3	3.5	110.0	4.4	4.8	3.6	7.4	3.6	6.5	2.6	-0.4
	Aug.	107.7	3.6	109.0	4.5	5.0	3.7	7.0	3.8	7.7	2.3	-1.2
	Sep.	107.2	2.4	109.7	3.5	3.7	2.5	5.9	2.6	5.7	0.7	-2.8
	Oct.	107.3	1.9	109.8	2.5	2.8	1.3	5.6	2.8	8.0	0.2	-3.1
	Nov.	107.0	1.7	109.6	2.3	2.1	1.4	4.6	1.5	4.3	-0.1	-3.6
	Dec.	106.0	-0.9	108.3	-0.2	-0.7	-1.8	2.3	-0.7	0.5	-1.2	-4.4
1999	Jan	107.7	1.2	109.2	1.1	1.1	-0.4	3.9	2.0	3.9	0.9	1.8
	Feb.	106.5	-0.3	108.7	-0.7	-1.4	-1.6	-0.1	-0.1	0.9	-0.5	-3.9
	Mar.	107.2	0.6	109.5	-0.1	-0.3	-0.3	-1.2	0.9	-0.2	1.7	-1.3
	Apr.	106.7	-0.1	108.7	-0.9	-1.0	-1.7	0.2	-0.9	-1.3	-0.4	-1.5
	May	.	.	109.3	-0.7	-1.0	-1.4	-0.9	0.4	0.9	-0.5	-2.8
	June	.	.	109.9	0.8	0.5	0.2	0.5	1.2	1.6	0.5	-1.6
	July	.	.	110.0	0.1	-0.1	0.0	-1.4	0.3	-0.5	0.5	.

2. Retail sales and car registrations

(annual percentage changes, unless otherwise indicated)

		Retail sales								New passenger car registrations	
		Current prices		Constant prices							
		Total		Total		Food, beverages, tobacco	Non-food				
		Index (s.a.), 1995 = 100		Index (s.a.), 1995 = 100				Textiles, clothing, footwear	Household equipment	Thousands [2)] (s.a.)	
		12	13	14	15	16	17	18	19	20	21
1995		.	.	100.0	.	.	.	.	.	777	0.8
1996		.	.	100.3	0.3	0.7	.	-1.0	0.0	826	6.2
1997		.	.	101.4	1.1	1.2	.	0.6	0.9	861	4.2
1998		.	.	104.1	2.7	1.9	.	1.7	4.0	922	7.0
1998	Q2	.	.	103.9	2.1	1.0	.	1.6	3.9	902	5.0
	Q3	.	.	104.5	3.4	2.1	.	4.7	3.7	933	6.5
	Q4	.	.	105.0	2.6	3.1	2.5	0.2	3.3	942	6.1
1999	Q1	.	.	105.6	2.4	2.6	1.8	2.0	1.3	978	7.1
	Q2	.	.	106.0	1.8	2.9	1.5	1.9	2.7	983	8.3
1998	Aug.	.	.	105.0	4.3	2.1	4.8	6.6	4.5	921	3.1
	Sep.	.	.	103.9	2.0	0.9	2.4	4.7	3.2	940	8.2
	Oct.	.	.	104.6	1.7	1.3	2.0	-1.4	3.1	943	4.4
	Nov.	.	.	106.0	4.9	6.0	4.0	4.7	4.8	962	9.9
	Dec.	.	.	104.4	1.6	2.3	1.6	-2.0	2.2	920	3.9
1999	Jan.	.	.	105.2	1.9	1.7	0.8	1.9	2.3	985	8.9
	Feb.	.	.	105.1	1.6	2.6	0.9	-2.4	0.6	965	5.5
	Mar.	.	.	106.4	3.5	3.6	3.7	5.8	1.1	983	6.7
	Apr.	.	.	105.2	1.1	1.4	1.3	2.4	3.5	993	11.2
	May	.	.	106.0	0.9	1.3	0.6	-0.3	1.8	973	5.9
	June	.	.	106.8	3.5	5.9	2.8	3.8	2.9	983	7.8
	July	.	.	.	.	.	.	.	.	1,048	10.4
	Aug.	.	.	.	.	.	.	.	.	961	5.3

Sources: Eurostat except columns 20 and 21 (ECB calculations 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

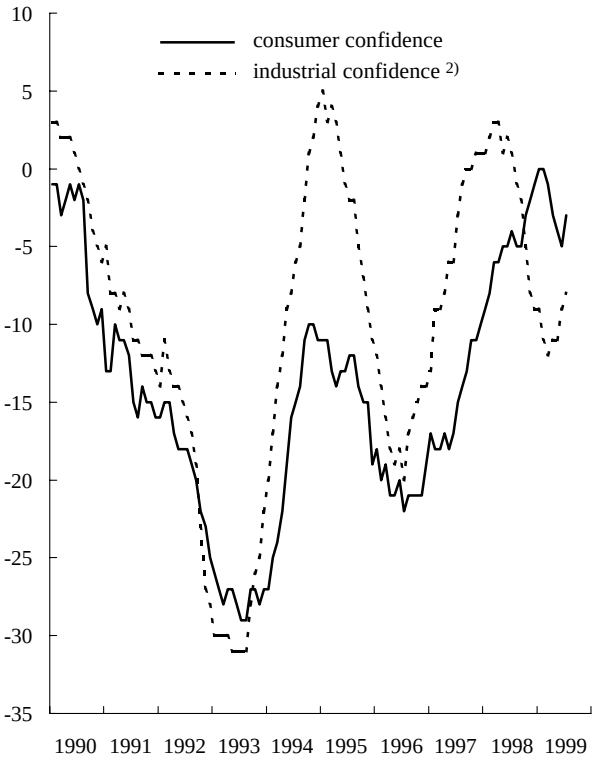
Business and consumer surveys

(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 [1] (percentages)			
		1	2	3	4	5	6	7
1995		-2	10	-8	82.6	-27	-12	-14
1996		-16	-1	-30	80.6	-36	-11	-20
1997		-4	11	-15	81.3	-33	-9	-15
1998		-1	11	-5	83.2	-19	-3	-5
1998	Q3	-1	11	-4	83.7	-13	-1	-5
	Q4	-7	3	-13	82.8	-15	-3	-2
1999	Q1	-11	1	-20	81.9	-9	-3	0
	Q2	-10	3	-21	81.9	-7	-4	-4
	Q3	.	.	.	81.7	.	.	.
1998	July	1	12	-2	-	-15	-1	-4
	Aug.	-1	10	-4	-	-13	0	-5
	Sep.	-2	11	-6	-	-12	-1	-5
	Oct.	-5	5	-10	-	-17	-1	-3
	Nov.	-8	2	-14	-	-14	-4	-2
	Dec.	-9	2	-15	-	-14	-4	-1
1999	Jan.	-9	2	-16	-	-9	0	0
	Feb.	-11	1	-20	-	-9	-4	0
	Mar.	-12	0	-23	-	-9	-6	-1
	Apr.	-11	2	-20	-	-7	-1	-3
	May	-11	3	-22	-	-8	-3	-4
	June	-9	5	-22	-	-6	-9	-5
	July	-8	7	-19	-	-5	-6	-3

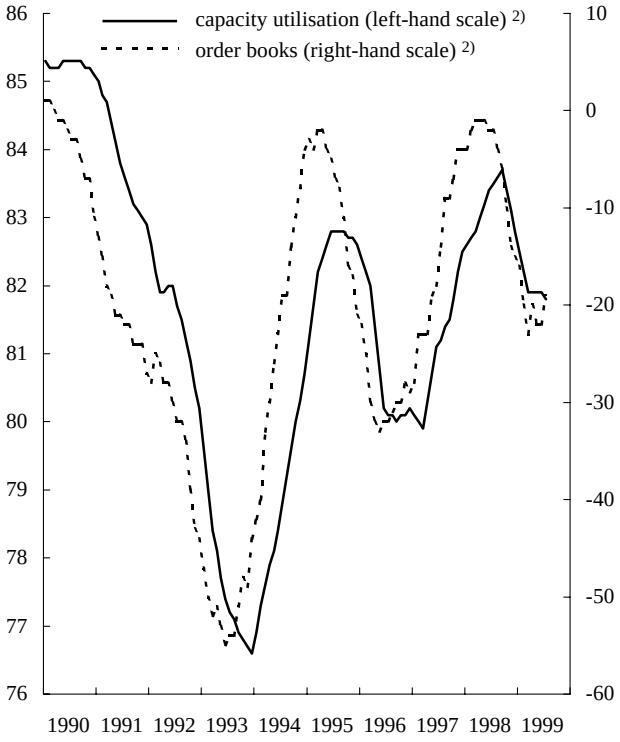
Consumer and industrial confidence indicators

(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	.	.	.	.	.	14.380	11.4	9.6	23.3
1996		100.3	0.3	0.2	0.5	-1.2	1.3	14.808	11.6	9.8	23.9
1997		100.8	0.5	0.6	0.0	-0.4	1.1	14.901	11.6	10.0	23.3
1998		102.1	1.3	1.4	0.7	0.9	1.6	14.107	10.9	9.4	21.4
1998	Q2	.	.	1.1	.	.	.	14.188	11.0	9.5	21.4
	Q3	.	.	1.3	.	.	.	14.012	10.9	9.4	21.3
	Q4	.	.	1.6	.	.	.	13.756	10.7	9.2	20.9
1999	Q1	.	.	.	.	.	.	13.413	10.4	9.0	20.1
	Q2	.	.	.	.	.	.	13.273	10.3	9.0	19.5
1998	July	-	-	-	-	-	-	14.060	10.9	9.4	21.3
	Aug.	-	-	-	-	-	-	14.032	10.9	9.4	21.3
	Sep.	-	-	-	-	-	-	13.944	10.8	9.3	21.3
	Oct.	-	-	-	-	-	-	13.844	10.7	9.2	21.2
	Nov.	-	-	-	-	-	-	13.745	10.7	9.2	20.9
	Dec.	-	-	-	-	-	-	13.680	10.6	9.2	20.7
1999	Jan.	-	-	-	-	-	-	13.508	10.5	9.1	20.5
	Feb.	-	-	-	-	-	-	13.416	10.4	9.0	20.1
	Mar.	-	-	-	-	-	-	13.314	10.3	9.0	19.8
	Apr.	-	-	-	-	-	-	13.294	10.3	9.0	19.6
	May	-	-	-	-	-	-	13.272	10.3	9.0	19.5
	June	-	-	-	-	-	-	13.252	10.3	9.0	19.4
	July	-	-	-	-	-	-	13.173	10.2	8.9	19.3

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	Services	
								Total	Total	
		11	12	13	14	15	16	17	18	19
1995		1.6	3.5	1.8	.	.	.	.	.	3.8
1996		2.0	3.2	1.2	2.5	2.5	3.5	3.8	1.1	3.5
1997		0.7	2.6	1.8	2.5	2.5	2.6	2.7	2.6	2.8
1998		.	.	.	1.6	2.6	0.4	2.0	1.2	.
1997	Q1	2.0	2.8	0.7	2.6	2.4	2.7	2.8	2.6	2.8
	Q2	0.6	2.8	2.2	2.9	2.9	3.3	3.1	3.4	3.1
	Q3	0.3	2.3	1.9	2.2	2.4	2.1	2.7	2.1	2.5
	Q4	0.1	2.1	2.1	2.3	2.5	2.3	2.4	2.2	2.6
1998	Q1	-1.9	0.9	2.9	1.7	2.6	0.2	1.8	1.5	2.0
	Q2	-0.4	1.1	1.5	1.4	2.5	-0.1	1.6	1.1	2.7
	Q3	0.0	1.3	1.5	1.5	2.5	0.5	2.0	1.1	2.4
	Q4	.	.	.	1.9	2.6	0.9	2.5	1.3	.
1999	Q1	.	.	.	1.8	2.7	2.7	1.8	1.4	.

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

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

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

3) Hourly labour costs for the whole economy, excluding the agriculture, 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)

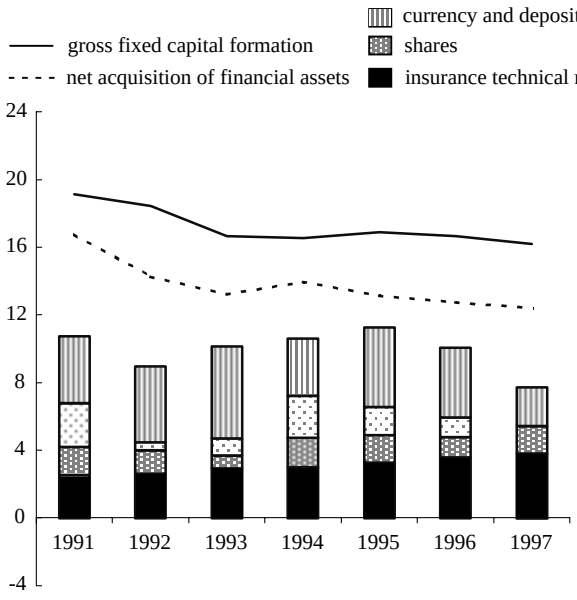
	Euro area saving and investment [1]			Investment of private non-financial sectors [1] [2]							
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other than shares	Long-term securities	Shares	Insurance technical reserves
	1	2	3	4	5	6	7	8	9	10	11
1991	21.9	23.0	-1.3	19.1	14.3	16.8	3.9	3.0	2.6	1.7	2.5
1992	20.9	22.2	-1.0	18.4	13.7	14.3	4.5	1.7	0.5	1.4	2.6
1993	20.0	20.2	0.5	16.6	12.3	13.2	5.4	0.6	1.0	0.8	2.9
1994	20.4	19.8	0.3	16.5	12.3	14.0	3.4	2.3	2.5	1.8	3.0
1995	21.4	20.2	0.8	16.9	12.6	13.1	4.7	1.9	1.7	1.6	3.3
1996	21.0	19.9	1.2	16.7	12.3	12.7	4.1	0.2	1.2	1.2	3.6
1997	21.7	19.3	1.9	16.2	12.1	12.4	2.3	-0.5	0.0	1.6	3.8
1998	22.2	19.6	1.4	16.5	12.3	.	.	.	.	.	.

	Financing of private non-financial sectors [1] [2]								Net financial investment	Financial investment as a % of gross investment	Net incurrence of liabilities as a % of financing
	Gross saving	Households	Net incurrence of liabilities	Securities other than shares	Long-term securities	Shares	Loans	Long-term loans	(col. 6 - 14)	(col. 6÷(4+6))	(col. 14÷(12+14))
	12	13	14	15	16	17	18	19	20	21	22
1991	21.0	12.1	13.2	0.4	0.3	1.5	9.0	4.8	3.6	46.7	38.6
1992	20.7	12.1	10.7	0.7	0.6	1.4	6.9	4.7	3.6	43.6	34.0
1993	20.4	11.5	7.6	1.3	1.4	1.5	3.8	4.6	5.6	44.2	27.1
1994	20.3	10.6	9.8	1.1	1.2	1.8	3.8	3.7	4.1	45.8	32.6
1995	21.1	10.9	5.6	-1.7	-1.8	1.6	4.7	2.9	7.6	43.7	20.8
1996	20.3	10.7	8.4	0.2	0.1	1.8	4.6	3.5	4.3	43.3	29.3
1997	19.8	9.4	8.5	0.0	0.0	1.3	5.7	3.9	3.9	43.4	30.0
1998	19.4	8.9	.	.	.	.	.	.	.	.	.

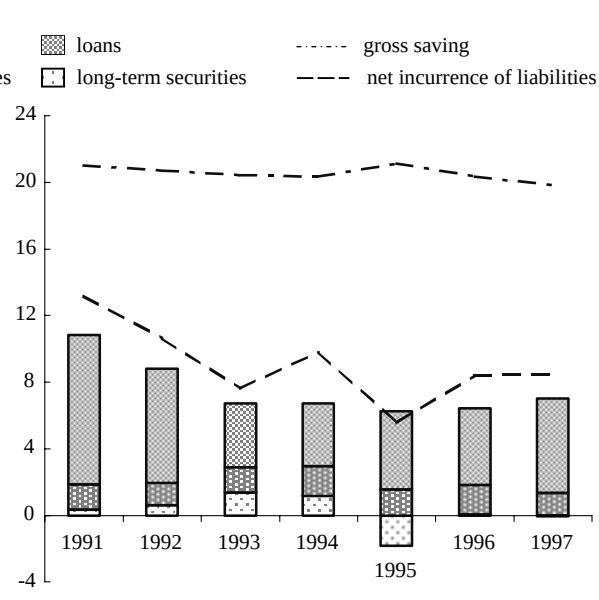
Investment and financing of private non-financial sectors [1] [2]

(as a percentage of GDP)

Investment



Financing



Source: ECB.

1) Selected items of financing and investment.

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

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

Table 7

General government fiscal position

(as a percentage of GDP)

1. Euro area [1) 2)] – receipts and expenditure

	Receipts							Expenditure							
	Total	Current receipts	Direct taxes	Indirect taxes	Social contributions	Sales	Capital receipts	Total	Current expenditure	Compensation of employees	Intermediate consumption	Interest	Transfers to households	Capital expenditure	Investment
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1991	48.0	47.5	12.3	12.9	17.3	2.5	0.4	52.4	47.7	11.8	5.5	4.9	21.3	4.6	3.0
1992	49.2	48.4	12.3	13.0	17.7	2.7	0.8	53.8	49.3	12.1	5.5	5.5	22.2	4.5	3.0
1993	49.9	49.4	12.5	13.2	18.2	2.8	0.5	55.5	51.0	12.3	5.7	5.7	23.1	4.5	2.9
1994	49.2	48.6	12.0	13.4	18.1	2.7	0.5	54.3	50.1	12.0	5.5	5.4	23.1	4.2	2.7
1995	49.1	48.5	12.1	13.3	18.1	2.8	0.6	54.0	49.7	11.8	5.3	5.7	23.1	4.3	2.6
1996	49.3	48.8	12.1	13.4	18.3	2.8	0.5	53.4	49.7	11.9	5.4	5.5	23.2	3.7	2.4
1997	49.7	49.0	12.2	13.5	18.3	2.7	0.7	52.2	48.6	11.6	5.2	5.0	23.1	3.6	2.3
1998	49.1	48.5	12.5	14.1	17.2	2.7	0.5	51.2	47.4	11.3	5.1	4.5	22.6	3.7	2.3

2. Euro area [1) 2)] – saving, deficit and debt

	Gross saving	Deficit (-) / surplus (+)				Primary deficit/ surplus	Deficit/ debt adjustment [3)]	Change in debt [4)]				Gross nominal consolidated debt			
		Total	Central government	Local government	Social security			Total	Currency, deposits and loans	Short-term securities	Medium/ long-term securities	Total	Currency, deposits and loans	Short-term securities	Medium/ long-term securities
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1991	-0.2	-4.4	-4.5	-0.2	0.3	0.5	0.7	5.1	1.3	0.0	3.9	58.3	18.5	8.5	31.2
1992	-0.9	-4.6	-4.3	-0.2	-0.1	0.9	2.2	6.8	1.7	0.9	4.2	61.9	19.2	8.9	33.8
1993	-1.6	-5.5	-5.3	-0.2	0.0	0.2	2.5	8.1	1.5	-0.3	6.9	68.4	20.2	8.4	39.8
1994	-1.5	-5.1	-4.9	-0.2	0.0	0.3	0.8	5.9	0.2	0.6	5.1	70.8	19.4	8.5	42.9
1995	-1.3	-5.0	-4.6	-0.1	-0.3	0.7	2.3	7.3	2.0	-0.2	5.5	74.8	20.6	7.9	46.4
1996	-0.9	-4.1	-3.9	0.0	-0.2	1.3	-0.2	3.9	0.3	0.2	3.4	76.1	20.2	7.8	48.1
1997	0.4	-2.5	-2.6	0.0	0.0	2.5	-0.3	2.2	-0.1	-1.0	3.2	75.4	19.3	6.6	49.5
1998	1.1	-2.1	-2.3	0.2	0.1	2.4	-0.6	1.5	-0.4	-0.7	2.6	73.6	18.1	5.6	49.9

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

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11
1991	-6.3	-3.3	-4.4	-2.1	-2.3	-10.1	1.9	-2.9	-3.0	-6.0	-1.1
1992	-7.1	-2.8	-4.0	-3.9	-2.4	-9.6	0.7	-3.9	-2.0	-3.0	-5.7
1993	-7.3	-3.5	-6.8	-5.8	-2.3	-9.6	1.6	-3.2	-4.3	-6.1	-7.3
1994	-4.9	-2.6	-6.2	-5.8	-1.5	-9.2	2.7	-3.8	-5.0	-6.0	-6.0
1995	-4.0	-3.3	-7.1	-4.9	-2.1	-7.7	1.8	-4.0	-5.1	-5.7	-4.6
1996	-3.1	-3.4	-4.5	-4.1	-0.3	-6.6	2.8	-2.0	-3.7	-3.3	-3.1
1997	-1.9	-2.7	-2.6	-3.0	1.1	-2.7	2.9	-0.9	-1.9	-2.5	-1.2
1998	-1.3	-2.1	-1.8	-2.9	2.3	-2.7	2.1	-0.9	-2.1	-2.3	1.0

4. Euro area countries – gross nominal consolidated debt

	BE	DE	ES	FR	IE	IT	LU	NL	AT	PT	FI
	12	13	14	15	16	17	18	19	20	21	22
1991	128.4	40.9	44.6	35.8	92.6	102.0	4.0	79.0	58.2	67.3	23.1
1992	130.6	43.6	47.0	39.9	89.5	109.4	4.9	79.9	58.1	59.9	41.5
1993	137.6	47.5	58.8	45.4	93.1	120.0	5.9	81.1	62.8	63.2	58.0
1994	135.1	49.9	61.3	48.6	86.5	125.7	5.5	77.8	65.6	63.8	59.6
1995	132.2	58.3	64.2	52.8	78.9	125.3	5.8	79.0	69.4	65.9	58.1
1996	128.0	60.8	68.6	55.7	69.4	124.6	6.3	77.0	69.8	64.9	57.8
1997	123.4	61.5	67.5	58.1	61.3	122.4	6.4	71.2	64.3	61.7	54.9
1998	117.3	61.0	65.6	58.5	52.1	118.7	6.7	67.7	63.1	57.8	49.6

Sources: ECB for euro area aggregated data; European Commission (DG II and Eurostat, spring 1999) for data relating to euro area countries' deficit/ surplus and debt.

1) Transactions among the euro area countries are not consolidated.

2) Euro area excluding Luxembourg.

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

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

8 Balance of payments of the euro area and the Eurosystem's reserve position

Table 8.1

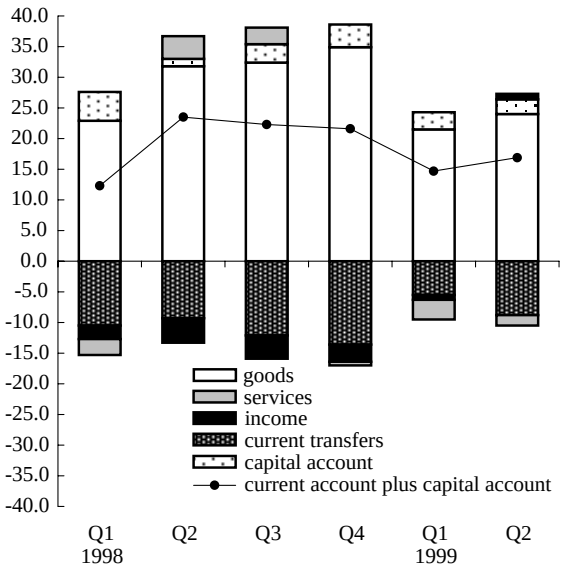
Summary balance of payments

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

		Current account					Capital account	Financial account [1]						Errors and omissions [2]
		Total	Goods	Services	Income	Current transfers		Total [2]	Direct investment	Portfolio investment [2]	Financial derivatives [2]	Other investment [2] [3]	Reserve assets [2]	
		1	2	3	4	5	6	7	8	9	10	11	12	13
1998		67.0	122.1	3.1	-12.6	-45.5	12.6	7.9	-100.2	-90.8	-8.3	198.9	8.3	-87.6
1998	Q1	7.6	22.9	-2.6	-2.2	-10.5	4.7	-1.6	-11.2	-54.7	0.3	65.2	-1.3	-10.7
	Q2	22.3	31.8	3.7	-4.0	-9.3	1.2	4.1	-14.8	-1.7	-4.1	24.6	0.0	-27.5
	Q3	19.3	32.4	2.7	-3.8	-12.1	3.0	-3.3	-23.1	12.3	1.2	3.5	2.8	-19.0
	Q4	17.9	34.9	-0.6	-2.8	-13.6	3.7	8.7	-51.1	-46.7	-5.6	105.5	6.7	-30.3
1999	Q1	11.9	21.5	-3.2	-0.8	-5.5	2.8	-33.1	-15.6	-54.7	-1.4	33.0	5.5	18.4
	Q2	14.5	24.0	-1.7	0.9	-8.8	2.4	-0.8	-48.1	-36.8	1.0	73.5	9.7	-16.1
1998	Apr.	5.5	9.9	0.2	-0.7	-3.9	0.6	-29.0	-8.2	-21.9	-0.9	2.9	-0.9	22.9
	May	6.4	10.8	0.8	-2.2	-3.0	0.5	19.5	-1.3	9.1	-1.5	12.3	0.9	-26.4
	June	10.4	11.2	2.7	-1.1	-2.4	0.1	13.6	-5.2	11.1	-1.8	9.5	0.0	-24.1
	July	12.3	15.3	1.5	-2.3	-2.3	1.0	23.8	-8.6	14.6	-1.4	17.8	1.3	-37.1
	Aug.	4.5	8.2	1.0	0.1	-4.9	1.5	8.6	-7.9	8.5	2.3	8.3	-2.5	-14.6
	Sep.	2.5	8.9	0.2	-1.6	-4.9	0.5	-35.7	-6.6	-10.8	0.3	-22.6	4.0	32.6
	Oct.	5.4	12.2	-0.6	-1.2	-5.0	0.9	-12.3	-16.6	-33.4	-3.0	44.1	-3.3	6.0
	Nov.	5.0	11.6	-0.3	-1.6	-4.7	0.9	4.7	-33.8	1.8	-2.4	45.1	-6.1	-10.5
	Dec.	7.5	11.0	0.3	0.1	-3.9	2.0	16.3	-0.7	-15.1	-0.2	16.2	16.1	-25.8
1999	Jan.	-0.5	4.8	-2.9	-0.4	-2.0	2.7	0.4	-4.7	8.8	-1.9	0.3	-2.1	-2.6
	Feb.	4.1	6.9	0.0	-0.6	-2.2	-0.1	6.8	-6.2	-26.4	-0.4	34.8	5.0	-10.8
	Mar.	8.3	9.8	-0.4	0.2	-1.4	0.2	-40.3	-4.6	-37.1	0.9	-2.1	2.7	31.8
	Apr.	6.8	8.6	-0.4	1.4	-2.8	0.6	17.3	-13.8	2.4	2.7	24.5	1.5	-24.7
	May	2.5	6.5	0.1	-1.3	-2.7	0.9	-7.4	-17.0	-27.6	-3.2	36.6	3.9	4.0
	June	5.1	8.9	-1.3	0.8	-3.3	0.8	-10.6	-17.3	-11.6	1.5	12.4	4.4	4.7
	July	8.2	13.3	0.8	-1.5	-4.4	0.7	-3.4	-5.7	3.0	1.8	-1.8	-0.7	-5.5

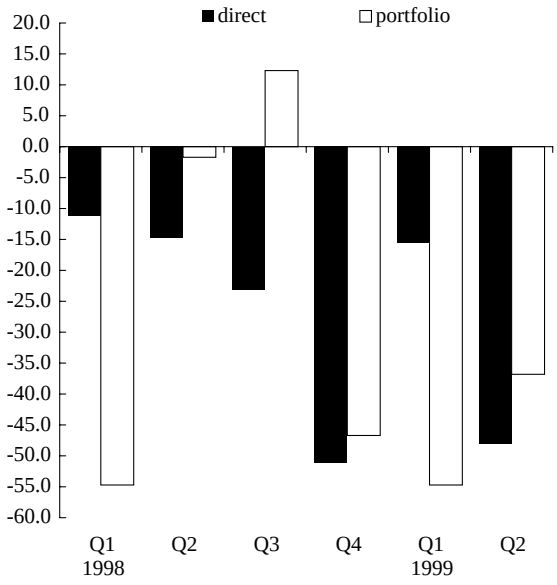
Current and capital accounts

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



Direct and portfolio investment

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



Source: ECB.

1) *Inflows (+); outflows (-). Reserve assets: increase (-); decrease (+).*
2) *Data from January 1999 are not closely comparable with earlier observations.*
3) *Flows before January 1999 include estimates.*

Table 8.2

Current and capital accounts

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

		Current account										Capital account	
		Total		Goods		Services		Income		Current transfers			
		Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
		1	2	3	4	5	6	7	8	9	10	11	12
1998		1,277.8	1,210.7	779.4	657.3	247.6	244.4	190.2	202.9	60.6	106.1	17.6	5.0
1998	Q1	317.6	310.1	190.8	167.9	56.3	58.9	47.0	49.2	23.5	34.1	5.9	1.2
	Q2	325.7	303.5	199.0	167.2	64.1	60.4	50.3	54.2	12.3	21.6	2.4	1.2
	Q3	316.0	296.7	190.8	158.3	67.4	64.7	45.5	49.3	12.2	24.3	4.1	1.1
	Q4	318.4	300.5	198.8	163.9	59.7	60.4	47.4	50.1	12.5	26.1	5.2	1.5
1999	Q1	299.7	287.7	179.7	158.2	50.7	53.9	45.5	46.3	23.8	29.3	4.4	1.7
	Q2	316.1	301.7	191.0	167.0	56.3	58.0	54.5	53.7	14.3	23.0	4.2	1.8
1998	Apr.	106.4	101.0	66.5	56.6	20.2	20.0	16.2	16.9	3.5	7.4	1.0	0.4
	May	104.4	98.0	64.3	53.5	20.7	19.9	15.2	17.3	4.2	7.2	0.9	0.4
	June	114.9	104.5	68.2	57.1	23.2	20.5	18.9	20.0	4.6	7.0	0.5	0.4
	July	116.0	103.7	70.6	55.3	24.1	22.6	16.2	18.5	5.0	7.3	1.4	0.4
	Aug.	94.6	90.1	55.3	47.1	22.3	21.3	13.4	13.3	3.6	8.5	1.8	0.3
	Sep.	105.4	102.9	64.8	55.9	21.0	20.9	15.9	17.5	3.6	8.5	0.9	0.4
	Oct.	106.8	101.4	68.2	56.0	20.4	21.0	14.6	15.8	3.6	8.6	1.3	0.4
	Nov.	101.5	96.5	65.2	53.5	18.1	18.4	14.2	15.8	4.1	8.8	1.3	0.5
	Dec.	110.1	102.5	65.4	54.4	21.2	20.9	18.6	18.5	4.8	8.7	2.6	0.6
1999	Jan.	95.0	95.5	53.5	48.7	14.9	17.8	14.4	14.8	12.3	14.3	3.1	0.4
	Feb.	94.7	90.5	57.4	50.5	17.2	17.2	13.8	14.5	6.2	8.4	0.7	0.8
	Mar.	110.0	101.7	68.8	59.0	18.7	19.0	17.3	17.1	5.3	6.6	0.6	0.5
	Apr.	103.8	97.0	63.5	55.0	17.9	18.3	17.5	16.1	4.8	7.6	1.5	0.9
	May	101.0	98.5	60.6	54.1	18.2	18.2	16.9	18.2	5.3	8.0	1.2	0.3
	June	111.3	106.2	66.9	57.9	20.2	21.5	20.1	19.3	4.2	7.4	1.5	0.6
	July	111.9	103.7	69.4	56.0	22.7	21.9	15.4	16.9	4.4	8.8	1.3	0.6

Source: ECB.

Table 8.3

Income account

(EUR billions; gross flows)

	Total		Compensation of employees		Investment income							
					Total		Direct investment		Portfolio investment		Other investment	
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11	12
1999 Q1	45.5	46.3	2.3	0.9	43.2	45.4	7.8	8.8	12.5	15.0	23.0	21.6

	Income on direct investment				Income on portfolio investment							
	Equity		Debt		Equity		Debt instruments					
							Total		Bonds and notes		Money market instruments	
	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	13	14	15	16	17	18	19	20	21	22	23	24
1999 Q1	6.9	8.0	0.9	0.9	1.6	3.6	10.9	11.3	10.5	10.9	0.5	0.5

Source: ECB.

Table 8.4

Direct and portfolio investment accounts [1) 2)]

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

1. Direct investment; portfolio investment by instrument

		Direct investment		Portfolio investment									
				Total		Equity		Debt instruments					
								Assets			Liabilities [2)]		
		Abroad	In the euro area	Assets	Liabilities [2)]	Assets	Liabilities [2)]	Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
		1	2	3	4	5	6	7	8	9	10	11	12
1998		-177.9	77.7	-307.1	216.3	-82.4	68.5	-224.7	-206.9	-17.9	147.8	119.4	28.3
1998	Q1	-46.4	35.2	-114.1	59.4	-29.6	14.8	-84.5	-74.9	-9.5	44.6	39.9	4.6
	Q2	-39.6	24.9	-83.3	81.6	-25.6	24.8	-57.6	-55.1	-2.5	56.7	44.3	12.4
	Q3	-25.3	2.2	-55.0	67.3	-9.8	-0.4	-45.2	-42.5	-2.7	67.7	50.5	17.3
	Q4	-66.6	15.4	-54.7	8.0	-17.3	29.2	-37.4	-34.3	-3.1	-21.2	-15.2	-6.0
1999	Q1	-36.3	20.8	-65.3	10.7	-21.7	-5.4	-43.6	-43.8	0.1	16.1	2.9	13.2
	Q2	-71.1	23.0	-68.3	31.5	-27.7	21.4	-40.7	-44.2	3.5	10.1	-15.2	25.2
1998	Apr.	-20.7	12.5	-34.0	12.1	-8.0	1.2	-26.0	-30.9	4.9	10.9	10.6	0.3
	May	-12.3	10.9	-19.6	28.7	-6.7	5.5	-12.9	-10.0	-2.9	23.2	15.8	7.5
	June	-6.6	1.4	-29.7	40.8	-10.9	18.2	-18.7	-14.2	-4.6	22.6	17.9	4.7
	July	-2.8	-5.8	-23.0	37.6	-3.2	9.1	-19.8	-20.9	1.1	28.6	17.0	11.6
	Aug.	-4.0	-4.0	-14.5	23.0	0.5	-5.4	-15.0	-14.1	-0.9	28.4	22.4	6.0
	Sep.	-18.6	12.0	-17.5	6.7	-7.1	-4.1	-10.4	-7.4	-2.9	10.8	11.1	-0.3
	Oct.	-11.7	-5.0	-6.9	-26.6	-1.4	-6.1	-5.5	-8.0	2.5	-20.4	-24.8	4.3
	Nov.	-41.1	7.3	-30.3	32.1	-9.0	33.0	-21.3	-15.7	-5.6	-0.9	1.1	-2.0
	Dec.	-13.8	13.1	-17.6	2.5	-7.0	2.4	-10.6	-10.6	0.0	0.1	8.4	-8.3
1999	Jan.	-11.8	7.1	-19.1	27.9	-6.4	9.5	-12.7	-9.3	-3.4	18.4	15.7	2.7
	Feb.	-12.0	5.8	-16.2	-10.2	-4.3	1.9	-11.9	-13.2	1.3	-12.1	-18.0	6.0
	Mar.	-12.5	7.9	-30.0	-7.1	-11.0	-16.9	-19.0	-21.2	2.3	9.7	5.2	4.5
	Apr.	-22.4	8.6	-14.4	16.8	-4.1	2.7	-10.3	-16.4	6.1	14.1	12.7	1.3
	May	-25.4	8.4	-25.0	-2.6	-11.7	6.1	-13.3	-14.1	0.8	-8.7	-17.5	8.8
	June	-23.4	6.1	-28.9	17.3	-11.8	12.6	-17.1	-13.7	-3.4	4.7	-10.4	15.1
	July	0.1	-5.8	-19.0	22.1	-5.2	9.5	-13.9	-13.3	-0.5	12.6	0.7	11.9

2. Portfolio investment assets by instrument and sector of holder

		Equity				Debt instruments							
						Bonds and notes				Money market instruments			
		Eurosystem	General government	MFIs (excl. the Eurosystem)	Other sectors	Eurosystem	General government	MFIs (excl. the Eurosystem)	Other sectors	Eurosystem	General government	MFIs (excl. the Eurosystem)	Other sectors
		1	2	3	4	5	6	7	8	9	10	11	12
1999	Q1	0.1	-0.4	1.1	-22.5	0.1	-0.4	5.1	-48.6	1.4	-0.2	-1.1	0.0

Source: ECB.

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

2) Data from January 1999 are not closely comparable with earlier observations.

Table 8.5

Other investment account [1) 2)]

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

1. By sector

		Total		Eurosystem		General government		MFIs (excluding the Eurosystem)						Other sectors	
								Total		Long-term		Short-term			
		Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1998		-37.0	235.8	-0.7	2.5	-1.4	-8.2	-18.1	211.0	-38.3	36.6	20.3	174.4	-16.8	30.5
1998	Q1	-31.2	96.4	0.4	-0.1	-1.9	-2.4	-9.6	88.7	-7.6	11.1	-1.9	77.6	-20.1	10.2
	Q2	-1.5	26.2	-1.0	0.5	-2.9	-1.0	-1.8	20.7	-13.7	7.7	11.9	13.1	4.2	5.9
	Q3	-79.3	82.8	0.4	-0.6	0.4	-1.9	-73.6	78.7	-14.7	1.4	-58.8	77.3	-6.5	6.6
	Q4	75.0	30.4	-0.5	2.7	3.1	-2.8	66.9	22.8	-2.3	16.4	69.1	6.4	5.6	7.8
1999	Q1	-34.6	67.7	2.9	0.0	-3.3	-4.2	-13.4	58.6	-13.9	7.1	0.6	51.5	-20.9	13.3
	Q2	31.8	41.7	3.8	0.0	4.4	-3.2	25.8	33.3	-16.2	15.0	42.1	18.3	-2.2	11.6
1998	Apr.	6.7	-3.8	0.0	0.3	0.5	0.2	12.9	-7.2	-4.1	4.0	17.0	-11.3	-6.6	2.9
	May	-0.7	12.9	0.0	-0.3	-1.2	-0.6	-5.9	13.5	-3.9	0.8	-1.9	12.7	6.4	0.4
	June	-7.6	17.0	-0.9	0.6	-2.2	-0.6	-8.8	14.5	-5.6	2.9	-3.2	11.6	4.4	2.6
	July	-3.2	20.9	0.2	-0.1	0.3	-3.4	6.4	21.9	-3.3	0.9	9.7	21.1	-10.0	2.5
	Aug.	-10.2	18.5	0.1	-0.1	0.5	0.5	-22.8	17.4	-6.1	-1.6	-16.7	19.0	12.0	0.7
	Sep.	-65.9	43.3	0.1	-0.4	-0.3	0.9	-57.1	39.4	-5.3	2.1	-51.9	37.3	-8.5	3.4
	Oct.	5.5	38.7	0.0	0.4	0.2	0.4	14.8	33.6	-1.0	4.6	15.7	29.0	-9.5	4.3
	Nov.	10.2	34.9	-0.1	-2.7	1.1	1.5	2.5	33.1	0.5	2.3	2.1	30.9	6.7	3.0
	Dec.	59.4	-43.2	-0.4	5.0	1.8	-4.7	49.6	-43.9	-1.8	9.6	51.4	-53.5	8.4	0.5
1999	Jan.	-64.7	65.1	8.4	0.0	0.0	-4.8	-65.0	65.2	-6.2	3.4	-58.8	61.7	-8.2	4.6
	Feb.	30.9	3.9	-4.5	0.0	-2.2	-0.6	48.5	1.5	-0.6	-3.2	49.1	4.6	-10.9	3.1
	Mar.	-0.8	-1.3	-1.0	0.0	-1.1	1.2	3.2	-8.1	-7.1	6.8	10.3	-14.9	-1.8	5.6
	Apr.	17.9	6.6	0.9	0.0	-0.1	0.4	17.0	3.6	-3.5	4.8	20.5	-1.2	0.1	2.6
	May	-3.1	39.7	3.6	0.0	1.2	-0.8	-5.6	39.9	-7.1	7.3	1.5	32.5	-2.3	0.6
	June	17.0	-4.6	-0.7	0.0	3.2	-2.8	14.4	-10.2	-5.6	2.9	20.1	-13.0	0.1	8.3
	July	-16.6	14.8	0.6	0.0	-1.4	-1.7	-8.3	16.7	-2.3	2.3	-6.0	14.4	-7.5	-0.2

2. By sector and instrument

2.1. Eurosystem

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

Source: ECB.

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

2) Data from January 1999 are not closely comparable with earlier observations. Flows before January 1999 include estimates.

2.2. General government

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

2.3. MFIs (excluding the Eurosystem)

	Loans/currency and deposits			Other assets/liabilities		
	Assets	Liabilities	Balance	Assets	Liabilities	Balance
	16	17	18	19	20	21
1999 Q1	-17.1	61.3	44.2	3.7	-2.7	1.0

2.4. Other sectors

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets	Liabilities	Balance	Assets	Liabilities	Balance	Assets	Liabilities	Balance
	22	23	24	25	26	27	28	29	30
1999 Q1	-3.5	4.1	0.6	-11.8	3.4	-8.4	-5.5	5.8	0.2

Table 8.6

Reserves and related assets of the Eurosystem

1. Outstanding amounts [1)]

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

		Reserve assets							Memo: Related assets
		Total	Monetary gold	In fine troy ounces (millions)	Special drawing rights	Reserve position in the IMF	Foreign exchange	Other claims	Claims on euro area residents denominated in foreign currency
		1	2	3	4	5	6	7	8
1999	1 Jan.	330.3	99.6	405	6.0	22.5	201.5	0.7	7.6
	Jan.	339.0	101.6	405	6.0	22.7	207.0	1.6	7.5
	Feb.	340.9	105.6	405	3.0	22.7	208.9	0.7	9.4
	Mar.	350.2	105.9	405	3.9	23.5	215.1	1.8	10.1
	Apr.	353.0	109.6	405	5.5	23.9	212.3	1.7	11.7
	May	344.8	103.9	405	5.0	24.1	210.1	1.7	12.7
	June	347.3	102.2	404	3.9	25.2	214.5	1.6	12.6
	July	340.2	96.6	404	3.6	24.5	213.7	1.7	12.7
	Aug.	341.9	97.1	404	3.8	24.3	215.1	1.7	12.1

2. Balance of payments flows [2)]

(EUR billions; net flows)

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

Source: ECB.

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

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

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 manu-factured 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		793.1	53.4	15.6	12.5	103.9	220.0	368.2	19.6	127.4	119.5	106.6
1997	Q1	170.7	12.0	3.8	3.7	22.6	48.9	74.7	5.0	109.7	104.2	105.3
	Q2	191.8	13.4	4.1	3.6	25.1	53.9	86.4	5.3	123.3	117.3	105.1
	Q3	193.5	13.0	4.2	3.4	25.6	55.6	86.5	5.1	124.3	116.6	106.6
	Q4	206.8	14.4	4.2	3.7	25.6	58.2	95.1	5.5	132.9	125.7	105.7
1998	Q1	194.2	13.2	4.1	3.4	26.5	54.5	87.5	5.0	124.8	115.8	107.8
	Q2	203.7	13.9	3.9	3.3	26.8	56.2	94.6	5.0	130.9	122.6	106.8
	Q3	195.1	12.8	3.8	3.0	25.7	54.8	90.2	4.7	125.4	117.7	106.5
	Q4	200.1	13.5	3.8	2.8	24.8	54.4	95.9	4.8	128.6	122.2	105.2
1999	Q1	187.1	12.1	3.8	2.6	25.7	50.8	86.2	5.9	120.3	112.2	107.2
	Q2	201.5	13.1	3.9	3.0	28.0	54.7	93.1	5.7	129.5	.	.
1998	Jan.	58.5	4.0	1.2	1.2	8.4	16.2	25.8	1.6	112.8	104.8	107.6
	Feb.	63.7	4.3	1.4	1.0	8.6	18.0	28.8	1.6	122.9	114.0	107.8
	Mar.	72.0	4.8	1.5	1.2	9.6	20.2	32.9	1.8	138.8	128.5	108.0
	Apr.	68.0	4.7	1.3	1.1	9.1	18.9	31.0	1.8	131.0	122.6	106.9
	May	65.7	4.5	1.3	1.1	8.6	18.1	30.5	1.6	126.7	118.5	106.9
	June	70.1	4.7	1.3	1.1	9.1	19.1	33.1	1.6	135.1	126.6	106.7
	July	72.8	4.5	1.3	1.1	9.2	21.0	34.0	1.6	140.4	131.4	106.9
	Aug.	56.3	4.0	1.2	0.9	7.7	15.5	25.5	1.4	108.6	102.5	105.9
	Sep.	65.9	4.3	1.3	0.9	8.8	18.3	30.7	1.6	127.1	119.2	106.6
	Oct.	68.9	4.6	1.3	1.0	8.6	19.5	32.3	1.6	132.8	125.8	105.6
	Nov.	66.6	4.5	1.3	0.9	8.0	18.0	32.2	1.6	128.4	122.7	104.7
	Dec.	64.6	4.4	1.2	0.9	8.2	16.9	31.3	1.6	124.5	118.2	105.3
1999	Jan.	54.4	3.6	1.2	0.8	7.8	14.6	24.9	1.6	104.8	98.3	106.6
	Feb.	60.0	3.9	1.2	0.8	8.2	16.4	27.3	2.1	115.7	108.3	106.8
	Mar.	72.7	4.6	1.4	1.0	9.8	19.8	34.0	2.2	140.2	129.8	108.0
	Apr.	65.8	4.2	1.3	1.0	9.2	17.7	30.6	1.7	126.8	117.6	107.8
	May	63.5	4.4	1.3	1.0	9.0	17.3	28.7	1.8	122.4	113.6	107.8
	June	72.2	4.5	1.3	1.1	9.8	19.7	33.7	2.1	139.2	.	.
	July	73.3	.	.	.	.	.	.	.	141.3	.	.

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

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

2) ECB calculations based on Eurostat data.

Table 9

2. Imports [1)]

(EUR billions (ECU billions to end-1998); c.i.f. value)

		Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manu-factured articles	Machinery, transport equipment	Other	Import trade indices 1995 = 100		
										Value [2)]	Volume [2)]	Unit value
		1	2	3	4	5	6	7	8	9	10	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		711.4	50.5	41.1	61.9	67.3	200.3	267.1	23.2	126.4	123.2	102.6
1997	Q1	159.1	11.4	9.7	21.2	14.7	44.6	51.8	5.8	113.1	106.0	106.7
	Q2	168.0	12.6	11.0	18.6	16.0	46.5	57.5	5.7	119.4	111.4	107.2
	Q3	166.6	12.2	10.0	20.0	15.2	48.9	55.6	4.7	118.5	106.9	110.8
	Q4	180.4	13.5	10.6	21.4	16.1	48.2	63.8	6.8	128.2	117.0	109.6
1998	Q1	180.8	12.6	10.8	17.5	17.6	51.2	64.9	6.2	128.5	119.8	107.3
	Q2	179.5	12.6	11.1	15.9	17.2	50.1	66.6	6.1	127.6	122.0	104.6
	Q3	171.1	12.2	9.6	14.7	16.3	50.2	62.7	5.3	121.6	119.6	101.7
	Q4	180.0	13.0	9.5	13.9	16.3	48.7	72.9	5.7	128.0	131.8	97.1
1999	Q1	176.9	11.7	9.1	13.4	16.9	49.8	70.2	5.7	125.8	127.3	98.8
	Q2	186.4	12.2	10.0	16.3	17.5	50.2	74.1	6.0	132.5	.	.
1998	Jan.	58.0	4.1	3.5	6.2	5.6	16.4	20.2	2.0	123.6	114.9	107.6
	Feb.	58.2	4.0	3.5	5.7	5.5	16.6	20.7	2.2	124.2	115.2	107.8
	Mar.	64.6	4.6	3.8	5.6	6.5	18.2	24.0	2.0	137.8	129.5	106.4
	Apr.	60.1	4.4	3.7	5.4	5.7	16.6	22.4	2.0	128.2	121.6	105.5
	May	57.1	4.0	3.5	5.5	5.6	15.7	21.0	1.8	121.9	116.2	104.9
	June	62.2	4.2	3.9	4.9	5.9	17.7	23.2	2.3	132.7	128.3	103.4
	July	59.3	4.3	3.6	4.9	5.9	17.7	21.0	1.9	126.4	123.8	102.1
	Aug.	50.1	3.7	2.8	4.7	4.7	14.8	17.9	1.5	106.8	105.6	101.1
	Sep.	61.7	4.2	3.3	5.0	5.7	17.8	23.8	1.9	131.6	129.3	101.8
	Oct.	62.5	4.3	3.3	5.0	5.8	17.2	24.8	2.1	133.2	134.1	99.3
	Nov.	59.3	4.2	3.1	4.4	5.3	16.0	24.5	1.8	126.5	131.3	96.3
	Dec.	58.3	4.5	3.1	4.5	5.2	15.5	23.6	1.8	124.2	130.0	95.6
1999	Jan.	54.4	3.6	2.9	4.5	5.1	15.3	21.1	1.8	115.9	118.2	98.1
	Feb.	55.8	3.7	2.9	4.1	5.4	16.0	21.8	2.0	118.9	120.9	98.4
	Mar.	66.8	4.4	3.3	4.9	6.4	18.5	27.4	2.0	142.5	142.9	99.7
	Apr.	60.6	4.0	3.2	5.4	5.8	15.9	24.2	2.0	129.2	126.3	102.3
	May	61.6	4.0	3.3	5.5	5.7	16.4	24.7	2.0	131.4	126.3	104.0
	June	64.2	4.2	3.4	5.3	6.1	17.9	25.2	2.1	136.9	.	.
	July	61.2	.	.	.	.	.	.	.	130.5	.	.

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

1) Owing to differences in definitions, coverage and time of recording, trade data (as compiled by Eurostat) are not fully comparable with the goods item in the balance of payments statistics compiled by the ECB (Table 8.2). 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	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manufactured articles	Machinery, transport equipment	Other
		1	2	3	4	5	6	7	8
1996		75.8	2.7	-22.3	-58.5	31.4	28.5	102.3	-8.3
1997		88.6	3.2	-25.0	-66.8	37.0	28.5	114.0	-2.2
1998		81.7	2.9	-25.5	-49.4	36.6	19.7	101.1	-3.6
1997	Q1	11.6	0.6	-5.8	-17.5	7.9	4.3	22.8	-0.8
	Q2	23.8	0.7	-6.9	-15.0	9.1	7.4	28.9	-0.4
	Q3	26.8	0.9	-5.9	-16.6	10.4	6.8	30.9	0.3
	Q4	26.3	1.0	-6.4	-17.7	9.5	10.0	31.3	-1.3
1998	Q1	13.4	0.5	-6.7	-14.1	9.0	3.2	22.7	-1.2
	Q2	24.2	1.4	-7.2	-12.6	9.6	6.1	28.0	-1.0
	Q3	24.0	0.6	-5.8	-11.7	9.4	4.6	27.5	-0.6
	Q4	20.0	0.5	-5.7	-11.0	8.5	5.7	22.9	-0.9
1999	Q1	10.2	0.4	-5.3	-10.8	8.8	1.0	16.0	0.2
	Q2	15.1	0.9	-6.1	-13.3	10.4	4.5	18.9	-0.3
1998	Jan.	0.5	-0.1	-2.3	-5.0	2.8	-0.2	5.6	-0.4
	Feb.	5.5	0.4	-2.2	-4.7	3.1	1.5	8.1	-0.6
	Mar.	7.4	0.2	-2.3	-4.4	3.1	2.0	8.9	-0.2
	Apr.	7.8	0.3	-2.4	-4.3	3.4	2.3	8.6	-0.1
	May	8.6	0.5	-2.3	-4.4	3.1	2.4	9.5	-0.2
	June	7.8	0.5	-2.6	-3.8	3.1	1.5	9.9	-0.8
	July	13.6	0.2	-2.2	-3.9	3.3	3.3	13.1	-0.2
	Aug.	6.2	0.3	-1.5	-3.8	3.0	0.7	7.6	-0.1
	Sep.	4.2	0.1	-2.0	-4.1	3.0	0.6	6.8	-0.3
	Oct.	6.4	0.3	-2.0	-4.0	2.8	2.3	7.5	-0.4
	Nov.	7.3	0.3	-1.9	-3.5	2.8	2.0	7.7	-0.2
	Dec.	6.3	-0.1	-1.9	-3.5	3.0	1.4	7.7	-0.2
1999	Jan.	0.0	0.0	-1.8	-3.7	2.6	-0.8	3.8	-0.2
	Feb.	4.3	0.2	-1.7	-3.2	2.8	0.4	5.5	0.2
	Mar.	5.9	0.1	-1.9	-3.9	3.4	1.3	6.6	0.2
	Apr.	5.2	0.3	-2.0	-4.5	3.4	1.8	6.4	-0.3
	May	1.9	0.4	-2.0	-4.6	3.3	0.9	4.0	-0.1
	June	8.0	0.2	-2.1	-4.2	3.7	1.8	8.5	0.1
	July	12.1	.	.	.	.	.	.	.

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]					
		Nominal	Real	US dollar	Japanese yen	Swiss franc	Pound sterling	Swedish krona	Danish krone
		1	2	3	4	5	6	7	8
1995		107.8	108.7	1.308	123.0	1.546	0.829	9.33	7.33
1996		107.9	108.8	1.270	138.1	1.568	0.814	8.51	7.36
1997		99.1	99.4	1.134	137.1	1.644	0.692	8.65	7.48
1998		101.5	101.3	1.121	146.4	1.622	0.676	8.92	7.50
1998	Q3	102.5	102.5	1.118	156.3	1.642	0.676	8.95	7.50
	Q4	104.2	103.8	1.177	140.6	1.600	0.702	9.38	7.44
1999	Q1	100.0	100.0	1.122	130.7	1.599	0.687	8.98	7.44
	Q2	96.1	96.0	1.057	127.7	1.600	0.658	8.90	7.43
	Q3	94.6	94.8	1.049	118.7	1.602	0.655	8.71	7.44
1998	Sep.	104.6	104.3	1.154	155.3	1.617	0.687	9.12	7.48
	Oct.	105.6	105.2	1.194	144.2	1.596	0.705	9.37	7.44
	Nov.	103.6	103.2	1.164	140.1	1.612	0.701	9.31	7.44
	Dec.	103.4	103.2	1.172	137.4	1.594	0.702	9.45	7.45
1999	Jan.	102.0	101.8	1.161	131.3	1.605	0.703	9.08	7.44
	Feb.	99.9	99.9	1.121	130.8	1.598	0.689	8.91	7.44
	Mar.	98.3	98.3	1.088	130.2	1.595	0.671	8.94	7.43
	Apr.	97.1	96.9	1.070	128.2	1.602	0.665	8.91	7.43
	May	96.6	96.5	1.063	129.7	1.603	0.658	8.97	7.43
	June	94.7	94.7	1.038	125.3	1.595	0.650	8.83	7.43
	July	94.8	95.1	1.035	123.7	1.604	0.658	8.74	7.44
	Aug.	95.4	95.6	1.060	120.1	1.600	0.660	8.75	7.44
	Sep.	93.6	93.6	1.050	112.4	1.602	0.647	8.63	7.43
% ch. vs. [3]	prev. month	-1.9	-2.1	-1.0	-6.4	0.1	-2.0	-1.4	-0.1
	prev. year	-10.6	-10.3						

		Bilateral ECU or euro exchange rates [2]						
		Greek drachma	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar [4]	Korean won [4]	Singapore dollar [4]
		9	10	11	12	13	14	15
1995		303.0	8.29	1.795	1.765	10.01	999.7	1.833
1996		305.5	8.20	1.731	1.623	9.68	1,007.9	1.765
1997		309.3	8.02	1.569	1.528	8.75	1,069.8	1.678
1998		330.7	8.47	1.665	1.787	8.69	1,568.9	1.876
1998	Q3	332.7	8.54	1.690	1.867	8.67	1,486.8	1.935
	Q4	331.5	8.82	1.814	1.887	9.16	1,516.6	1.942
1999	Q1	322.7	8.60	1.696	1.770	8.69	1,342.6	1.911
	Q2	325.0	8.24	1.557	1.618	8.19	1,258.8	1.810
	Q3	326.1	8.22	1.558	1.613	8.14	1,252.8	1.772
1998	Sep.	337.9	8.74	1.756	1.962	8.97	1,592.4	1.994
	Oct.	336.5	8.88	1.842	1.932	9.31	1,615.7	1.969
	Nov.	329.1	8.68	1.793	1.834	9.05	1,511.9	1.913
	Dec.	328.8	8.91	1.807	1.893	9.11	1,426.3	1.941
1999	Jan.	323.6	8.65	1.765	1.839	8.99	1,362.4	1.950
	Feb.	322.0	8.65	1.679	1.751	8.68	1,330.2	1.905
	Mar.	322.5	8.51	1.651	1.726	8.43	1,336.2	1.881
	Apr.	325.5	8.32	1.594	1.668	8.30	1,292.2	1.834
	May	325.2	8.23	1.553	1.605	8.24	1,272.1	1.820
	June	324.2	8.17	1.524	1.580	8.05	1,212.6	1.775
	July	325.0	8.18	1.540	1.576	8.03	1,229.4	1.756
	Aug.	326.4	8.26	1.583	1.645	8.23	1,269.1	1.779
	Sep.	327.0	8.23	1.552	1.619	8.15	1,260.1	1.781
% ch. vs. [3]	prev. month	0.2	-0.4	-2.0	-1.6	-0.9	-0.7	0.1

Source: ECB.

1) *ECB calculations; based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade with the trading partners whose currencies are shown in the table, and capture third-market effects. Real rates are calculated using national CPIs (HICP for the euro area and the other EU Member States). Where CPI data are not yet available, estimates are used.*

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

3) *The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year (for the effective exchange rate only). A positive change denotes an appreciation of the euro.*

4) *As the ECB does not provide official reference rates, indicative rates are shown.*

11 Economic and financial developments in the other EU Member States

Table 11

Economic and financial developments

(annual percentage changes, unless otherwise indicated)

		HICP	General government deficit (-) / surplus (+) as a % of GDP	General government gross debt as a % of GDP	Long-term government bond yield [1] as a % per annum	Exchange rate [2] as national currency per ECU or euro	Current and new capital account [3] as a % of GDP	Unit labour costs [4]	Real GDP	Industrial production index [5]	Standardised unemployment rate as a % of labour force (s.a.)	Broad money [6]	3-month interest rate [1] as a % per annum
		1	2	3	4	5	6	7	8	9	10	11	12
Denmark													
1995		-	-2.4	72.1	8.27	7.33	.	0.5	3.7	4.4	7.2	-2.0	6.20
1996		2.1	-0.9	67.4	7.19	7.36	.	1.4	2.8	2.0	6.8	7.2	3.98
1997		1.9	0.4	63.6	6.26	7.48	0.6	2.8	3.1	5.6	5.6	4.7	3.73
1998		1.3	0.8	58.1	4.94	7.50	-1.3	2.4	2.7	2.2	5.1	4.6	4.27
1998	Q3	1.2	-	-	4.82	7.50	1.7	2.1	3.6	3.7	5.0	6.6	4.47
	Q4	1.1	-	-	4.51	7.44	-3.9	3.5	2.5	-0.3	4.7	3.7	4.51
1999	Q1	1.4	-	-	4.22	7.44	1.8	5.9	0.8	-0.6	4.8	4.5	3.64
	Q2	1.8	-	-	4.50	7.43	1.8	4.6	1.5	6.9	4.5	4.9	3.12
	Q3	.	-	-	5.35	7.44	.	.	.	.	.	.	3.19
1999	Mar.	1.7	-	-	4.43	7.43	-	-	-	0.0	4.6	5.5	3.46
	Apr.	1.7	-	-	4.22	7.43	-	-	-	9.8	4.6	3.9	3.12
	May	1.6	-	-	4.46	7.43	-	-	-	13.7	4.5	5.2	3.11
	June	1.9	-	-	4.81	7.43	-	-	-	-1.8	4.5	5.8	3.13
	July	2.0	-	-	5.11	7.44	-	-	-	.	.	3.1	3.17
	Aug.	2.4	-	-	5.38	7.44	-	-	-	.	.	4.9	3.21
	Sep.	.	-	-	5.55	7.43	-	-	-	.	.	.	3.18
Greece													
1995		-	-10.3	110.1	-	303.0	-2.8	11.6	.	2.1	7.1	6.4	16.09
1996		7.9	-7.5	112.2	-	305.5	-3.7	10.6	2.4	0.6	7.5	9.8	13.54
1997		5.4	-3.9	109.4	9.92	309.3	-4.0	7.2	3.4	1.0	7.9	14.5	12.48
1998		4.5	-2.4	106.5	8.48	330.7	-3.1	.	.	3.4	10.0	4.0	13.53
1998	Q3	4.8	-	-	7.83	332.7	.	.	.	3.7	11.7	2.3	13.18
	Q4	4.0	-	-	7.76	331.5	.	.	.	0.8	9.8	5.7	11.94
1999	Q1	3.4	-	-	6.08	322.7	.	.	.	-0.8	.	.	10.56
	Q2	2.2	-	-	5.87	325.0	.	.	.	0.5	.	.	9.80
	Q3	.	-	-	6.56	326.1	.	.	.	.	.	.	9.86
1999	Mar.	3.2	-	-	5.97	322.5	-	-	-	-1.2	.	.	9.84
	Apr.	2.6	-	-	5.85	325.5	-	-	-	0.0	.	.	9.85
	May	2.2	-	-	5.75	325.2	-	-	-	1.6	.	.	9.72
	June	1.8	-	-	6.02	324.2	-	-	-	-0.2	.	.	9.84
	July	1.8	-	-	6.37	325.0	-	-	-	.	.	.	9.83
	Aug.	1.6	-	-	6.66	326.4	-	-	-	.	.	.	9.90
	Sep.	.	-	-	6.64	327.0	-	-	-	.	.	.	9.85
Sweden													
1995		-	-6.9	77.6	10.24	9.33	.	.	3.7	10.6	8.8	-1.3	8.83
1996		0.8	-3.5	76.7	8.02	8.51	.	.	1.3	1.8	9.6	10.0	6.03
1997		1.8	-0.7	76.7	6.62	8.65	.	.	1.8	7.2	9.9	4.2	4.43
1998		1.0	2.0	75.1	4.99	8.92	2.3	.	2.6	4.2	8.3	3.5	4.36
1998	Q3	0.6	-	-	4.82	8.95	2.5	.	2.5	5.2	8.1	4.7	4.29
	Q4	0.1	-	-	4.50	9.38	2.7	.	3.2	1.3	7.6	4.5	3.94
1999	Q1	0.2	-	-	4.21	8.98	1.3	.	3.7	1.2	7.5	5.4	3.31
	Q2	0.3	-	-	4.54	8.90	0.0	.	3.6	.	7.0	6.4	3.07
	Q3	.	-	-	5.48	8.71	.	.	.	.	.	.	3.23
1999	Mar.	0.5	-	-	4.44	8.94	-	-	-	2.3	7.4	6.3	3.23
	Apr.	0.3	-	-	4.24	8.91	-	-	-	0.3	7.3	6.7	2.99
	May	0.3	-	-	4.50	8.97	-	-	-	4.0	6.8	6.6	3.10
	June	0.4	-	-	4.87	8.83	-	-	-	.	7.0	5.9	3.12
	July	0.2	-	-	5.26	8.74	-	-	-	.	6.8	4.5	3.23
	Aug.	0.8	-	-	5.49	8.75	-	-	-	.	.	6.5	3.25
	Sep.	.	-	-	5.69	8.63	-	-	-	.	.	.	3.22
United Kingdom													
1995		-	-5.7	53.0	8.32	0.829	-0.4	1.5	2.8	1.5	8.7	7.2	6.75
1996		2.5	-4.4	53.6	7.94	0.814	0.0	1.7	2.6	0.4	8.2	9.9	6.11
1997		1.8	-1.9	52.1	7.13	0.692	0.9	2.9	3.5	1.3	7.0	11.2	6.92
1998		1.5	0.6	49.4	5.60	0.676	0.1	3.5	2.2	0.4	6.3	9.6	7.43
1998	Q3	1.4	-	-	5.57	0.676	0.4	3.5	2.0	0.6	6.3	9.5	7.67
	Q4	1.4	-	-	4.82	0.702	0.2	4.1	1.6	-0.5	6.3	8.6	6.89
1999	Q1	1.6	-	-	4.39	0.687	-1.6	4.4	1.3	-1.3	6.3	7.3	5.60
	Q2	1.4	-	-	4.82	0.658	.	4.5	1.4	-1.3	6.1	6.7	5.29
	Q3	.	-	-	5.39	0.655	.	.	.	.	.	.	5.28
1999	Mar.	1.7	-	-	4.60	0.671	-	-	-	-1.2	6.3	6.9	5.40
	Apr.	1.5	-	-	4.54	0.665	-	-	-	-1.4	6.2	7.5	5.32
	May	1.3	-	-	4.83	0.658	-	-	-	-0.9	6.1	7.1	5.35
	June	1.4	-	-	5.09	0.650	-	-	-	-1.7	.	5.4	5.22
	July	1.3	-	-	5.27	0.658	-	-	-	-1.5	.	3.4	5.17
	Aug.	1.3	-	-	5.31	0.660	-	-	-	.	.	.	5.26
	Sep.	.	-	-	5.60	0.647	-	-	-	.	.	.	5.41

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

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

12 Economic and financial developments outside the EU

Table 12.1

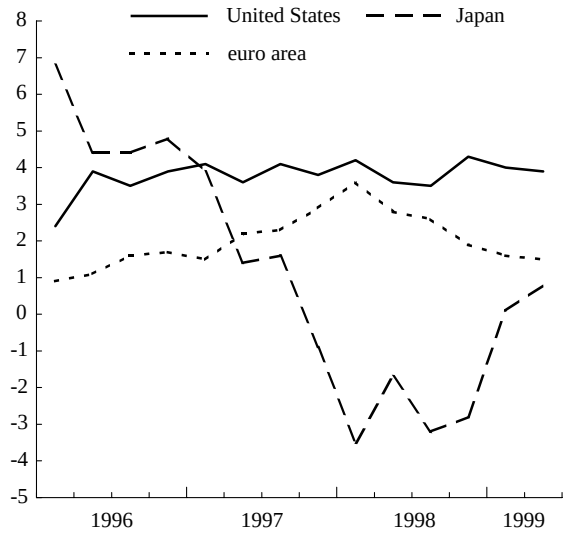
Economic and financial developments

(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 (+) as a % of GDP	Gross public debt [5] as a % of GDP
		1	2	3	4	5	6	7	8	9	10	11
						United States						
1995		2.8	-1.6	2.3	5.4	5.6	2.1	5.44	6.69	1.308	-2.2	60.8
1996		2.9	-2.3	3.4	4.8	5.4	4.8	5.43	6.54	1.270	-1.2	59.9
1997		2.3	0.0	3.9	6.7	4.9	5.0	5.62	6.45	1.134	0.1	57.8
1998		1.6	0.7	3.9	4.2	4.5	7.4	5.00	5.33	1.121	1.4	55.1
1998	Q3	1.6	1.4	3.5	3.2	4.5	7.3	5.20	5.27	1.118	-	55.3
	Q4	1.5	-0.8	4.3	2.5	4.4	8.4	5.00	4.72	1.177	-	55.1
1999	Q1	1.7	-1.6	4.0	2.2	4.3	8.4	4.99	5.00	1.122	-	54.8
	Q2	2.1	-1.4	3.9	2.7	4.3	7.9	5.04	5.54	1.057	-	.
	Q3	.	.	.	.	.	.	5.44	5.88	1.049	-	.
1999	Mar.	1.7	-	-	2.2	4.2	8.1	4.99	5.23	1.088	-	-
	Apr.	2.3	-	-	2.3	4.3	8.1	4.97	5.18	1.070	-	-
	May	2.1	-	-	2.2	4.2	7.9	4.98	5.54	1.063	-	-
	June	2.0	-	-	3.6	4.3	7.6	5.17	5.90	1.038	-	-
	July	2.1	-	-	4.3	4.3	7.7	5.30	5.80	1.035	-	-
	Aug.	2.3	-	-	3.1	4.2	7.5	5.46	5.94	1.060	-	-
	Sep.	.	-	-	.	.	.	5.56	5.91	1.050	-	-
						Japan						
1995		-0.1	-2.2	1.5	3.4	3.2	3.0	0.50	3.32	123.0	-3.6	.
1996		0.1	-1.9	5.1	2.3	3.4	3.3	0.31	3.03	138.1	-4.3	.
1997		1.7	-2.2	1.4	3.6	3.4	3.1	0.36	2.15	137.1	-3.3	.
1998		0.6	6.3	-2.8	-7.1	4.1	4.4	0.18	1.30	146.4	-5.9	.
1998	Q3	-0.2	7.6	-3.2	-8.5	4.3	4.2	0.12	1.14	156.3	-	-
	Q4	0.5	5.1	-2.8	-6.8	4.4	4.5	0.18	1.04	140.6	-	-
1999	Q1	-0.1	3.6	0.1	-4.2	4.6	4.1	0.31	1.96	130.7	-	-
	Q2	-0.3	-1.3	0.8	-1.0	4.8	4.1	0.13	1.50	127.7	-	-
	Q3	.	.	.	.	.	.	0.13	1.78	118.7	-	-
1999	Mar.	-0.4	-0.2	-	-0.8	4.8	4.2	0.20	1.72	130.2	-	-
	Apr.	-0.1	0.4	-	-2.4	4.8	4.0	0.18	1.55	128.2	-	-
	May	-0.4	-2.1	-	-0.5	4.6	4.1	0.12	1.36	129.7	-	-
	June	-0.3	-2.1	-	0.0	4.9	4.3	0.10	1.60	125.3	-	-
	July	-0.1	.	-	0.2	4.9	3.9	0.12	1.69	123.7	-	-
	Aug.	0.3	.	-	5.5	4.7	3.5	0.13	1.89	120.1	-	-
	Sep.	.	.	-	.	.	.	0.14	1.75	112.4	-	-

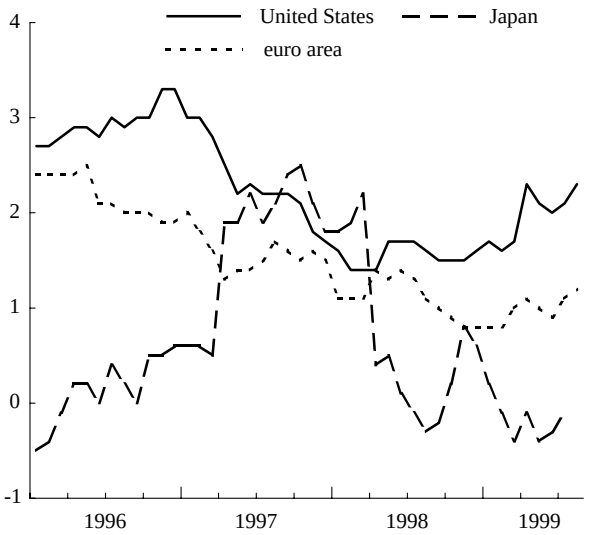
Real gross domestic product

(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 11); OECD (column 2 (Japan)); Eurostat (euro area chart data); Reuters (columns 7 and 8 (from January 1999)); European Commission (DG II) (column 10).

1) Manufacturing.

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

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

4) For more information, see Table 10.

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

Table 12.2

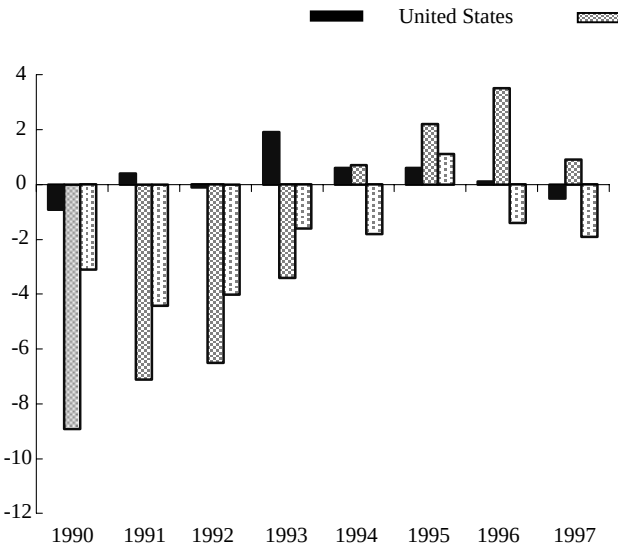
Saving, investment and financing

(as a percentage of GDP)

		National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households [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														
1995		16.3	17.4	-1.4	7.8	7.2	6.0	8.3	5.4	2.6	12.2	6.5	13.6	5.0
1996		16.6	17.8	-1.6	7.9	7.5	5.3	8.2	5.2	1.2	12.4	5.4	13.5	4.9
1997		17.3	18.4	-1.7	8.3	7.4	3.7	8.2	4.3	2.3	12.3	4.5	12.8	4.6
1998		17.2	18.8	-2.5	8.3	7.7	4.2	8.1	4.6	1.8	12.8	5.7	11.6	5.9
1997	Q3	17.5	18.4	-1.7	8.2	7.7	5.1	8.4	6.1	2.0	12.3	5.1	12.8	5.4
	Q4	17.3	18.5	-2.0	8.1	7.3	3.2	8.1	3.4	3.4	12.2	4.5	12.3	4.2
1998	Q1	17.7	19.1	-2.1	8.7	7.7	4.0	8.2	4.9	3.4	12.5	3.8	12.0	5.9
	Q2	17.2	18.7	-2.5	8.1	7.8	4.7	8.1	5.1	4.0	12.8	9.3	11.6	5.7
	Q3	17.3	18.8	-2.7	8.2	7.6	4.4	8.1	4.4	0.7	12.7	5.5	11.3	5.5
	Q4	16.9	18.8	-2.6	8.3	7.9	3.5	8.0	4.0	-0.9	13.1	4.0	11.4	6.2
1999	Q1	17.2	19.0	-2.9	8.3	7.9	7.2	8.2	7.9	5.8	13.3	3.3	10.8	6.6
	Q2	16.7	18.8	-3.4	8.6	8.5	4.6	8.0	4.6	-0.4	13.6	4.3	10.6	6.7
Japan														
1995		30.8	28.6	2.1	14.9	14.9	3.1	13.5	2.3	0.5	5.3	10.3	13.1	1.9
1996		31.5	30.0	1.4	14.6	15.3	1.7	15.2	0.3	1.0	6.7	6.4	12.7	1.1
1997		30.9	28.7	2.2	15.5	16.1	3.3	15.2	1.2	0.1	5.6	7.1	12.3	0.7
1998		.	.	.	.	.	4.5	.	-5.6	-1.3	.	5.3	.	-0.3
1997	Q3	30.2	30.0	2.2	.	.	3.0	.	3.1	0.4	.	-0.3	.	1.5
	Q4	29.0	29.3	2.6	.	.	6.6	.	10.7	-0.3	.	19.8	.	1.5
1998	Q1	33.2	27.9	2.4	.	.	-6.9	.	-15.7	5.4	.	-2.5	.	2.3
	Q2	.	24.1	.	.	.	-25.6	.	-10.9	0.9	.	13.5	.	-5.8
	Q3	.	26.7	.	.	.	4.1	.	-2.9	4.7	.	3.3	.	1.9
	Q4	.	.	.	.	.	11.5	.	-5.9	-0.8	.	10.3	.	1.1
1999	Q1	.	.	.	.	.	-2.7	.	-19.6	5.7	.	-5.5	.	8.3
	Q2	.	.	.	.	.	.	.	.	.	.	.	.	.

Net lending of non-financial corporations

(as a percentage of GDP)



Net lending of households [1]

(as a percentage of GDP)

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

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

General notes

The basis for the statistics compiled and published by the European Central Bank (ECB) was laid down in the document entitled the "Statistical requirements for Stage Three of Monetary Union (Implementation package)" which was made available to banking associations and others involved in statistical preparations for Stage Three by the European Monetary Institute (EMI) and the national central banks (NCBs) in July 1996. The "Implementation package" covers money and banking statistics, balance of payments statistics, international investment position statistics, financial accounts statistics, price and cost and other economic statistics.[1]

The focus of these statistics is the euro area as a whole. More detailed and longer runs of data, with further explanatory notes, are available on the ECB's Web site (http://www.ecb.int), and new or expanded data will appear in the ECB Monthly Bulletin as they become available.

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

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

As a general rule, the cut-off date for the statistics included in the ECB Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, it was 6 October 1999.

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

Monetary policy and financial statistics

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

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

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).*

concerning the statistics on retail bank interest rates (Table 3.4), see the footnote at the bottom of the relevant page.

Statistics on securities market issues and redemptions are expected to be available later in 1999.

Prices and real economy indicators

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

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

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

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

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

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

Financial accounts statistics

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

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

General government fiscal position

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

In addition, general government deficit and debt data are shown for individual euro area countries owing to their importance in the framework of the Stability and Growth Pact. These data are provided by the European Commission.

Balance of payments of the euro area, the Eurosystem's reserve position, trade in goods and exchange rates

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

The euro area balance of payments is compiled by the ECB. Data up to December 1998 are expressed in ECU.

The outstanding amounts of the Eurosystem's reserves and related assets from 1999 onwards are shown in Table 8.6, together with quarterly detail of flows. Corresponding summary net flows are shown in Table 8.1. The data in Table 8.1 for net flows up to December 1998 are not fully comparable with later data, since they were compiled by aggregating figures following national definitions and include instruments issued by other residents of the euro area.

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).

In Table 10 an effective exchange rate index for the euro compiled by the ECB replaces the BIS calculation used hitherto. The bilateral rates shown are those against the 13 currencies used in the calculation. For all except the Hong Kong and Singapore dollars and the Korean won the bilateral rates are daily reference rates published by the ECB. Box 5 on page 29 gives more information about the new effective exchange rate index.

Detailed methodological notes on euro area balance of payments statistics, external trade in goods of the euro area, and exchange rates are available on the ECB's Web site.

Other statistics

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

Conventions used in the tables

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

Chronology of monetary policy measures of the Eurosystem

22 December 1998

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

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

31 December 1998

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

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

7 January 1999

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

12 January 1999

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

21 January 1999

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

4 February 1999

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

18 February 1999

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 24 February and 3 March 1999 the same conditions will apply as for the previous such operations settled earlier in the year, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. In addition, the interest rate on the marginal lending facility continues to be 4.5% and the interest rate on the deposit facility remains 2.0%.

4 March 1999

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 10 and 17 March 1999 the same conditions will apply as for the previous such operations settled earlier in the year, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. In addition, the interest rate on the marginal lending facility continues to be 4.5% and the interest rate on the deposit facility remains 2.0%. The Governing Council also decides that for forthcoming longer-term refinancing operations of the Eurosystem the multiple rate method of allotment will be applied (starting from the operation with a settlement date of 25 March 1999) until otherwise indicated.

18 March 1999

The Governing Council of the ECB decides that for the main refinancing operations to be settled on 24 and 31 March and 7 April 1999 the same conditions will apply as for the previous such operations settled earlier in the year, i.e. they will be fixed rate tenders conducted at an interest rate of 3.0%. In addition, the interest rate on the marginal lending facility continues to be 4.5% and the interest rate on the deposit facility remains 2.0%.

8 April 1999

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

22 April 1999

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

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

6 May 1999

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

20 May 1999

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

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

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

23 September 1999

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

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

7 October 1999

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

Documents published by the European Central Bank (ECB)

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

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

Annual Report

"Annual Report 1998", April 1999.

Monthly Bulletin

Articles published from January 1999 onwards:

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

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

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

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

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

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

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

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

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

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

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

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

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

Working Paper Series

1 "A global hazard index for the world foreign exchange markets" by V. Brousseau and F. Scacciavillani, May 1999.

2 "What does the single monetary policy do? A SVAR benchmark for the European Central Bank" by C. Monticelli and O. Tristani, May 1999.

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7 "A cross-country comparison of market structures in European banking" by O. de Bandt and E. P. Davis, September 1999.

Other publications

"The TARGET service level", July 1998.

"Report on electronic money", August 1998.

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

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

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

"Third progress report on the TARGET project", November 1998.

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

"Payment systems in the European Union: Addendum incorporating 1997 figures", January 1999.

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

"Euro area monetary aggregates: conceptual reconciliation exercise", July 1999.

"The effects of technology on the EU banking systems", July 1999.

"Payment systems in countries that have applied for membership of the European Union", August 1999.

"Improving cross-border retail payment services: the Eurosystem's view", September 1999.

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

Information brochures

"TARGET", July 1998.

"The euro banknotes and coins", July 1999.

"TARGET: facts, figures, future", September 1999.