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EUROPEAN CENTRAL BANK



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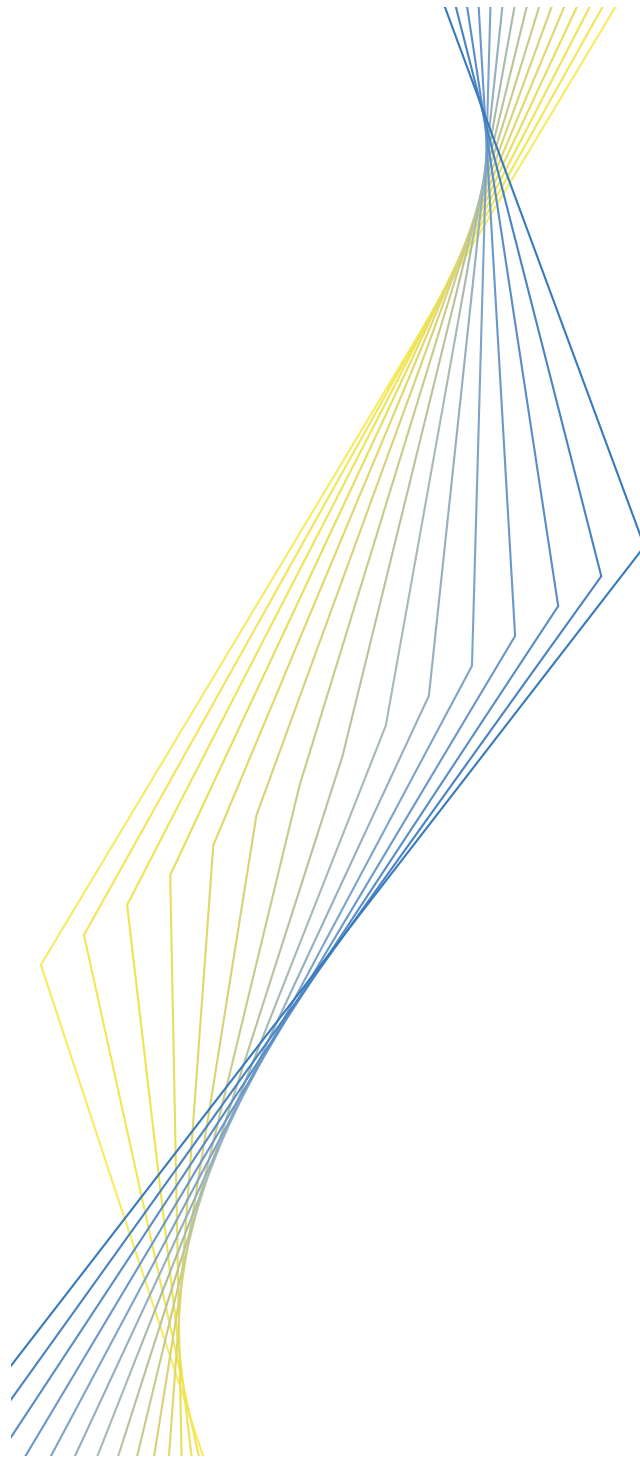
MONTHLY BULLETIN July 2001

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

July 2001



EUROPEAN CENTRAL BANK



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

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Abbreviations

Countries

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

Others

BIS	Bank for International Settlements
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 on 21 June and 5 July 2001 the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem at 4.50%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged, at 5.50% and 3.50% respectively.

These decisions reflect the Governing Council's assessment that the current monetary policy stance remains appropriate to ensure that price stability will prevail in the euro area over the medium term. Maintaining a favourable perspective for price stability is the best contribution which monetary policy can make to fostering sustainable economic growth.

The assessment underlying these monetary policy decisions is based on the analysis of the information provided under the two pillars of the ECB's monetary policy strategy.

With regard to the first pillar, the three-month average of the annual growth rates of M3 (adjusted for non-euro area residents' holdings of money market fund shares/units) stood at 4.9% in the period from March to May 2001. As previously indicated, there is some evidence that M3 is currently subject to upward distortions, of around half a percentage point, on account of holdings of money market paper and short-term debt securities of non-euro area residents. Taking this into account, the three-month average of the annual growth rates of M3 in the period from March to May 2001 was broadly in line with the reference value of 4½%. In addition, over recent months, the annual growth rate of credit to the private sector in the euro area has continued to moderate.

With regard to the second pillar, starting with economic activity, real GDP growth in the euro area declined somewhat in early 2001. The first Eurostat estimate of real GDP growth in the first quarter of 2001 was 0.5%, as compared with 0.6% in the last quarter of 2000. The slowdown appears to be related

to the external environment and to the weak growth of domestic demand. The significant decline in the growth rate of domestic demand was stronger than expected, with investment being affected both by the adverse influences from the world economy and by specific domestic developments relating to construction investment. At the same time, growth of consumption was weak, which may in part be explained by adverse income effects relating to the increases in energy and food prices. Survey and confidence indicators as well as industrial production data suggest a pattern of continued growth moderation for the second quarter of the year, especially in the manufacturing sector. However, in the course of the year, domestic demand should gradually recover, in view of the sound economic fundamentals of the euro area, previous and ongoing tax reforms and favourable financing conditions. Real GDP growth in the euro area is therefore expected to remain broadly in line with trend potential growth in both 2001 and 2002.

The current level of HICP inflation, 3.4% in May 2001, mainly reflects the direct effects of the recent increases in food and energy prices and the indirect effects of the pass-through from past developments in import prices. Given the nature of these shocks, and taking into account the current monetary policy stance, it is expected that they will have only a temporary effect on inflation rates. If no further unfavourable shocks occur, it is likely that annual rates of HICP inflation will start to fall during 2001 and reach rates of below 2% in 2002 – although the decrease from current levels in the coming months may be subject to some volatility. Recent data on producer prices in the euro area also indicate that upward pressures on prices further along the chain of production may gradually ease. The main risk related to this outlook is that the temporary increase in inflation will give rise to second-round effects having an impact on wage negotiations this year and early next year. So far, wage developments have been satisfactory, although, with regard to the future, some concerns may be justified.

Overall, on the basis of the analysis under both pillars, the current stance of the monetary policy of the ECB should ensure price stability over the medium term. The Governing Council will continue to monitor closely future developments which may affect the balance of risks to price stability over the medium term, including – in particular – monetary developments, inflationary pressures relating to real GDP growth, price-setting behaviour and wage developments.

Monetary policy must adopt a stance which is consistent with price stability over the medium term. Firm adherence to this commitment will be beneficial to the economy as a whole. Since the start of Stage Three of Economic and Monetary Union, monetary policy has been successful in maintaining low medium-term inflationary expectations and thus low risk premia. As a consequence, the euro area enjoys low long-term interest rates which are conducive to both economic growth and employment creation.

The maintenance of price stability over the medium term will need to be supported by continued wage moderation. Such moderation will also promote employment growth and thereby foster consumer confidence and domestic demand in the period ahead. The prospects for non-inflationary economic growth can be significantly enhanced only by decisive structural reforms. Structural reforms will also improve the resilience of the economy to adverse shocks. Delays, on the basis of cyclical considerations, in introducing such reforms would be at the expense of medium-term growth opportunities.

A medium-term perspective is also strongly warranted for the conduct of fiscal policies in

the Member States of the euro area. It is of crucial importance that all euro area countries fulfil, in a credible manner, the commitments made under the Stability and Growth Pact and those laid down in the context of the stability programmes.

The Governing Council also analysed the potential impact of the euro cash changeover on prices. In general, it is expected that price transparency and market competition are likely to limit potential inflationary pressures arising from the cash changeover. As regards administered prices, the finance ministers forming the Eurogroup have pledged that “overall, the conversion into euro of all prices, charges and fees administered by their governments will be price neutral or smoothed in favour of the consumer”. The Governing Council calls on both governments at other levels and enterprises to follow the example set by central governments. Moreover, it also calls upon the public’s vigilance in monitoring prices and price changes, and encourages consumer and other organisations to actively engage in this task.

This issue of the ECB Monthly Bulletin contains two articles. The first article, entitled “New technologies and productivity in the euro area”, provides an overview of the evidence currently available on the importance of information and communication technologies for developments in productivity growth in the euro area. The second, entitled “Measures of underlying inflation in the euro area”, reviews conceptual issues relating to measures which attempt to exclude the erratic or sector-specific influences from the overall HICP index, thereby aiming to capture the “underlying” trend of the HICP.

Economic developments in the euro area

I Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

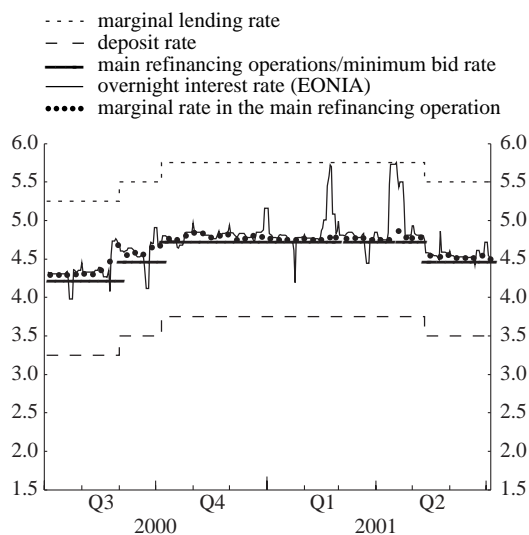
At its meetings on 21 June and 5 July 2001 the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations (conducted as variable rate tenders) at 4.50%. The interest rates on the deposit facility and the marginal lending facility were also kept unchanged, at 3.50% and 5.50% respectively (see Chart 1).

Monetary growth broadly in line with the reference value

The annual rate of growth of M3 (adjusted for holdings of money market fund shares/units by non-euro area residents) increased to 5.4% in May 2001, from 4.8% in April (see Chart 2).¹ The three-month average of the annual growth rates of M3 for the period from March to May 2001 rose to 4.9%, from 4.6% in the period from February to April. As indicated earlier, there is some evidence that M3 (as defined above) is currently distorted upwards by non-residents' holdings of money

Chart 1 ECB interest rates and money market rates

(percentages per annum; daily data)

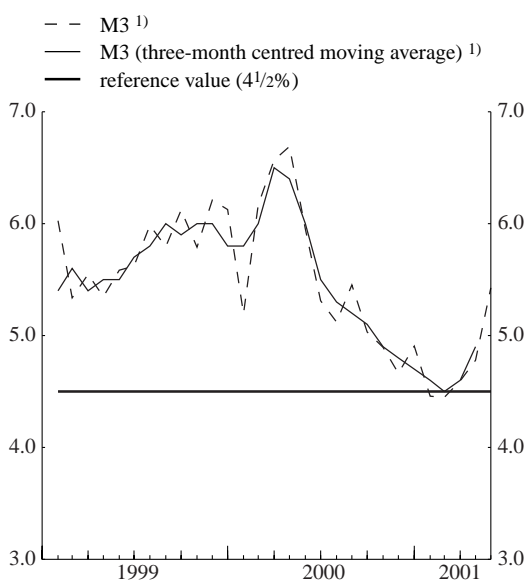


Sources: ECB and Reuters.

Chart 2

M3 growth and the reference value

(annual percentage changes)



Source: ECB.

1) Series adjusted for non-euro area resident holdings of money market fund shares/units.

market paper and short-term debt securities. If these preliminary indications are taken into account, the annual growth rate of M3 would probably be around half a percentage point lower. Hence, the three-month average of the annual growth rates of M3, if fully corrected for non-residents' holdings of negotiable instruments included in M3, would be broadly in line with the reference value of 4 1/2% in the period from March to May 2001.

The relatively pronounced increase in the annual growth rate of M3 in May 2001 partly reflects a base effect, since the month-on-month increase in May last year had been exceptionally weak. Furthermore, a calendar effect had a slight upward impact on the annual growth rate of M3 in May 2001. This notwithstanding, the most recent data on M3 confirm a strengthening in the shorter-run dynamics of this aggregate over the past few

1) If not otherwise indicated, the reported data on money market fund shares/units, total marketable instruments and M3 will from now on be adjusted for non-residents' holdings of money market fund shares/units.

months. In May the seasonally adjusted and annualised six-month growth rate of M3 stood at 6.9%, compared with 6.2% in the previous month and 4.8% in December 2000. These developments may partly reflect the rise in consumer price inflation in recent months. Moreover, the yield curve continues to be flat by historical standards, which makes investments in shorter-term assets more attractive. Furthermore, it cannot be ruled out that developments in stock markets in early 2001 have led investors to hold liquid assets.

In May 2001 the annual rate of growth of M1 rose to 3.5%, from 1.9% in April (see Table I). To some extent, this increase reflects the above-mentioned base and calendar effects. At the same time, some normalisation of M1 growth seems to have taken place after the exceptionally subdued expansion in the second half of 2000 and in early 2001. The dynamic development of M1 in May is exclusively attributable to a considerable rise in overnight deposits, whereas currency in circulation continued to decline. The annual rate of change in currency in circulation, which accounts for around 6% of M3, stood at -3.8%, after -2.9% in April. This points to a negative impact on currency from the euro cash changeover. The overall

impact of this factor on the annual growth rate of M3, however, is expected to be rather limited. With respect to cash holdings of euro area residents, it is likely that they will be shifted, to a large extent, into other secure and liquid assets within M3 which are close substitutes for currency. With respect to holdings outside the euro area of banknotes denominated in the national currencies of euro area countries, the impact on the annual growth rate of M3 is expected to be small. First, these holdings are estimated to amount to less than 1% of M3. In addition, available evidence does not thus far point to a significant flowback of these banknotes to the euro area.

The annual growth rate of short-term deposits other than overnight deposits decreased to 4.0% in May, from 4.6% in the previous month. Owing to the pronounced increase of M1, however, the annual rate of growth of M2, which includes currency as well as short-term deposits, increased to 3.8% in May, from 3.3% in April. The annual growth rate of deposits with an agreed maturity of up to two years stood at 12.6% in May, after 15.4% in April, whereas the annual rate of growth of deposits redeemable at a period of notice of up to three months was -2.3%, up from -3.0% in April.

Table I
Summary table of monetary variables for the euro area

(annual percentage changes; not seasonally adjusted; quarterly averages)

	2000 Q3	2000 Q4	2001 Q1	2001 Feb.	2001 Mar.	2001 Apr.	2001 May
M1	6.9	5.6	2.4	2.0	2.1	1.9	3.5
Currency in circulation	3.7	1.8	-1.3	-1.2	-1.9	-2.9	-3.8
Overnight deposits	7.6	6.4	3.2	2.6	2.9	2.8	5.0
M2 - M1 (= other short-term deposits)	1.6	2.2	3.4	3.5	4.3	4.6	4.0
M2	4.1	3.8	2.9	2.8	3.3	3.3	3.8
M3 - M2 (= marketable instruments) ¹⁾	12.9	11.3	14.5	14.4	12.4	13.4	15.1
M3¹⁾	5.2	4.8	4.6	4.4	4.6	4.8	5.4
Longer-term financial liabilities	7.1	6.1	4.5	4.3	4.5	3.7	3.4
Credit to euro area residents	7.1	6.4	6.0	5.8	5.7	5.8	5.8
Credit to general government	-2.2	-6.0	-5.8	-6.2	-5.4	-4.6	-3.2
of which: Loans to general government	-0.1	-1.9	-0.1	-0.0	-0.4	-1.6	-1.6
Credit to other euro area residents	10.2	10.5	9.8	9.7	9.3	9.1	8.6
of which: Loans to the private sector	9.4	9.6	9.1	8.9	8.6	8.4	8.0

Source: ECB.

1) Series adjusted for non-residents' holdings of money market fund shares/units.

Marketable instruments (M3 less M2), adjusted for holdings of money market shares/units by non-euro area residents, continued to expand strongly in May. The increase in the annual growth rate of marketable instruments to 15.1% in May, from 13.4% in April, was attributable to an increase in the annual growth rates of repurchase agreements and short-term debt securities. By contrast, annual growth in money market fund shares/units and money market paper declined somewhat.

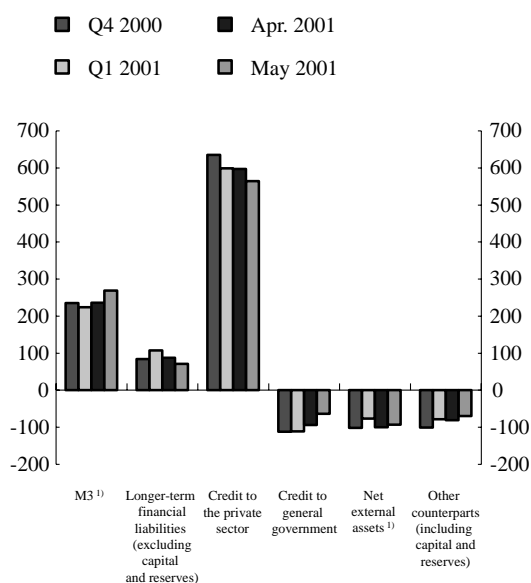
Slowdown in the growth of loans to the private sector continued

The annual growth rate of credit to euro area residents remained unchanged at 5.8% in May. While the annual rate of change in credit to general government increased to -3.2%, from -4.6% in April, the annual growth rate of credit to the private sector continued to decline, to 8.6%, from 9.1% in the previous month (see Table 1 and Chart 3). The latter was mainly caused by the further moderation of the annual growth rate of loans to the private sector to 8.0%, from 8.4% in April. The continuing decline in the dynamics of loans to the private sector is likely to be related to the moderation of economic activity. Although, compared with longer-term averages, the annual rate of growth of loans to the private sector in the euro area remained relatively high, it needs to be kept in mind that this continues to be caused in part by factors which are not directly related to expenditure in the euro area (e.g. financing of mergers and acquisitions, including foreign direct investment and financing of UMTS licences).

Among the other components of M3, the annual rate of growth of longer-term financial liabilities declined further, to 3.4% in May, from 3.7% in the previous month. Although the yield curve steepened slightly in May, it remained flat by historical standards. The latter might explain why investors continued to shift funds into short-term monetary assets from longer-term financial assets.

Chart 3
Movements in M3 and its counterparts

(annual flows; EUR billions)



Source: ECB.

1) Series adjusted for non-euro area residents' holdings of money market fund shares/units.

Finally, net external assets continued to decline in May. Over the 12 months up to May, the net external assets of the MFI sector decreased by €93 billion (see Chart 3). This reflects net portfolio and foreign direct investment outflows as recorded in the balance of payments of the euro area.

Continuing strong debt securities issuance in April 2001

The annual growth of the amount outstanding of debt securities issued by euro area residents remained at 7.6% in April 2001. Underlying this unchanged growth rate was an increase in the annual growth of the amount outstanding of short-term debt securities from 12.3% in March 2001 to 14.0% in April, and a decrease in the annual growth of the amount outstanding of long-term debt securities from 7.1% in March 2001 to 6.9% in April (see Chart 4).

The breakdown of the data by currency shows that the annual growth of the amount

outstanding of euro-denominated debt securities issued by euro area residents, which has been rising since the beginning of 2001, continued to increase in April reaching 6.4%, up slightly from 6.3% in March. The share of euro-denominated gross issuance in total gross issuance of debt securities by euro area residents increased from 92.7% in March to 94.6% in April.

The sectoral breakdown reveals that debt securities issuance slowed down in April in the private sector, whereas it increased within the public sector. The annual growth of the amount outstanding of debt securities issued by MFIs was 7.9% in April 2001 compared with 8.1% in March. Similarly, the issuance activity of non-monetary financial corporations declined slightly in April 2001, although growth remained high at just above 30%. The annual growth of the amount outstanding of debt securities issued by non-financial corporations also declined, to 20% in April 2001, from 23.7% in March. This decline may be an effect of the

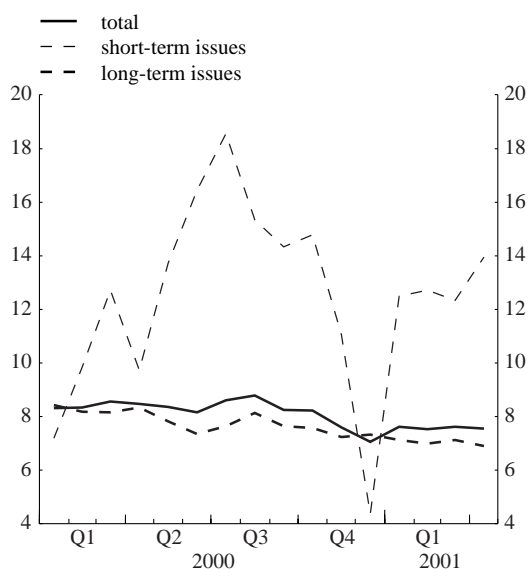
deterioration in business confidence and the decline in growth expectations seen in recent months. Still, the level of corporate debt securities issuance remained high owing to the continued high level of restructuring activity by the private sector and narrowing corporate bond spreads in April.

As regards the public sector, the increase in debt securities issuance in April 2001 contrasted with the overall declining trend prevalent over the preceding 12 months. The annual growth of the amount outstanding of debt securities issued by central government increased from 1.7% in March 2001 to 2.3% in April. Part of this increase may be a first reflection of slightly deteriorating government balances in the euro area, and another part might be explained as a substitution of indirect by direct financing, as loans from the MFI sector to central government decreased in April.

Retail bank interest rates broadly stable in May 2001

Short-term retail bank interest rates fell slightly in May 2001 (see Chart 5). The average interest rates on deposits with an agreed maturity of up to one year and on deposits redeemable at up to three months' notice declined by 2 basis points between April and May 2001. The rate on loans to enterprises with a maturity of up to one year fell by 4 basis points in the same period, reflecting the continued decline in short-term money market rates. Over the period from November 2000, when money market interest rates started to decline, to May 2001, the average rates on loans to enterprises with maturities of up to one year and the rate on deposits with maturities of up to one year declined by amounts ranging from 25 to 30 basis points. By contrast, the interest rates on overnight deposits and on deposits redeemable at a period of notice of up to three months remained virtually unchanged between November 2000 and May 2001. Over the same period, the average three-month money market interest rate declined

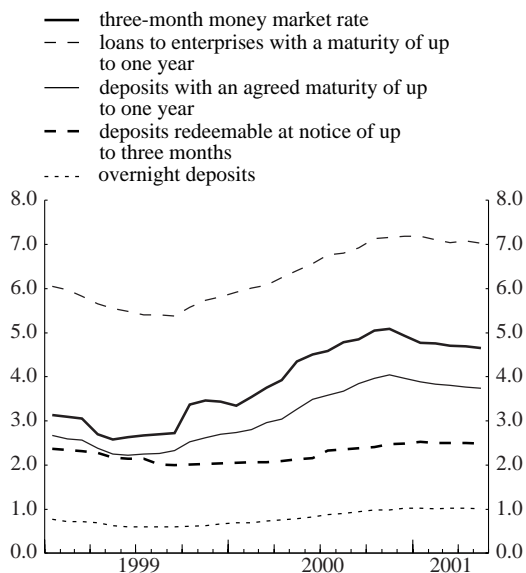
Chart 4
Amounts outstanding of debt securities issued by euro area residents
(annual percentage changes)



Source: ECB.
 Note: From January 2001, euro area data include Greece. For reasons of comparability, annual growth rates before January 2001 use data for the euro area plus Greece.

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

(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.
 Note: From 1 January 2001 onwards Greek data are also included.

by 45 basis points. The differences in response of short-term retail bank rates to movements in comparable market interest rates are in line with past developments.

Long-term retail bank interest rates were either unchanged or increased slightly between April and May 2001 (see Chart 6). While the average rate on deposits redeemable at a period of notice of over three months was unchanged, the average rate on deposits with an agreed maturity of over two years and on housing loans to households increased by 1 and 3 basis points respectively between April and May 2001. These slight increases followed a six-month period of declining longer-term retail rates and reflected the increase in longer-term market rates observed since March 2001. This pattern was in line with the usual evidence of a relatively quick pass-through of capital market rates to these retail bank interest rates.

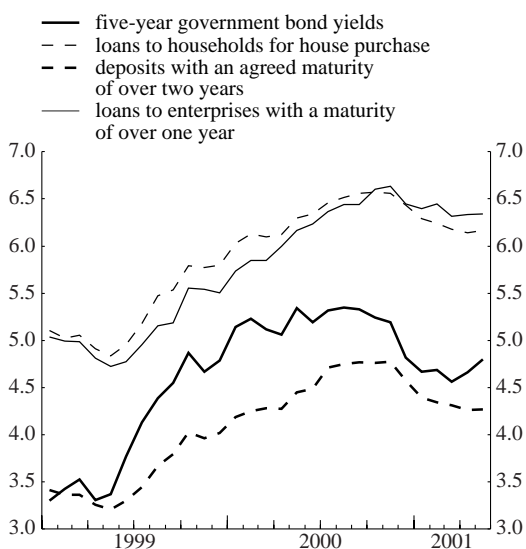
Money market interest rates fell slightly in June 2001

A pattern of declining money market interest rates has been evident for most of the period since the autumn of 2000. This continued between end-May and 4 July 2001, albeit at a moderate pace. The negative slope of the EURIBOR yield curve between the one-month and twelve-month maturities remained broadly unchanged. The expected path of the three-month EURIBOR, as implied by three-month EURIBOR futures prices, adjusted slightly downwards between end-May and 4 July.

The shortest money market interest rates remained stable for most of the period between the end of May and 4 July. The EONIA remained within 5 basis points above the minimum bid rate in the ECB's main refinancing operations at 4.50% for most of this period. The main exceptions were some short-lived volatility towards the end of the

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

(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.
 Note: From 1 January 2001 onwards Greek data are also included.

Box I**Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 June 2001**

During the reserve maintenance period that lasted from 24 May 2001 to 23 June 2001, the Eurosystem settled four main refinancing operations (MROs) and one longer-term refinancing operation.

All the MROs were carried out as variable rate tenders with a minimum bid rate of 4.50%. The allotted volumes ranged between €67 billion and €91 billion. The ratio of the amount bid to the volume allotted varied between 2.08 and 1.37, while the average for the reserve maintenance period was 1.78. In the first operation of the maintenance period, both marginal and weighted averages were 4.55%, while in the remaining three operations, the marginal rate declined to 4.51% and the weighted average rate was one or two basis points above this. The number of counterparties participating in the tenders ranged between 411 and 492, with an average of 455.

On 30 May the Eurosystem conducted a longer-term refinancing operation through a variable rate tender with a pre-announced allotment volume of €20 billion. A total of 268 bidders participated in this operation, submitting a total amount of bids of €46.4 billion. The marginal and the weighted average rates of the operation were 4.49% and 4.51% respectively.

On 24 May 2001 the maintenance period started with an EONIA of 4.59%, which dropped continuously to 4.56% on 30 May. The EONIA then temporarily spiked to reach 4.60% on 31 May 2001 on account of the end-of-month effect, but fell back to 4.54% on 1 June 2001. The downward trend of the overnight rate mainly reflected improving liquidity conditions, after the usual tightness at the start of the maintenance period. From 4 to 21 June the EONIA remained stable, fluctuating between 4.52% and 4.53%. During the penultimate business day of the reserve maintenance period, the EONIA declined to 4.42%, driven by market perceptions of comfortable liquidity conditions prevailing at the end of the maintenance period. The EONIA increased on the last business day of the maintenance period to 4.61%, owing to some imperfections in the distribution of liquidity between market participants at the end of the day.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 May to 23 June 2001

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	221.0	0.4	+ 220.6
Main refinancing operations	161.7	-	+ 161.7
Longer-term refinancing operations	59.1	-	+ 59.1
Standing facilities	0.2	0.4	- 0.2
Other operations	0.0	0.0	0.0
(b) Other factors affecting the banking system's liquidity	385.0	479.9	- 94.9
Banknotes in circulation	-	351.1	- 351.1
Government deposits with the Eurosystem	-	41.3	- 41.3
Net foreign assets (including gold)	385.0	-	+385.0
Other factors (net)	-	87.5	- 87.5
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			125.7
(d) Required reserves			125.0

Source: ECB.

Totals may not add up due to rounding.

As can be seen from the table above, the average daily use of the marginal lending and deposit facilities amounted to €0.2 billion and €0.4 billion respectively. The net liquidity-absorbing impact of the autonomous factors (the factors not related to monetary policy, see Box 2) on the banking system's liquidity (item (b)) was €94.9 billion on average. The daily sum of autonomous factors fluctuated between €86.1 billion and €100.1 billion. The published forecasts of average liquidity needs, stemming from autonomous factors, ranged between €99.2 billion and €89.7 billion, differing from the actual figures by an amount ranging from minus €2.7 billion to plus €0.5 billion. Finally, the difference between average current account holdings (€125.7 billion) and reserve requirements (€125.0 billion) amounted to €0.7 billion, slightly higher than during the previous reserve maintenance period but in line with other reserve maintenance periods that ended on a weekend.

reserve maintenance period ending on 23 June, and a temporary increase at end-June related to balance sheet considerations of financial institutions at the end of the first half-year. Two-week money market rates were also, to some extent, influenced by these factors but remained, overall, broadly stable at levels close to the minimum bid rate between end-May and 4 July. In all the four main refinancing operations settled in June, the marginal and average rates of allotment stood within 5 basis points above the minimum bid rate of 4.50% (see Box 1). In the operation settled on 4 July, the rates were 4.50% and 4.51% respectively.

The one-month and three-month EURIBOR fell by 4 and 8 basis points respectively between end-May and 4 July, to stand at 4.53% and 4.45% (see Chart 7). Most of the declines were seen in the first week of June, and the rates remained broadly stable thereafter.

The interest rates of allotment in the longer-term refinancing operations of the Eurosystem largely reflected, as usual, the development of the three-month EURIBOR. In the operation settled on 28 June, the marginal and average rates of allotment were 4.36% and 4.39% respectively. These levels were 13 and 12 basis points lower than the corresponding rates on the longer-term refinancing operation settled on 31 May.

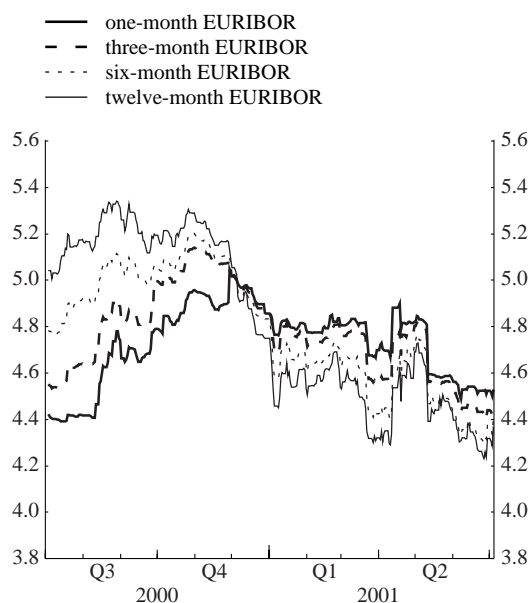
At the longer end of the money market yield curve, the six-month and twelve-month EURIBOR were equal to 4.41% and 4.37% respectively on 4 July, a decline of 4 and

6 basis points respectively compared with the end of May. Thus, the negative slope of the EURIBOR yield curve, measured as the difference between the twelve-month and the one-month EURIBOR, remained, overall, nearly unchanged during this period, standing at -16 basis points on 4 July.

The expected path of the three-month EURIBOR, as implied in futures prices on contracts with delivery dates in September and December 2001 and in March 2002, adjusted slightly downwards in June. Between the end of May and 4 July, these rates fell by 1, 9 and 7 basis points respectively, to stand at 4.25%, 4.22% and 4.20% on 4 July.

Chart 7
Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

Box 2

Autonomous liquidity factors in the euro area and the use of the forecasts of liquidity needs provided by the ECB

Autonomous liquidity factors can be defined as the items in the consolidated balance sheet of the Eurosystem, apart from monetary policy operations, that provide or withdraw liquidity and thus affect the current accounts which credit institutions hold with the Eurosystem, mostly to fulfil their minimum reserve requirements. Section 1 of this box gives an update of the major developments in autonomous liquidity factors since end-June 2000. A box on this subject was published in an article entitled "The switch to variable rate tenders in the main refinancing operations" in the July 2000 issue of the ECB Monthly Bulletin. Section 2 explains how counterparties can use the ECB's weekly estimates of autonomous factors and the daily data published on the ECB's wire service pages to understand better the main parameters on the basis of which the size of tender allotments is decided.

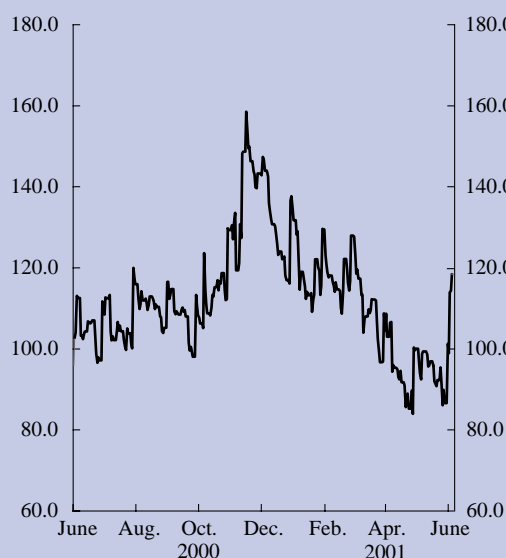
1. The evolution of the autonomous factors since end-June 2000

Autonomous factors represent the principal source of uncertainty in the assessment of the liquidity needs of the banking system. The most important autonomous factors are government deposits with the Eurosystem, banknotes, net foreign assets and a miscellaneous category that includes items in the course of settlement (net float). In the period from 26 June 2000 to 30 June 2001 the sum of autonomous factors ranged between €84 billion and €159 billion, with an average of €113 billion (see chart below). In the preceding 12 months, autonomous factors averaged €93 billion. The standard deviation of daily changes of the time series was €4.1 billion, compared with €4.7 billion in the preceding 12 months.

Some euro area governments keep their main deposit account at their national central bank, while others hold their deposits with commercial banks. Government deposits with national central banks remain the most volatile autonomous factor in the euro area. Currently, the treasuries contributing the most to the volatility of government deposits with the Eurosystem are those of Greece, France and Italy.

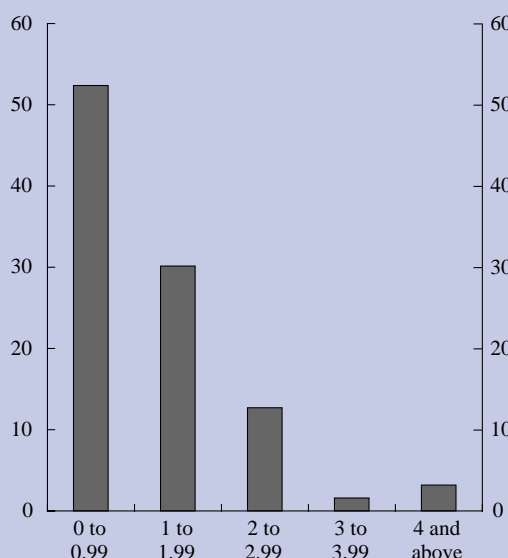
Total autonomous factors

(daily data; EUR billions)



Distribution of absolute forecast errors

(y axis: percentage of forecasts; x axis: range of errors in EUR billions; 26 June 2000 to 30 June 2001)



Source: ECB.

Since the end of June 2000, when the variable rate tender system was first applied to the Eurosystem's main refinancing operations (MROs), the ECB has been publishing on the wire services forecasts of autonomous factors for the week ahead, or up to the end of the maintenance period, in order to enhance market participants' ability to assess the tender allotment amount.¹ By the end of June 2001 the ECB had published 64 forecasts. The standard deviation of the associated forecast errors was €1.5 billion. So far, the largest average daily error over a one-week horizon has been €4.2 billion, which was related to the forecast for the period from 24 to 29 April. The histogram above provides the frequency of absolute values of the forecast errors in the period reviewed. 52% of the errors are less than €1 billion.

2. How to use the forecasts of autonomous factors published by the ECB

Although the allotment decision depends on several factors and consequently cannot be forecast in a mechanical way, the publication of autonomous factors and minimum reserve requirements provides a reliable basis for the Eurosystem counterparties to assess the allotment decisions taken by the ECB.

In the table overleaf, which is derived from the simplified balance sheet of the Eurosystem and covers, by way of example, the reserve maintenance period from 24 September to 23 October 2000, the liquidity situation in the euro area on Monday, 9 October 2000 is analysed. Autonomous factors appear in column 1, various open market operations in columns 2 to 4, the standing facilities in columns 5 and 6, and current account holdings in column 7. Some of the elements provide liquidity to the market (columns 2, 3, 4 and 5), while others withdraw liquidity (columns 1 and 6). Column 7 represents the total liquidity available to the banking system and is simply calculated as the difference between liquidity-providing and liquidity-absorbing balance sheet items (columns 2+3+4+5-1-6). This liquidity available to Eurosystem counterparties takes the form of current account holdings, i.e. deposits that counterparties hold with their respective euro area NCB mainly for the fulfilment of minimum reserve requirements. These minimum reserve requirements are determined from banks' balance sheets at the end of the previous month. The preliminary estimate of minimum reserve requirements for the relevant maintenance period is published through wire services directly after the disclosure of the monetary aggregate M3 of the preceding month, which usually occurs by the end of the next calendar month.

Current account holdings can be, on a daily basis, lower or higher than minimum reserve requirements. However, at the end of the maintenance period counterparties have to fulfil their requirements, which means the average of current account holdings over a maintenance period must be at least equal to the minimum reserve requirements. In reality, counterparties normally hold some excess reserves (defined as the value of the average reserve surplus in excess of the amount to be held with the Eurosystem to fulfil minimum reserve requirements). These have amounted to approximately €0.7 billion per day, on average, although their level has recently fallen slightly.

From the figures available, one can compute the daily reserve surplus (column 9), which equals the difference between current account holdings and minimum reserves. Then, column 10 displays the average of the daily reserve surplus since the beginning of the maintenance period. All the figures displayed in the table in bold were made available to counterparties from the ECB's wire service pages. In the afternoon of that day, the ECB announced the tender and published its forecast of liquidity needs of the banking system until 17 October (column 1, rows 9 to 17 October).

Finally, based on the available information, and on the assumption of no recourse to the standing facilities, counterparties could derive a rough estimate of the allotment volume of the MRO conducted on 10 October

¹ Whenever the value date of the MRO extends into the next reserve maintenance period, two forecasts are published: one covering the remaining days of the prevailing reserve maintenance period, and another ranging from the beginning of the next reserve maintenance period to the day before the settlement of the subsequent MRO.

2000, namely €76 billion (column 4, rows 11 to 17 October), that would allow them to fulfil proportionally their minimum reserve requirements until 17 October and to hold an average of €0.7 billion in excess reserves on that day (column 10).

However, the ECB may deviate from this estimate in its allotment decisions. For example, changes in autonomous factors' forecasts may occur between the announcement of the tender and the final allotment decision. In addition, other considerations may play a role in the ECB's allotment decision in order to ensure the efficient performance of the monetary policy functions attributed to the ECB's main refinancing operations.

Information on liquidity factors available to the markets on 9 October 2000¹⁾

In EUR billions		Autonomous factors	Longer-term refinancing operation	Main refinancing operation 1 ²⁾	Main refinancing operation 2 ³⁾	Marginal lending facility	Deposit facility	Current accounts of CIs with NCBS	Minimum reserves	Daily reserve surplus	Average reserve surplus
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		Ex post figures on ECB42, forecast on ECB40 ⁴⁾	Ex post figures on ECB39 ³⁾	Ex post figures on ECB39 ⁴⁾	Ex post figures on ECB39 ⁴⁾	Ex post figures on ECB40 ⁴⁾	Ex post figures on ECB40 ⁴⁾	Equals (2) + (3) + (4) + (5) - (1) - (6)	Estimate published on ECB40 ⁴⁾	Equals (7) - (8)	Average of (9) from 24 September to current date
24/09/2000	Sun.	105.2	50.0	104.0	63.0	2.4	1.4	112.8	113.6	-0.8	-0.8
25/09/2000	Mon.	116.5	50.0	104.0	63.0	0.1	0.1	100.6	113.6	-13.0	-6.9
26/09/2000	Tue.	116.6	50.0	104.0	63.0	0.0	0.8	99.6	113.6	-14.0	-9.3
27/09/2000	Wed.	112.4	50.0	104.0	81.0	0.3	0.1	122.9	113.6	9.3	-4.6
28/09/2000	Thu.	113.3	45.0	104.0	81.0	0.6	0.1	117.2	113.6	3.6	-3.0
29/09/2000	Fri.	114.8	45.0	104.0	81.0	0.0	0.4	114.8	113.6	1.2	-2.3
30/09/2000	Sat.	114.8	45.0	104.0	81.0	0.0	0.4	114.8	113.6	1.2	-1.8
01/10/2000	Sun.	114.8	45.0	104.0	81.0	0.0	0.4	114.8	113.6	1.2	-1.4
02/10/2000	Mon.	109.3	45.0	104.0	81.0	0.1	0.1	120.7	113.6	7.1	-0.5
03/10/2000	Tue.	108.5	45.0	104.0	81.0	0.2	0.0	121.7	113.6	8.1	0.4
04/10/2000	Wed.	109.3	45.0	99.0	81.0	0.4	0.0	116.1	113.6	2.5	0.6
05/10/2000	Thu.	109.0	45.0	99.0	81.0	0.2	0.1	116.2	113.6	2.6	0.7
06/10/2000	Fri.	108.5	45.0	99.0	81.0	0.2	0.1	116.7	113.6	3.0	0.9
07/10/2000	Sat.	108.5	45.0	99.0	81.0	0.2	0.1	116.7	113.6	3.0	1.1
08/10/2000	Sun.	108.5	45.0	99.0	81.0	0.2	0.1	116.7	113.6	3.0	1.2
09/10/2000	Mon.	107.7	45.0	99.0	81.0	0.0	0.0	117.3	113.6	3.7	1.4
10/10/2000	Tue.	107.7	45.0	99.0	81.0	0.0	0.0	117.3	113.6	3.7	1.5
11/10/2000	Wed.	107.7	45.0	99.0	76.0	0.0	0.0	112.3	113.6	-1.3	1.3
12/10/2000	Thu.	107.7	45.0	99.0	76.0	0.0	0.0	112.3	113.6	-1.3	1.2
13/10/2000	Fri.	107.7	45.0	99.0	76.0	0.0	0.0	112.3	113.6	-1.3	1.1
14/10/2000	Sat.	107.7	45.0	99.0	76.0	0.0	0.0	112.3	113.6	-1.3	1.0
15/10/2000	Sun.	107.7	45.0	99.0	76.0	0.0	0.0	112.3	113.6	-1.3	0.9
16/10/2000	Mon.	107.7	45.0	99.0	76.0	0.0	0.0	112.3	113.6	-1.3	0.8
17/10/2000	Tue.	107.7	45.0	99.0	76.0	0.0	0.0	112.3	113.6	-1.3	0.7
18/10/2000	Wed.		45.0		76.0	0.0	0.0		113.6		
19/10/2000	Thu.		45.0		76.0	0.0	0.0		113.6		
20/10/2000	Fri.		45.0		76.0	0.0	0.0		113.6		
21/10/2000	Sat.		45.0		76.0	0.0	0.0		113.6		
22/10/2000	Sun.		45.0		76.0	0.0	0.0		113.6		
23/10/2000	Mon.		45.0		76.0	0.0	0.0		113.6		

1) After the publication by the ECB of the forecast of autonomous factors at 3.30 p.m. Figures in bold were made available to counterparties through the ECB's wire service pages.

2) Amount of the outstanding main refinancing operation with the shortest remaining maturity.

3) Amount of the outstanding main refinancing operation with the longest remaining maturity.

4) Refer to Reuters pages.

Long-term bond yields decreased slightly in June

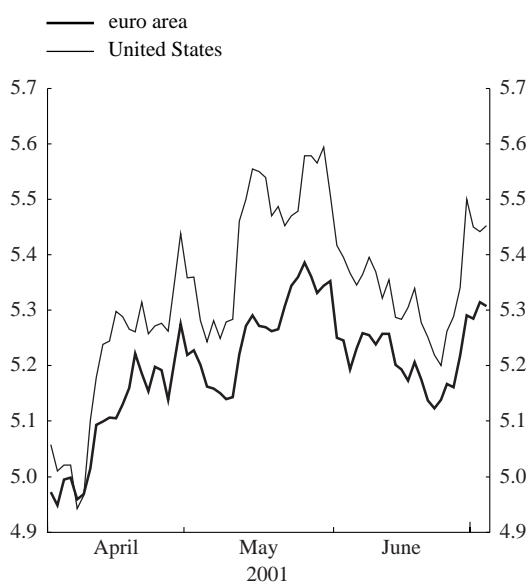
Although pronounced swings in long-term government bond yields took place during June 2000, by 4 July ten-year government bond yields in the euro area were little changed compared with end-May (see Chart 8). Overall, the average euro area ten-year bond yield showed a decline of around 5 basis points during that period to stand at 5.3% on 4 July. A similar, albeit more pronounced, volatile pattern was seen in US bond markets, which left ten-year government bond yields around 5 basis points lower on 4 July than at end-May. As a result, the spread between ten-year government bond yields in the US and the euro area remained broadly stable at around 15 basis points.

In the United States, long-term government bond yields were subject to some volatility during June resulting from changing market views about US economic prospects. Initially, ten-year bond yields came under downward pressure in the first three weeks of June, which seemed to reflect mounting concerns among financial market participants about the likely depth and duration of the economic slowdown in the United States. These concerns were bolstered by some economic data releases, as well as by profit warnings made by companies, in particular in the technological sectors. Downward pressure on long-term government bond yields also seemed to come from lower long-term inflation expectations. Later on, however, after the Federal Reserve decided on 27 June to lower its target for the federal funds rate by 25 basis points, these developments were mostly reversed. Overall, between end-May and 4 July the US ten-year break-even inflation rate showed a decline of around 10 basis points to about 2.4 percentage points and the real yield on ten-year US index-linked bonds changed little, standing at around 3% on 4 July. The slope of the US yield curve, measured by the spread between the ten-year government bond yield and the three-month interest rate, steepened further,

Chart 8

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

(percentages per annum; daily data)



Source: Reuters.

Notes: Long-term government bond yields refer to ten-year bonds or to the closest available bond maturity. From 1 January 2001 onwards euro area data also include Greek data.

reaching a level close to 1.6 percentage points, the highest figure since mid-1997.

In Japan, ten-year government bond yields, although somewhat volatile, showed little overall change between end-May and 4 July, standing at around 1.3% on the latter date. Developments in Japanese government bond markets seemed to be mainly influenced by evidence of further weakness in the Japanese economy following recent macroeconomic data releases, together with spillovers from global bond markets arising from changing market views about the global economic outlook.

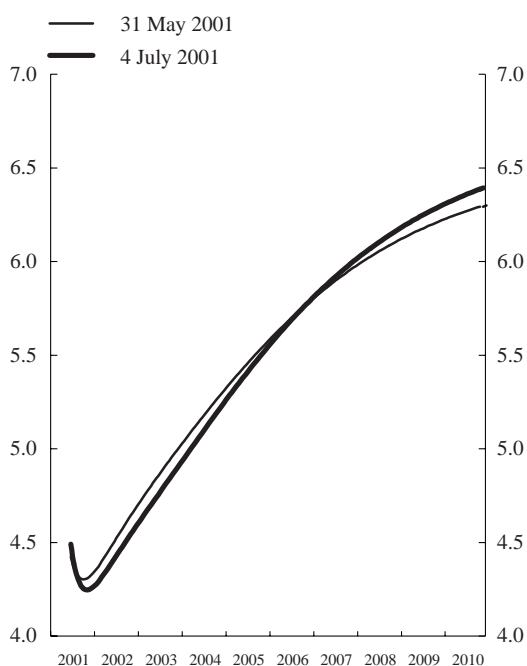
In the euro area, the pattern of government bond yield movements across most of the maturity spectrum in June was similar to that in US bond markets. In the French index-linked bond market, ten-year break-even inflation declined between end-May and 4 July by 15 basis points to 1.5%. This figure was close to the average level in 2000 and shows

that investors do not expect the recent pick-up in euro area inflation to persist and that they continue to have a high degree of confidence in the maintenance of price stability in the medium term. Conversely, the yield of the French index-linked ten-year government bond increased by around 10 basis points over the same period, standing at 3.6% on 4 July.

By 4 July the implied forward euro area overnight interest rate curve had inverted further at shorter horizons, while still remaining positively sloped at medium and long-term maturities (see Chart 9). This reflected the fact that bond yields with shorter maturities declined more than those with long maturities during June.

Chart 9
Implied forward euro area overnight interest rates

(percentages per annum; daily data)



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

Stock prices declined in June

Continuing a tendency that seemed to get under way towards the end of May 2001, stock prices in the euro area, the United States and Japan, as measured by the broad Dow Jones EURO STOXX, the Standard & Poor's 500 and the Nikkei 225 indices, all declined between the end of May and 4 July (see Chart 10). Implied volatility remained broadly stable in all three markets.

In the United States, the Standard & Poor's 500 index declined by around 2% between end-May and 4 July. By contrast, the Nasdaq Composite index, which has a large share of companies in the technology sector, increased by 1% over the same period. The overall decline in the Standard & Poor's 500 index seemed to be mainly due to announcements of corporate earnings in the first quarter of 2001 that were lower than anticipated, as well as market expectations of further weakness in earnings in the second quarter that mounted in the first half of June. Towards the end of June, better than expected macroeconomic data releases and the decision by the Federal Reserve to lower its target for the federal funds rate by 25 basis points on 27 June helped to stabilise stock prices. Implied volatility of the Standard & Poor's 500 index remained at low levels in June after the declines in April and May.

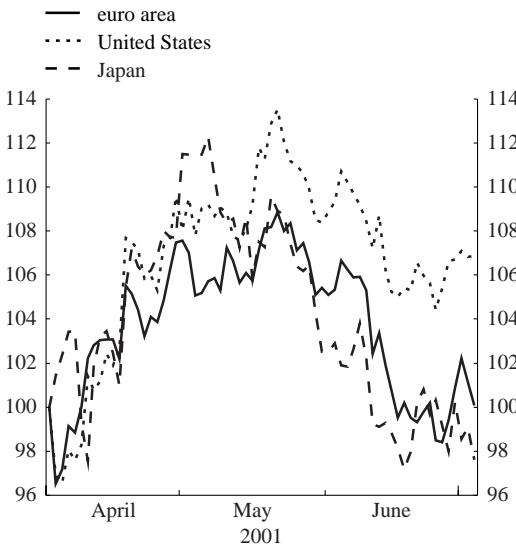
In Japan, stock prices declined by 5% between the end of May and 4 July. The announcement of a decline in real GDP in the first quarter of 2001 compared with the previous quarter seemed to spark fears of recession, which was reinforced by the release of other macroeconomic data that also tended to be worse than expected. All in all, these developments signalled a further deterioration in the outlook for corporate profitability. Nevertheless, implied volatility of the Nikkei 225 index remained unchanged, although still at higher levels than in the euro area and in the United States.

In the euro area, the broad Dow Jones EURO STOXX index was 5% lower on 4 July than

Chart 10

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

(index: 1 April 2001 = 100; daily data)



Source: Reuters.

Notes: Dow Jones EURO STOXX broad (stock price) index for the euro area, Standard & Poor's 500 for the United States and Nikkei 225 for Japan. From 1 January 2001 onwards euro area data also include Greek data.

at the end of May. This decline in euro area stock prices was spurred by a number of large firms reporting lower earnings for the first quarter of 2001 than previously expected, combined with a lowering of their forecasts of earnings for the second quarter, mainly owing to expectations of slower world economic growth. Overall, as in the United States, the industrial sector was among those which recorded the largest declines, with a loss of more than 8% between end-May and 4 July. However, in contrast to developments in the United States, the technology sector index in the euro area recorded a significant decline of 17% in this period. Similar to developments in the United States and Japan, the implied volatility of the Dow Jones EURO STOXX index remained broadly stable.

2 Price developments

Higher HICP inflation in May 2001 mainly due to energy and food prices

In May 2001, the year-on-year rate of increase in the euro area Harmonised Index of Consumer Prices (HICP) including Greece rose to 3.4%, up 0.4 percentage point from April. As in the previous month, the increase was mainly due to developments in the prices of energy and food, in particular unprocessed food (see Table 2). In addition, the year-on-year rate of change in the HICP excluding energy and unprocessed food prices continued the upward movement observed since the last quarter of 1999, increasing by 0.2 percentage point to reach 2.2% in May 2001.

The annual rate of increase in energy prices rose from 7.9% in April 2001 to 8.6% in May (see Chart 11), reflecting mainly the rise in the world market price of oil and the weakening of the euro. Euro-denominated oil prices stood at €32.7 per barrel in May 2001 compared with €29.8 per barrel in April. As a result of this, but also owing to a high demand for petrol from the United States following short-lived fears of a summer supply shortage, petrol prices rose particularly strongly between April and May 2001.

Food prices also contributed significantly to the most recent rise in overall HICP inflation. The annual rate of change in unprocessed

Table 2
Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1998	1999	2000	2000	2000	2001	2001	2001	2001	2001	2001	2001	2001
				Q3	Q4	Q1	Q2	Jan.	Feb.	Mar.	Apr.	May	June
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index	1.2	1.1	2.4	2.5	2.7	2.6	.	2.5	2.6	2.6	3.0	3.4	.
<i>of which:</i>													
Goods	0.7	0.9	2.7	2.9	3.2	2.8	.	2.7	2.9	2.8	3.3	3.8	.
Food	1.7	0.6	1.4	1.9	2.2	3.2	.	2.8	3.0	3.9	4.3	5.2	.
Processed food	1.5	1.0	1.2	1.2	1.4	2.0	.	1.7	2.1	2.2	2.6	2.8	.
Unprocessed food	2.0	0.1	1.7	3.1	3.5	5.2	.	4.5	4.5	6.5	7.1	9.0	.
Industrial goods	0.2	1.0	3.4	3.4	3.8	2.6	.	2.7	2.8	2.3	2.9	3.2	.
Non-energy industrial goods	1.0	0.7	0.7	0.6	1.1	1.3	.	1.2	1.3	1.3	1.5	1.6	.
Energy	-2.6	2.3	13.4	13.7	13.8	7.2	.	7.9	8.3	5.6	7.9	8.6	.
Services	2.0	1.6	1.7	1.8	1.8	2.3	.	2.2	2.3	2.3	2.4	2.5	.
Other price and cost indicators													
Industrial producer prices ¹⁾	-0.7	-0.4	5.4	5.8	6.1	4.5	.	4.8	4.5	4.2	4.2	3.6	.
Unit labour costs ²⁾	0.2	1.3	1.0	1.3	1.7	.	.	-	-	-	-	-	-
Labour productivity ²⁾	1.2	0.9	1.2	1.0	0.5	.	.	-	-	-	-	-	-
Compensation per employee ²⁾	1.5	2.3	2.3	2.4	2.1	.	.	-	-	-	-	-	-
Total hourly labour costs ³⁾	1.7	2.3	3.9	3.9	3.5	.	.	-	-	-	-	-	-
Oil prices (EUR per barrel) ⁴⁾	12.0	17.1	31.0	33.7	34.5	28.4	31.7	27.5	29.9	28.1	29.8	32.7	32.5
Commodity prices ⁵⁾	-12.5	-3.1	18.1	18.0	16.4	1.4	0.2	3.3	1.7	-0.8	-1.1	-4.0	6.0

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

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Excluding construction.

2) Whole economy.

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

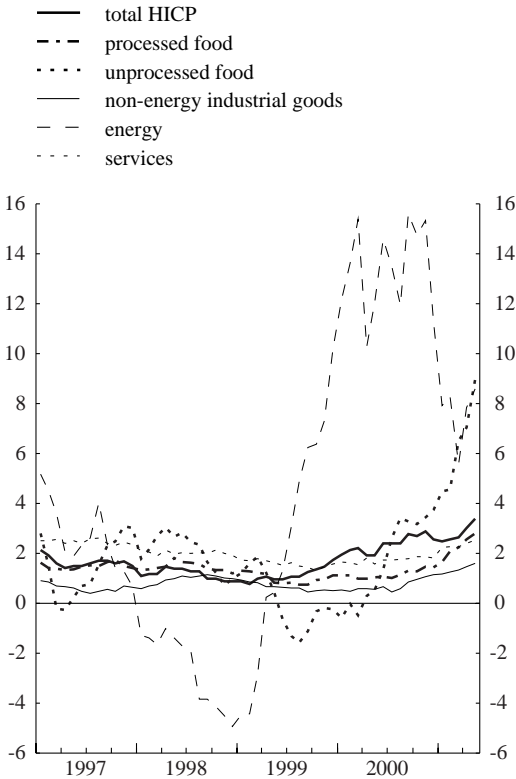
4) Brent Blend (for one-month forward delivery). In ECU up to December 1998.

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

Chart 11

Breakdown of HICP inflation in the euro area by component

(annual percentage changes; monthly data)



Source: Eurostat.
Note: Data refer to the Euro 12 (including periods prior to 2001).

food prices continued its increase in 2001 to stand at 9.0% in May 2001, up 1.9 percentage point compared with April. As in previous months, an important factor behind this rise was the development in meat prices, reflecting the continued effects of health scares associated with meat consumption and the consequences of foot-and-mouth disease. In addition, base effects together with significant increases in fruit and vegetable prices in May 2001 that were mainly related to bad weather conditions in some euro area countries also played an essential role. Recent animal health scares may also be partly the cause of the 0.2 percentage point increase in the year-on-year rate of change in processed food prices, to 2.8% in May 2001.

The annual rates of change in the remaining HICP components continued their gradual upward movements, mainly reflecting continued upward pressure from the pass-through of past increases in oil prices and the depreciation of the euro. Non-energy industrial goods prices increased by 1.6% year-on-year in May, which is 0.1 percentage point higher than in the previous month and about 1 percentage point above the rate observed a year ago. Meanwhile, the annual rate of change in services prices rose from 2.4% in April to 2.5% in May.

While overall HICP inflation in the euro area has increased significantly since early 1999, the divergence of inflation rates across the euro area countries has changed only moderately. However, as explained in Box 3, the broad stability of HICP inflation dispersion over recent years masks significant changes in the cross-country dispersion among the HICP components.

Looking ahead to likely developments in overall HICP inflation in the euro area in the near term, some counterbalancing developments in its sub-components can be expected. On the one hand, base effects associated with last year's increase in energy prices together with the fall in euro-denominated oil prices that occurred more recently should lead to a decline in the contribution of energy prices to overall HICP inflation. On the other hand, further indirect effects of past import price increases may still be expected, in particular on prices of non-energy industrial goods. Finally, continued upward pressure on overall inflation stemming from further increases in food prices cannot be ruled out. However, these factors should ease over time; an easing is already indicated, for example, by a weakening of the upward pressure from producer prices, leaving room for a gradual, though relatively volatile, decline in overall HICP inflation later this year and in 2002.

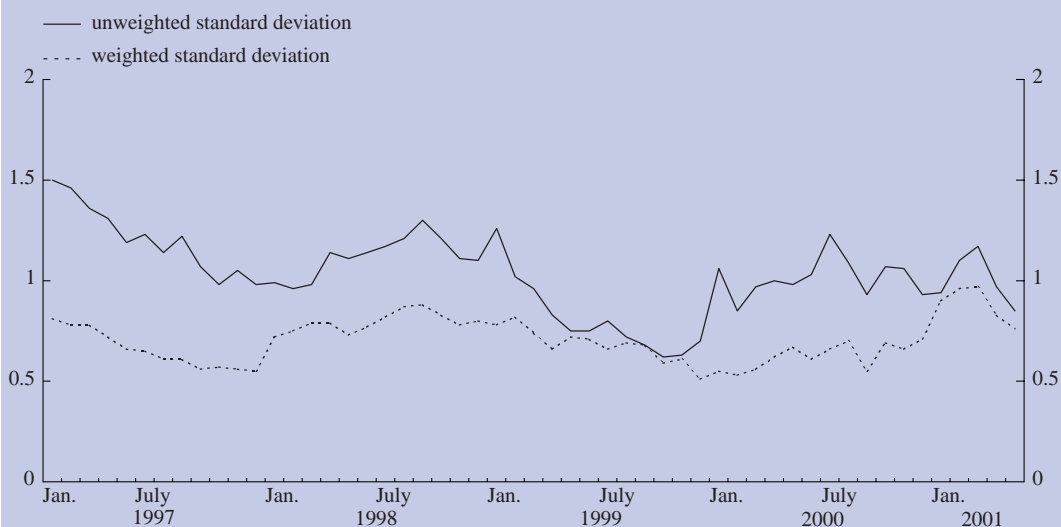
Box 3

Rising HICP inflation since early 1999 has been accompanied by moderate changes in inflation dispersion across euro area countries

During most of the past decade, euro area countries have experienced a significant decline in HICP inflation, accompanied by a considerable degree of inflation rate convergence. While the annual rate of change of the overall HICP has increased since the beginning of 1999, various statistical measures¹ show that the dispersion of overall HICP inflation rates across euro area countries rose only moderately, if at all, over the same period. In fact, all these measures show that the dispersion of overall HICP inflation rates remained broadly contained within the narrow margins that have been observed since 1997. However, the broad stability in overall HICP inflation dispersion in the past few years masks sometimes significant (temporary) changes in the cross-country dispersion among its main components and sub-components.²

Dispersion of HICP inflation across euro area countries

(dispersion of annual rates of change in percentage points)



Energy prices have contributed most to the rise in overall HICP inflation since spring 1999, reflecting oil price and euro exchange rate movements. While energy prices have risen in all euro area countries, the degree of increase differed across euro area countries, reflecting different energy trade structures, energy consumption patterns, progress in deregulating energy markets and also different national policy responses to the oil price shock. Nevertheless, the dispersion of annual rates of change in energy prices seems to have peaked in early 2000. Considering the sub-components of energy (such as petrol, gas and electricity), the development of the dispersion of price changes seems to reflect the cross-country differences in the transmission of oil price increases to the consumer. Thus, the dispersion of inflation rates of liquid fuel and petrol had increased since mid-1999 to peak in early 2000. However, the dispersion of inflation rates for gas, heating energy and solid fuel rose only during the course of 2000 before falling in early 2001. The dispersion of price changes for electricity rose somewhat during 1999, increased more substantially in 2000, and has recently fallen significantly.

Food price increases have contributed to the rise in overall HICP inflation in particular since the beginning of 2001. Unprocessed food prices in some euro area countries have been affected by health concerns in the context of BSE and the consequences of foot-and-mouth disease. The dispersion of annual rates of change in

¹ Dispersion measures used here include the weighted and unweighted standard deviation, the maximum-minimum spread and the spread between the three countries with the highest and the three countries with the lowest HICP inflation rates. For an overview of these measures, see the box entitled "Inflation differentials within the euro area" in the December 2000 issue of the ECB Monthly Bulletin.

² For an analysis of the developments in the main components of the overall HICP for the euro area as a whole since early 1999, see Box 7 in the June 2001 issue of the Monthly Bulletin.

unprocessed food prices, and in particular those for fish and meat, have risen substantially since the beginning of this year, reflecting the country-specific impact of these animal diseases. By contrast, the dispersion of inflation rates for fruit was very low in early 2001. The change in the dispersion of inflation rates for *processed food* appears recently to have been dominated by national policy measures. Dispersion measures of processed food inflation jumped in December 1999 mainly due to an increase in the tobacco excise duty in one euro area country, before returning to a low level in December 2000. Altogether, the dispersion of inflation rates for food has remained relatively contained as the recent increase in the dispersion of price changes for unprocessed food has broadly been offset by a lower dispersion in inflation rates of processed food and, in particular, tobacco.

The other components of the HICP, i.e. non-energy industrial goods and services prices, have experienced some increases in their year-on-year rates of change since early 1999, and in particular during the past few months. Cross-country inflation divergence with respect to *non-energy industrial goods* remained almost unchanged at a very low level, despite varying degrees of national exposure to import and oil prices. This seems to reflect the effect of fierce competition in the tradable goods sector. While some sub-components of the non-energy industrial goods price index, such as furniture and shoes, experienced higher dispersion of inflation rates recently, dispersion of inflation rates of other sub-components, such as garment and motor car prices, fell significantly. Altogether, the opposing developments in the dispersion of inflation rates of the various sub-components over time contained the dispersion of overall non-energy industrial goods inflation rates across euro area countries.

The dispersion of *services* inflation rates has also remained rather low since the beginning of 1999. For some sub-components of the services index, the changes in dispersion seems to have been affected mainly by changes in administered prices and fees (e.g. for cultural services or refuse collection) or by differences in progress with deregulation (e.g. in postal services and telephone and telefax services). The dispersion of price changes in sub-components such as package holidays increased somewhat in 2000 before declining again during the first few months of this year, to some extent reflecting the different shares of transportation (and thus energy) costs in overall package holiday prices. By contrast, the dispersion of the annual rise in housing rents has increased steadily since the beginning of 2000, and may not decline swiftly over the near future.

Dispersion of HICP inflation and its main components across euro area countries

(various statistical measures of dispersion of annual rates of change in percentage points)

	Weights ¹⁾ (%)	Average 1997-2000	1999	2000	2000				2001		2001				
					Q1	Q2	Q3	Q4	Q1	Q2	Jan.	Feb.	Mar.	Apr.	May
HICP inflation	100.0														
Maximum value minus minimum value		3.7	2.5	3.6	3.6	3.6	3.7	3.5	3.4	3.1	3.2	3.4	3.7	3.3	2.9
Average of the three highest minus the average of the three lowest values		2.2	2.0	2.3	2.2	2.3	2.5	2.4	2.6	2.2	2.3	2.7	2.9	2.3	2.1
Weighted standard deviation		0.7	0.7	0.6	0.5	0.6	0.6	0.7	0.9	0.8	0.9	1.0	1.0	0.8	0.8
Unweighted standard deviation		1.0	0.8	1.0	1.0	1.0	1.1	1.0	1.1	0.9	0.9	1.1	1.2	1.0	0.9
<i>of which:</i>															
Energy	9.5	2.9	2.8	4.0	4.8	3.7	3.8	3.9	4.0	4.1	3.8	4.0	4.2	4.5	3.7
Unprocessed food	8.0	2.0	2.1	1.8	2.0	1.8	1.6	1.8	2.6	2.9	1.8	2.7	3.2	3.4	2.5
Processed food	12.3	1.5	1.3	1.9	2.0	2.0	1.9	1.6	1.2	1.2	1.1	1.2	1.2	1.3	1.1
Non-energy industrial goods	32.1	1.2	1.0	0.9	1.0	0.7	1.0	0.8	0.9	0.9	0.8	0.9	1.0	0.9	0.9
Services	38.1	1.5	1.1	1.4	1.2	1.4	1.5	1.4	1.4	1.3	1.3	1.4	1.5	1.4	1.3

Sources: Eurostat and ECB calculations.

1) 2001 weights. Since 1999 the coverage of the HICP has been extended and the weights have been updated twice.

Again, the opposing developments seen in the dispersion of inflation rates of the various sub-components over time contained the dispersion of overall services inflation rates.

Overall, the increase in HICP inflation in the euro area since the beginning of 1999 has been accompanied by only moderate changes in inflation dispersion across euro area countries, despite differences in cyclical positions. A number of temporary factors, namely the oil price shock, animal diseases and specific national government measures, have caused significant increases in inflation dispersion in some sub-components of the HICP during the period. However, the declining dispersion in other sub-components, probably partly reflecting the structural impact of competitive forces, contained the dispersion of overall HICP inflation within narrow bands and at a relatively low level.

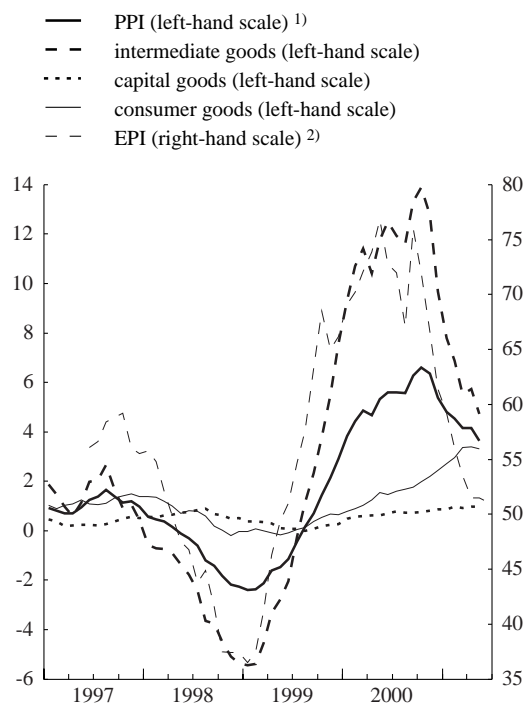
Fall in the annual rate of change in producer prices in May 2001

Recent developments in producer prices point to weakening rates of price increases at the early stage of production. In May 2001,

the year-on-year rate of change in euro area industrial producer prices declined to 3.6%, down from 4.2% in March and April. Underlying this fall was a 1.0 percentage point decrease in the annual rate of change in intermediate goods prices to 4.7% in May (see Chart 12), which was due only to base effects associated with the significant increase in oil prices between April and May 2000. These base effects negated the upward effect on the level of intermediate goods prices stemming from the rise in euro-denominated oil prices that occurred between March and May 2001.

Chart 12 Producer prices and manufacturing input prices for the euro area

(monthly data)



Sources: Eurostat and Reuters.

Note: When available, data refer to the Euro 12 (including periods prior to 2001).

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

The annual rate of increase in capital goods prices remained unchanged in May 2001 at 1.0%, while the year-on-year rate of change in consumer goods prices declined from 3.4% in March and April to 3.3% in May. This was the first time that the annual rate declined after broadly moving upwards since mid-1999. These latest developments support the view that the decline in the annual rates of increase in intermediate goods prices since last autumn is likely to reduce upward pressure on prices along the chain of production.

Wage moderation continued in early 2001

As already reported in earlier issues of the ECB Monthly Bulletin, wage pressure remained moderate overall in 2000. For the time being, there are few official wage data for 2001. However, the available information on the nature and coverage of wage agreements already settled for 2001, which

in some countries is quite extensive, confirms the view that wage developments have generally continued to remain moderate. Although there is evidence of a possible slight increase in wage growth in some cases, overall wage developments currently support

the picture of decreasing upward pressure on prices. However, the continuation of wage moderation in the negotiations later this year is of great importance for future price developments.

3 Output, demand and labour market developments

Real GDP growth moderated in the first quarter of 2001 with domestic demand weaker than expected

Eurostat's first estimate of national accounts developments in the first quarter of 2001 corroborated the picture of a moderation of economic growth observed since the second quarter of 2000. According to this first estimate, euro area real GDP rose by 0.5% quarter-on-quarter in the first quarter of 2001, compared with 0.6% in the fourth

quarter of 2000 (see Table 3). In terms of the composition of growth, the contribution of net exports to real GDP growth was 0.6 percentage point on account of a faster slowdown in imports than in exports. Thus, net exports mainly accounted for GDP growth in the first quarter of 2001. At the same time, however, domestic demand was weaker than expected. While private consumption is estimated to have increased by 0.3% quarter-on-quarter, extending a period of subdued growth in the third and

Table 3
Composition of real GDP growth in the euro area
(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1998	1999	2000	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1
Real gross domestic product	2.9	2.5	3.4	3.5	3.7	3.3	2.9	2.5	0.9	0.7	0.6	0.6	0.5
<i>of which:</i>													
Domestic demand	3.5	3.1	2.8	2.8	3.3	2.8	2.4	1.5	0.8	0.8	0.3	0.5	0.0
Private consumption	3.1	3.0	2.6	2.6	3.2	2.5	2.1	1.7	0.7	0.9	0.2	0.2	0.3
Government consumption	1.0	1.5	1.9	2.0	2.2	1.7	1.9	1.4	0.8	0.3	0.1	0.6	0.4
Gross fixed capital formation	5.1	5.2	4.5	5.6	4.9	4.0	3.6	1.0	1.6	0.6	1.0	0.3	-0.9
Changes in inventories ^{3), 4)}	0.4	0.0	0.0	-0.3	0.0	0.2	0.0	0.1	-0.1	0.1	0.0	0.1	-0.1
Net exports ³⁾	-0.6	-0.5	0.6	0.8	0.5	0.5	0.6	1.0	0.2	0.0	0.3	0.2	0.6
Exports ⁵⁾	7.1	4.8	11.9	12.4	11.9	11.7	11.6	8.7	2.8	2.4	2.9	3.0	0.1
Imports ⁵⁾	9.6	6.8	10.6	10.5	11.0	10.7	10.4	6.2	2.4	2.6	2.4	2.7	-1.5
Real gross value added:													
Agriculture and fishing ⁶⁾	1.6	2.4	0.3	0.8	-0.1	0.8	-0.2	0.9	-1.0	-0.6	1.8	-0.4	0.1
Industry	2.5	1.4	3.7	4.1	4.0	3.5	3.2	2.4	1.7	0.5	0.5	0.5	1.0
Services	3.1	2.9	3.6	3.6	3.7	3.5	3.5	3.0	1.1	0.8	0.8	0.8	0.6

Sources: Eurostat and ECB calculations.

Note: Data refer to the Euro 12 (including periods prior to 2001).

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

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

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

4) Including acquisitions less disposals of valuables.

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

6) Also includes hunting and forestry.

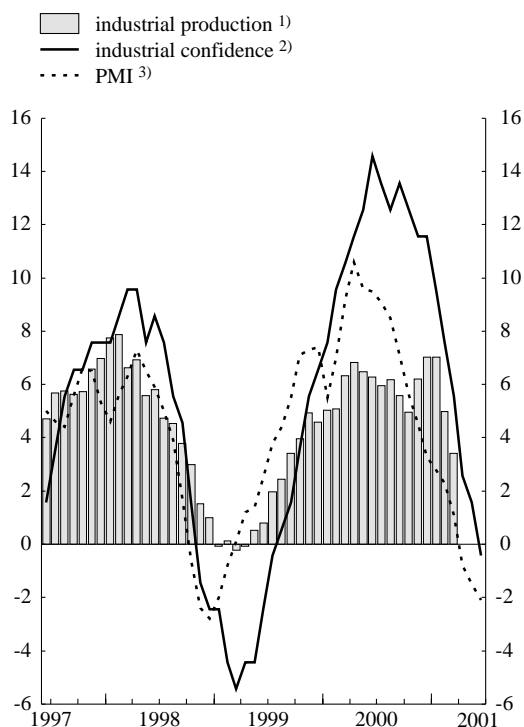
fourth quarters of 2000, investment decreased for the first time since the first quarter of 1997, by 0.9% quarter-on-quarter. In the first quarter of 2001, private consumption growth appears to have been affected negatively by the adverse price developments relating primarily to energy and food prices, while investment growth seems to have been subject to unfavourable influences from the world economy on the one hand and to specific developments relating to construction investment on the other. Overall, the contribution of domestic demand to real GDP growth in the first quarter was close to zero. However, this first release must be interpreted cautiously, given the fact that the first estimate of GDP components, in particular, can be subject to significant revisions.

Industrial production growth slowed further in April 2001

Industrial production (excluding construction) declined by 0.5% in April 2001 compared with the previous month, following a decrease of 0.2% month-on-month in March (see Table 4). On a year-on-year basis, in April 2001 industrial production rose by 1.7%, after increasing by 3.1% in March and 4.3% in February. The pattern of industrial production growth now appears more in line with the

Chart 13
Industrial production, industrial confidence and the PMI for the euro area

(monthly data)



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

Note: When available, data refer to the Euro 12 (including periods prior to 2001).

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

Table 4
Industrial production in the euro area

(annual percentage changes, unless otherwise indicated)

	1999		2001			2001			2000		2001		
	2000		Feb.	Mar.	Apr.	Feb.	Mar.	Apr.	Nov.	Dec.	Jan.	Feb.	Mar.
	month-on-month			three-month moving averages									
Total industry excl. construct.	2.0	5.6	4.3	3.1	1.7	0.6	-0.2	-0.5	1.5	1.5	1.3	-0.1	-0.4
Manufacturing	2.0	6.0	4.9	3.6	1.8	-0.2	-0.6	-0.4	1.2	1.6	1.7	0.2	-0.8
by main industrial groupings:													
Intermediate goods	2.4	5.8	3.5	1.8	1.2	0.8	-0.4	-0.6	1.3	1.2	1.1	-0.1	-0.2
Capital goods	1.8	9.1	8.7	6.9	3.5	0.1	0.1	-0.1	1.7	2.1	2.3	1.3	0.5
Consumer goods	1.5	2.5	2.9	2.5	1.0	0.2	0.0	0.1	0.8	0.6	0.6	0.1	0.2
Durable consumer goods	2.8	7.1	2.3	2.5	-1.8	0.0	0.1	-0.6	1.0	1.3	1.2	0.3	-0.2
Non-durable consumer goods	1.3	1.5	3.0	2.5	1.6	0.3	0.0	0.2	0.7	0.5	0.4	0.1	0.3

Sources: Eurostat and ECB calculations.

Notes: Annual percentage changes are calculated using data adjusted for variations in the number of working days; percentage changes on the previous month and three-month centred moving averages against the corresponding average three months earlier are calculated using seasonally and working day adjusted data. Data refer to the Euro 12 (including periods prior to 2001).

clear and protracted decline shown by survey indicators (see Chart 13). Production in the manufacturing sector followed a similar pattern, falling by 0.4% month-on-month in April, after a decline of 0.6% in March. Year-on-year growth in manufacturing was 1.8% in April 2001, down from 3.6% in March. The decline in year-on-year production growth in April was broadly distributed across all sectors. In the capital goods sector, the year-on-year growth rate declined from over 10% at the beginning of this year to 3.5% in April, mainly on account of a decline in production in the sectors “office machinery and computers” and “radio and telecommunication equipment”. In the consumer goods and the intermediate goods sectors, the slowdown in year-on-year production growth was also pronounced.

Lower industrial and consumer confidence in June 2001

Survey indicators suggest that the slowdown in industrial production growth continued in the second quarter of 2001. According to the European Commission Business Survey, industrial confidence continued to fall in June 2001, bringing it to its long-term average

value (see Table 5). The decline in June reflected a marked deterioration in production expectations, and a more moderate deterioration in the assessment of order books and stocks of finished products. The Purchasing Managers' Index (PMI) for the euro area declined further in June 2001, falling to 47.9, thus remaining below the theoretical threshold of 50 and signalling a contraction in production. However, the declines in May and June were smaller than those recorded in the first four months of 2001. At 49.6, the balance on employment expectations was below the theoretical threshold value of 50 for the first time since May 1999.

Consumer confidence fell in June 2001 for the second consecutive month. In terms of components, the indicators on the assessment of the general economic situation and on the willingness to make major purchases at present declined most. The consumers' assessment of their own financial situation also deteriorated for the second consecutive month. The volume of retail sales increased by 0.5% month-on-month in April 2001, following a decrease of 0.1% in March. In the three-month period up to and including April, the volume of retail sales increased by 1.8% year-on-year compared with 2.2% in the first

Table 5
Results from European Commission Business and Consumer Surveys for the euro area
(seasonally adjusted data)

	1998	1999	2000	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Jan.	2001 Feb.	2001 Mar.	2001 Apr.	2001 May	2001 June
Economic sentiment index ¹⁾	2.9	0.1	1.6	-0.3	-0.9	-0.6	-1.1	-0.2	-0.4	-0.5	-0.2	-0.4	-0.7
Consumer confidence indicator ²⁾	6	8	10	10	8	9	7	10	9	9	9	7	6
Industrial confidence indicator ²⁾	6	0	12	14	12	8	2	10	8	6	3	2	0
Construction confidence indicator ²⁾	2	14	22	23	20	19	17	21	18	18	18	18	15
Retail confidence indicator ²⁾	2	0	5	3	2	3	-1	5	5	-1	1	-2	-2
Business climate indicator ³⁾	0.7	-0.1	1.3	1.4	1.3	0.9	0.1	1.0	1.0	0.6	0.4	0.1	0.0
Capacity utilisation (%) ⁴⁾	82.9	81.9	83.9	84.3	84.5	84.1	.	84.4	-	-	83.7	-	-

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

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Percentage changes compared with the previous period.

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

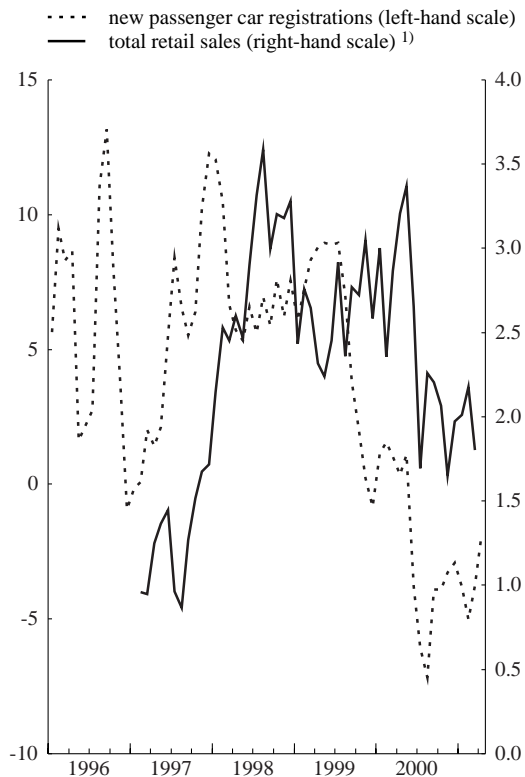
3) Units are defined as points of standard deviation.

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

Chart 14

New passenger car registrations and retail sales in the euro area

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



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

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Calculated using seasonally adjusted data.

quarter of 2001 (see Chart 14). In the three-month period up to and including May 2001, new passenger car registrations increased by 2.4% compared with the three-month period up to February, after increasing by 1.2% in the period up to and including April 2001. The data on new passenger car registrations have therefore improved further since the trough in growth rates (on a three-month moving average basis) of -5.3% observed in the three-month period to September 2000.

Overall, the data on real GDP in the first quarter of 2001 are consistent with a pattern of moderating growth in economic activity in the euro area since the second quarter of 2000. The data on industrial production growth in April and the confidence indicators up to June

suggest a further moderation of growth in the second quarter of 2001. However, while the negative effects of the adverse price developments may diminish, fundamental factors – such as previous and ongoing tax reforms and favourable financing conditions – are expected to underpin growth in the second half of 2001. The main risk to output growth remains the deterioration in the external environment, as its extent and duration and its eventual impact on the euro area economy remain uncertain. The recently adopted Broad Economic Policy Guidelines 2001 aim both to preserve the economic expansion in the EU and to strengthen the growth potential of the EU economy (see Box 4).

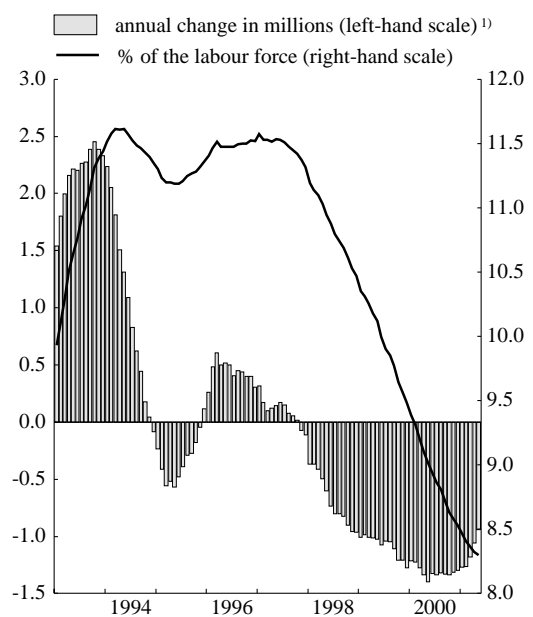
Unemployment rate unchanged in May 2001

In May 2001 the standardised rate of unemployment in the euro area stood at 8.3% of the labour force, i.e. unchanged compared with April. However, the number of

Chart 15

Unemployment in the euro area

(monthly data)



Source: Eurostat.

Note: Data refer to the Euro 12 (including periods prior to 2001).

1) Annual changes are not seasonally adjusted.

Box 4

The Broad Economic Policy Guidelines 2001

The ECOFIN Council in Gothenburg adopted the Broad Economic Policy Guidelines 2001 (BEPGs) on 15 June 2001. The BEPGs lay down both general and country-specific guidelines for the economic policies of the Member States and the Community. This year's BEPGs emphasise the need for immediate policy actions in order to meet a number of challenges. In the short run, the strategy aims to preserve the economic expansion of the European Union in a context of less favourable global conditions through growth and stability-oriented macroeconomic policies. The medium-term goal is to strengthen the growth potential of the EU economy through the resolute and accelerated implementation of economic reforms and the promotion of entrepreneurship, innovation and a knowledge-based economy. These policies should also enhance the capacity of the EU economy to cope with longer-term structural changes, including the impact of population ageing. The ECB attaches great importance to sustained progress by Member States in fiscal consolidation and structural reform. The main general recommendations of the BEPGs concerning the Member States participating in the euro area are mentioned below.

Ensure growth and stability-oriented macroeconomic policies

Governments of euro area countries and social partners are responsible for contributing to balanced macroeconomic policy. The single monetary policy is committed to maintaining price stability in the euro area. Member States are invited to meet budgetary positions "close to balance" or "in surplus" in 2001 and to prepare budgets in the same spirit for 2002 so as to have sufficient margin to cope with adverse cyclical fluctuations. They are urged to avoid pro-cyclical fiscal policies and, where appropriate, to further strengthen public finances, especially with a view to securing their long-term sustainability. In case of overheating risks and inflationary pressures, they are asked to stand ready to tighten budgetary policy.

Governments can create the framework conditions needed to facilitate wage negotiations by social partners. The BEPGs 2001 argue that it is necessary from a macroeconomic perspective to set nominal wage increases consistent with price stability and job creation. This implies taking due account of the ECB's price stability objective while ensuring that real wage increases do not exceed productivity growth.

Improve the quality and sustainability of public finances

Member States are invited to make tax and benefit systems more employment-friendly, including, where appropriate, a reduction in the overall tax burden while continuing with fiscal consolidation, and to pursue targeted reforms of the tax and benefit systems, especially with respect to low-wage labour. They are also invited to redirect public expenditure towards physical and human capital accumulation and research and development, and to enhance the efficiency of public spending by institutional and structural reforms. Concerning the long-term sustainability of public finances, Member States are encouraged to pursue a comprehensive three-pronged strategy, based on actions to raise employment rates, a fast reduction in government debt and further reforms of the pension and healthcare system.

Invigorate labour markets

Member States are invited to implement the Employment Guidelines adopted by the Council in January 2001.¹ In dialogue with the social partners, they are urged to promote increased participation in the labour market and to pursue policies aiming to reduce gender pay differences due to de facto discrimination. They are invited to improve the efficiency of labour market policies and target these towards individuals most exposed to the risk of long-term unemployment. They are also urged to promote more flexible work organisation and to ensure that any reductions in overall working time should not lead to increases in unit labour costs. Member States should facilitate occupational labour mobility and reduce obstacles to labour mobility within and between Member States.

¹ For more details, see Box 4 on page 29 of the January 2001 issue of the ECB Monthly Bulletin on the Employment Guidelines for 2001.

Ensure efficient product (goods and services) markets

Member States are asked to make progress with the transposition of internal market legislation and to make more efficient use of the European standardisation and mutual recognition principle. They are invited to create an effectively functioning internal market in services by removing regulatory and other constraints on cross-border activities and market entry and to further open up the public procurement market by bringing it on-line by 2003. They are asked to accelerate the liberalisation of the network industries, while taking account of existing universal service obligations and the security of supply, to reinforce competition and to reduce the overall level of state aid as well as to redirect it away from ad hoc and sectoral aids.

Promote the efficiency and integration of the financial services market

In order to advance a truly single market for financial services, all relevant parties – the Council, the European Parliament and the Commission – are urged to ensure full implementation of the Financial Services Action Plan by 2005 at the latest. In particular, they are invited to implement key steps towards an integrated securities market by the end of 2003, including the priorities set out in the report of the Committee of Wise Men on the Regulation of European Securities Markets. There should also be increased efforts towards a well-functioning risk capital market by 2003 through the implementation of the Risk Capital Action Plan. The relevant authorities are invited to take the necessary measures to further improve supervisory arrangements across sectors and across borders in order to keep pace with developments in the financial system.

Encourage entrepreneurship

Member States are urged to create a business-friendly environment. They are invited to further reduce the administrative burden and barriers for business by introducing simpler and more transparent procedures, one-stop shops for company start-ups and by simplifying regulation and business tax systems. The efficiency of public services also needs to be improved, inter alia through benchmarking and the increased use of public tendering, while ensuring that public and private entities compete on a level playing-field.

Foster the knowledge-based economy

Member States are urged to strengthen intellectual property rights and achieve agreement on how to deliver the European Community patent before the end of 2001. They are encouraged to ensure sufficient funding for research and development, especially for basic research, and establish clear and consistent priorities for public research. They are asked to implement the unbundling of the “local loop” in order to help reduce the costs of using the internet, ensure a better and more widespread use of the internet in schools and strengthen the regulatory framework for e-commerce. They are invited to reinforce education and training efforts, both private and public, in order to increase the supply of trained researchers and highly qualified information and communications technology personnel and to improve the basic skills of the population.

Enhance environmental sustainability

The Gothenburg European Council has agreed on a European Sustainable Development Strategy. Member States are urged to introduce and strengthen market-based policies like taxation, user and polluter charges, insurance/liability schemes and tradable emission rights and to reduce sectoral subsidies, tax exemptions and other measures which have a negative environmental impact. They are also invited to intensify the use of economic instruments to curb greenhouse gas emissions and fulfil the requirements of the Kyoto Protocol. Finally, they are invited to agree on an appropriate framework for energy taxation at the European level and for the creation of a single internal market for energy.

Table 6**Unemployment in the euro area***(as a percentage of the labour force; seasonally adjusted)*

	1998	1999	2000	2000 Q2	2000 Q3	2000 Q4	2001 Q1	2000 Dec.	2001 Jan.	2001 Feb.	2001 Mar.	2001 Apr.	2001 May
Total	10.8	10.0	8.9	9.0	8.8	8.6	8.4	8.5	8.5	8.4	8.4	8.3	8.3
Under 25 years ¹⁾	21.5	19.5	17.5	17.7	17.3	16.8	16.5	16.7	16.6	16.5	16.4	16.4	16.4
25 years and over	9.3	8.6	7.8	7.8	7.6	7.5	7.3	7.4	7.4	7.3	7.3	7.2	7.2

*Source: Eurostat.**Notes: According to ILO recommendations. Data refer to the Euro 12 (including periods prior to 2001).**1) In 2000 this category represented 23.6% of total unemployment.*

unemployed fell in May by around 36,000 compared with the previous month. This decline is smaller than those recorded in April and in the first quarter of the year. The latest figures point to a slower reduction in the euro area unemployment rate in the second quarter of 2001 compared with the trend observed from 1998 onwards (see Chart 15). Indeed, since early 1998 the monthly decline in unemployment has been around 95,000 persons on average. It was somewhat higher during most of 2000, but has been lower since March 2001. These developments are due to the lagged effects of the slowdown in activity on labour market developments.

In terms of the breakdown by age, the unemployment rate of both those aged below 25 and those aged 25 and above remained unchanged in May (see Table 6). However, the number of unemployed continued to decrease in both groups compared with April. For the first group, the unemployment rate stood at 16.4% in May, but the number of unemployed fell by around 7,000 compared with the previous month, slightly more than in April. The number of unemployed aged 25 and above decreased by 29,000 in May, less than in the previous month, while the unemployment rate stood at 7.2%.

Employment growth likely to have continued in the first quarter of 2001, although at a more moderate pace

Information available at the national level suggests that employment growth in the euro

area slowed in the first quarter of 2001 compared with the last quarter of 2000. Early estimates point to quarter-on-quarter employment growth of around 0.4% in the first quarter of 2001, compared with 0.6% registered in the previous quarter (see Table 7). This indicates that net job creation continued in the first quarter of this year, although at a more moderate pace.

At the sectoral level, employment expectations – together with the available information on sectoral employment developments from national sources – point to a more marked slowdown in employment growth for the industrial sector than for the services sector in the first half of the year. Employment expectations from the European Commission Business Survey indicate that year-on-year employment growth in industry fell in the first and second quarters of 2001 compared with the rate recorded in the previous quarter, i.e. 1.2% growth. This lower rate of growth is expected to have extended to both the manufacturing and the construction sectors, which were growing by 1.1% and 1.6% respectively in annual terms in the previous quarter. With regard to the services sector, although survey data on employment expectations also point to lower employment growth in the first half of 2001, job creation may have remained robust (following a rise of 2.8% in the last quarter of 2000).

Table 7
Employment growth in the euro area

(annual percentage changes, unless otherwise indicated; seasonally adjusted)

	1998	1999	2000	2000 Q1	2000 Q2	2000 Q3	2000 Q4	2000	2000	2000	2000
								Q1	Q2	Q3	Q4
								Quarterly rates ¹⁾			
Whole economy	1.6	1.6	2.0	1.9	2.1	2.0	2.2	0.5	0.5	0.5	0.6
Agriculture and fishing ²⁾	-1.3	-3.0	-1.1	-1.3	-1.5	-1.3	-0.5	0.1	-0.4	-0.3	0.1
Industry	1.0	0.4	1.0	0.9	0.9	1.1	1.2	0.2	0.2	0.4	0.4
Excluding construction ³⁾	1.2	0.3	0.8	0.2	0.8	1.0	1.1	0.1	0.3	0.3	0.3
Construction	0.4	0.8	1.6	2.5	1.0	1.2	1.6	0.3	-0.0	0.5	0.8
Services ⁴⁾	2.1	2.5	2.7	2.5	2.9	2.7	2.8	0.7	0.7	0.6	0.7
Trade and transport ⁵⁾	1.6	2.2	2.6	2.6	2.8	2.5	2.5	0.6	0.5	0.6	0.7
Finance and business ⁶⁾	4.9	5.3	6.1	6.1	6.4	6.1	5.7	1.6	1.6	1.2	1.2
Public administration ⁷⁾	1.3	1.4	1.4	1.0	1.3	1.4	1.8	0.5	0.5	0.3	0.5

Sources: Eurostat and ECB calculations.

Note: Data refer to the Euro 12 (including periods prior to 2001).

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

2) Also includes hunting and forestry.

3) Includes mining, quarrying, manufacturing, electricity, gas and water supplies.

4) Excludes extra-territorial bodies and organisations.

5) Also includes repairs, communication, hotels and restaurants.

6) Also includes real estate and renting services.

7) Also includes education, health and other services.

4 Exchange rate and balance of payments developments

Euro stabilised in June 2001

In the foreign exchange markets, June was characterised by a broad stabilisation of the euro in nominal effective terms. Against the background of continuing signs of economic slowdown in all major economic areas and expectations of lower rates of inflation in the euro area, the euro appreciated somewhat in the first half of June. However, this appreciation was broadly reversed at the end of the month. Overall, between early June and 4 July the euro appreciated against the Japanese yen, while remaining broadly stable against the US dollar and the pound sterling.

Following a depreciation in May the euro remained broadly stable against the US dollar throughout June. In the first half of the month the euro appreciated vis-à-vis the US currency, mostly in response to data releases suggesting a continuing slowdown in industrial

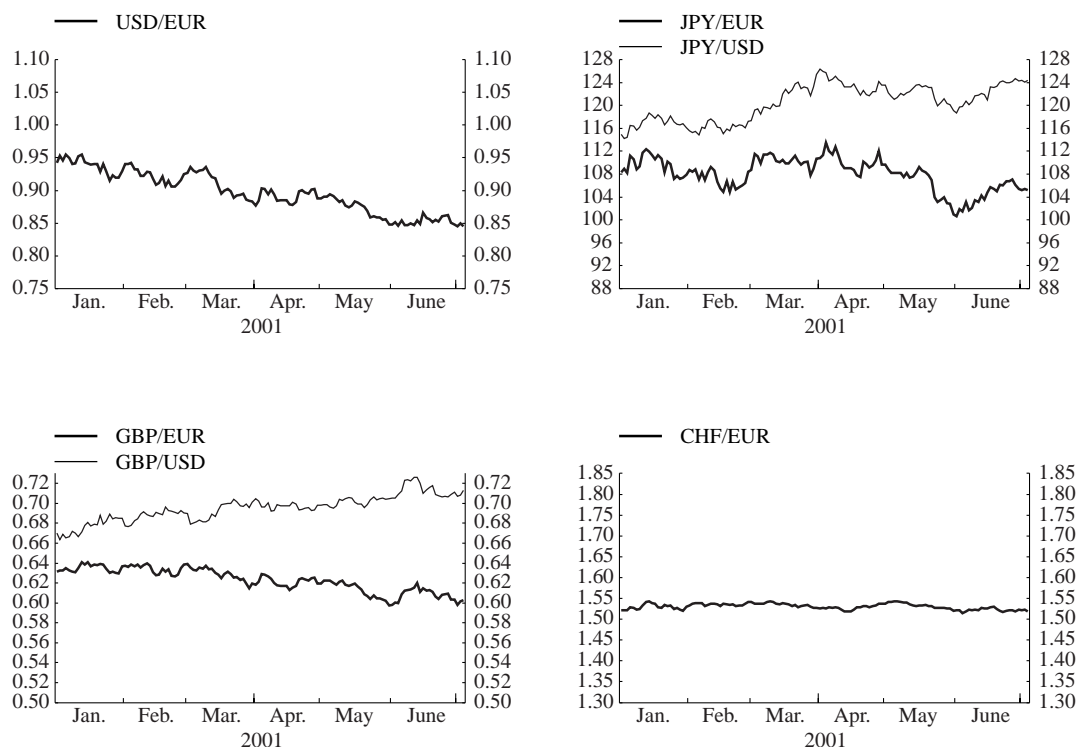
production, increasing jobless claims and rising inflation expectations in the US economy (see Chart 16). The Federal Reserve System decided to lower its target for the federal funds rate by 25 basis points on 27 June. Towards the end of June, the financial markets' perception of US developments became more favourable, while at the same time signs of moderation of economic growth became more apparent in the euro area, thereby providing support to the US dollar. On 4 July, the euro was quoted at USD 0.85, close to its level at the end of May and almost 8½% lower than its average value in 2000.

In June the Japanese yen depreciated rather sharply against both the euro and the US dollar, thus broadly reversing the appreciation that took place in May. The weakening of the yen was mainly a reaction to the deteriorating outlook for Japanese exports, which in turn contributed to a downward revision by the

Chart 16

Patterns in exchange rates

(daily data)



Source: ECB.

Bank of Japan of its assessment of the state of the Japanese economy. The subsequent release of preliminary data showing declining Japanese GDP growth in the first quarter of 2001 also contributed to the weakness of the yen. On 4 July, the euro was recorded at JPY 105, that is 4% higher than at the end of May and about 6% above its average value in 2000.

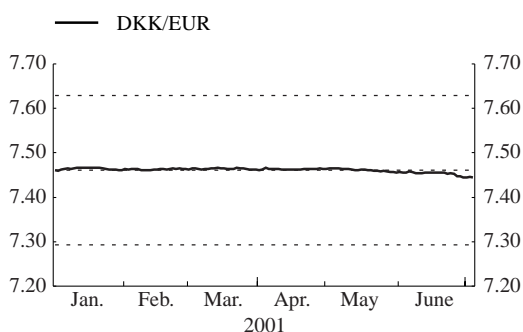
After having depreciated sharply against both the euro and the US dollar in the first week of June, the pound sterling first stabilised and then appreciated towards the end of the period. The fluctuation in the pound sterling exchange rates in June seemed mainly attributable to swings in market perceptions with regard to the prospect of the United Kingdom's participation in Stage Three of EMU following the general election. On 4 July, the euro traded at GBP 0.60, that is less than 1% higher than at the end of May, but around 1% lower than its average value in 2000.

Within ERM II, in May and in early June the Danish krone continued to move in a narrow range around its central parity against the euro (see Chart 17). With regard to other European currencies, the euro fluctuated sharply against the Swedish krona in June as

Chart 17

Patterns of exchange rates within ERM II

(daily data)



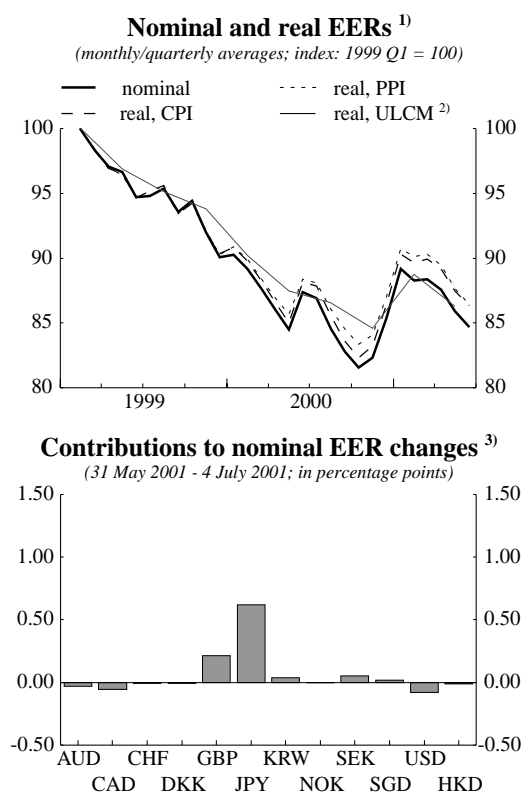
Source: ECB.

Note: The horizontal lines indicate the central parity (DKK 7.46) and the fluctuation bands ($\pm 2.25\%$ for DKK).

Sveriges Riksbank conducted a series of unilateral foreign exchange interventions to counter the depreciation of the Swedish currency. Against the Swiss franc, the euro moved throughout the period in a narrow range of CHF 1.52-1.53.

In nominal effective terms, as measured against the currencies of the euro area's most important trading partners, the euro remained broadly unchanged from the end of May to 4 July. On 4 July, the nominal effective exchange rate index of the euro was 1.7% lower than its average level in 2000. In real terms, the CPI, the PPI and the ULCM-deflated effective exchange rate indices of the euro remained fairly close to the nominal index (see Chart 18).

Chart 18
Effective euro exchange rates



Source: ECB.

1) An upward movement of the index represents an appreciation of the euro. The latest observations are for June 2001 and for the ULCM-based REER for Q2 2001.

2) Unit Labour Costs in Manufacturing.

3) Changes are calculated using trade weights against 12 major partner currencies.

Current account deficit continued to decrease in April 2001

The current account of the euro area recorded a deficit of €3.3 billion in April 2001, compared with a deficit of €7.0 billion in April 2000 (all figures refer to the Euro 12). This reduction in the deficit resulted from an increase in the goods surplus (to €5.3 billion in April 2001 from €2.5 billion in April 2000) combined with an improvement in the balance for services – moving from a deficit of €0.7 billion to a surplus of €0.3 billion – as well as a small decrease in the deficit of current transfers.

The cumulated current account deficit for the first four months of 2001 decreased to €12.5 billion compared with a deficit of €18.5 billion for the same period of 2000 (see Table 8). This was due to a higher goods surplus (€12.0 billion for the first four months of 2001 compared with €5.7 billion for the same period last year) coupled with a decrease in the deficit for current transfers (down to €6.9 billion for the first four months of 2001 from €9.0 billion for the same period in 2000), which more than offset the rise in the deficits for services and income.

The increase in the goods surplus was mainly due to the growth of export values (16.2%) outpacing that of import values (14.3%) during the first four months of 2001 (see Chart 19, which uses Euro II data, for which a longer span of historical series is available). The falling growth rate of import values in 2001 is explained by a significant decline in the growth rate of import prices. Indeed, disaggregated trade data available up to March 2001 indicate that import unit value indices increased at an annual rate of 7.5% in that month compared with 26.1% in November 2000. The growth rate of export unit value indices also declined. Import and export volumes have been growing at a slower rate since autumn 2000, mainly as a result of lower foreign and euro area demand. This deceleration was stronger on the import side, however, thus contributing to the increase in the goods surplus in recent months.

Table 8**Balance of payments of the euro area***(EUR billions; not seasonally adjusted)*

	2000 Jan. - Apr.	2000 Apr.	2001 Jan. - Apr.	2001 Feb.	2001 Mar.	2001 Apr.
Current account balance	-18.5	-7.0	-12.5	2.1	-2.8	-3.3
Credits	476.9	116.4	552.1	133.0	142.8	138.1
Debits	495.4	123.4	564.6	130.9	145.5	141.4
Goods balance	5.7	2.5	12.0	3.3	5.3	5.3
Exports	289.7	71.3	336.6	81.5	91.6	84.0
Imports	284.0	68.8	324.6	78.3	86.3	78.7
Services balance	-4.6	-0.7	-6.0	-1.1	-2.8	0.3
Exports	82.4	21.3	88.1	20.9	21.6	24.3
Imports	87.1	22.0	94.1	22.0	24.4	24.0
Income balance	-10.6	-4.0	-11.6	0.5	-0.7	-4.7
Current transfers balance	-9.0	-4.8	-6.9	-0.6	-4.6	-4.2
Capital account balance	6.2	2.3	5.7	1.6	0.5	2.2
Financial account balance	.	.	29.8	2.1	20.6	11.8
Direct investment	148.6	1.1	-47.4	-0.8	-42.3	0.1
Abroad	-79.6	-16.0	-66.2	-17.1	-29.5	-6.6
Equity capital and reinvested earnings	-40.8	-7.4	-38.3	-7.7	-11.3	-10.3
Other capital, mostly intercompany loans	-38.8	-8.7	-27.8	-9.5	-18.1	3.8
In the euro area	228.2	17.1	18.8	16.4	-12.8	6.7
Equity capital and reinvested earnings	196.3	5.1	29.1	13.9	6.6	2.5
Other capital, mostly intercompany loans	31.9	11.9	-10.4	2.5	-19.4	4.2
Portfolio investment	-196.0	-5.6	-59.4	0.9	6.1	-20.9
Equity	-244.5	-20.9	-9.3	2.5	10.9	-2.8
Assets	-134.6	-17.7	-34.4	-11.0	5.7	-11.3
Liabilities	-109.8	-3.2	25.2	13.5	5.2	8.5
Debt instruments	48.5	15.3	-50.2	-1.6	-4.8	-18.1
Assets	-42.6	-9.2	-52.1	-18.3	-20.5	3.2
Liabilities	91.0	24.5	2.0	16.8	15.6	-21.3
Memo item:						
Combined net direct and portfolio investment	-47.4	-4.6	-106.8	0.2	-36.2	-20.8
Financial derivatives	4.9	2.1	-1.0	-1.0	3.9	1.1
Other investment	97.7	6.1	119.6	-3.2	50.3	24.6
Reserve assets	.	.	18.0	6.1	2.6	7.0
Errors and omissions	.	.	-22.9	-5.7	-18.3	-10.7

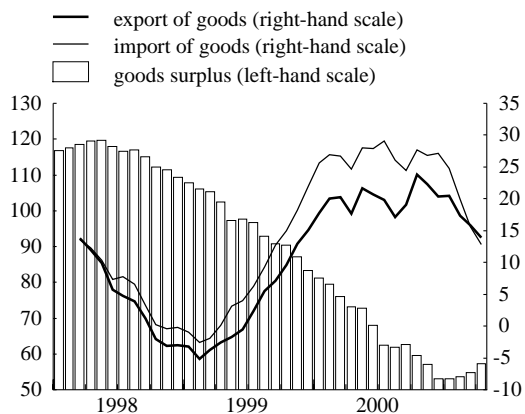
Source: ECB.

Notes: Figures may not add up due to rounding. All data refer to the Euro 12. For the financial account, a positive sign indicates an inflow, a negative sign an outflow; for reserve assets, a negative sign indicates an increase, a positive sign a decrease. A detailed set of tables on Euro 12 balance of payments data can be found in the "Past data for selected economic indicators for the euro area plus Greece" part of the "Euro area statistics" section of this issue of the ECB Monthly Bulletin and on the ECB's website.

Chart 19

Euro 11 goods surplus and growth rates of exports and imports of goods

(percentage year-on-year change of the 3-month moving average, right-hand scale) (12-month cumulated goods surplus in EUR billions, left-hand scale)



Source: ECB.

Note: Euro 11 data for 2001 are estimated.

Net portfolio outflows in April

In the financial account, portfolio investment of the euro area recorded a net outflow of

€20.9 billion in April 2001, while direct investment flows were balanced (see Table 8).

Flows relating to disinvestment in debt instruments (€18.1 billion) were the largest contributor to the net outflows observed in April. The net outflows in equity capital and reinvested earnings were offset by net inflows in “other capital, mostly intercompany loans”.

Cumulated net direct investment outflows amounted to €47.4 billion in the first four months of 2001, while cumulated net outflows from portfolio investment reached €59.4 billion during the same period. Net portfolio investment outflows between January and April 2001 may partly be linked to factors outside the euro area. In particular, outflows resulting from disinvestment in euro area debt instruments in January and April 2001 may be related to a rise in US long-term bond yields in those months.

New technologies and productivity in the euro area

This article provides an overview of the currently available evidence on the importance of information and communication technologies (ICT) for developments in productivity growth in the euro area. On the basis of the available data, there is evidence of an increased contribution of ICT to economic growth both in terms of production and investment in the second half of the 1990s. However, there is – as yet – little if any evidence of positive spillover effects from the use of ICT to overall productivity growth. As to this latter conclusion, it is important to note that further structural reforms are crucial in order to reap the full benefits of the new technological possibilities. In itself, the increased contribution of ICT to productivity growth, however, implies that uncertainties surrounding the estimates of potential output growth have become skewed to the upside.

I Introduction

This article focuses on the contribution of information and communication technologies (ICT) to the growth rate of productivity in the euro area. From a macroeconomic perspective, a sustained increase in productivity growth owing to ICT is generally considered the most important aspect of a “New Economy”. In this respect, a distinction is often made between a sustained increase in productivity growth resulting from developments in the ICT producing sectors and increases in productivity growth in the economy as a whole caused by the spreading use of ICT. The rapid productivity increase witnessed in the production of ICT is of interest on its own, but is in itself not sufficient to define a “New Economy” characterised by an economy-wide increase in productivity growth. For that, it would be necessary that ICT have the character of a so-called general purpose technology, i.e. that the use of ICT would cause a more rapid increase in the overall efficiency of the economic process. This would imply that the economy has reached a higher rate of growth of potential output.

Productivity growth is most often measured in terms of labour productivity, i.e. as the increase in output per person employed or, preferably, in output per hour worked. Growth in labour productivity can be the result of an increase in the amount of capital available per hour worked (capital deepening) or of an increase in the overall efficiency of the economic process, as measured by gains

in total factor productivity (TFP). An acceleration in labour productivity growth owing to an increase in TFP growth would be a sign of a “New Economy”. However, as opposed to labour productivity, TFP growth cannot be measured directly and is difficult to estimate in practice. This article first discusses developments in labour productivity, before giving some estimates of developments in TFP growth in the euro area. On account of data constraints, this article mainly focuses on developments in the 1990s.

The impact of a technological change always depends on the quality of the accompanying policies and on a number of other factors. These policies and factors include the liberalisation of domestic financial markets and the progressive international integration of these markets; the availability of risk capital to innovative firms combined with sound management; the globalisation of trade in goods and services and increased product market competition; more labour market flexibility; a monetary policy ensuring price stability; and a fiscal policy which reduces debt and tax burdens, leaving room for private investment. Although these policies and other factors are not the focal point of this article, they should nevertheless be kept in mind when assessing the importance of ICT for economic growth. Only by meeting all conditions will it be possible to reap the full benefits of what the new technologies have to offer.

2 Labour productivity in the euro area and the United States

In the 1990s, growth of real GDP was on average higher in the United States than in the euro area. Table I presents a decomposition of the growth of GDP per capita. Demographic changes, (a), changes in labour force participation, (b), and changes in the employment rate, (c), account for differences between the growth rates of GDP per capita and of GDP per person employed. Likewise, changes in the number of working hours, (d), explain the differences between the growth rates of GDP per person employed and of GDP per hour worked. The table thus highlights that the observed difference in GDP growth per capita between the United States and the euro area is attributable to different developments in labour utilisation and not to a difference in labour productivity growth.

Chart I presents developments in labour productivity and employment, both measured in total hours worked, in the euro area and the United States over a somewhat longer time horizon. Labour productivity is usually calculated either in terms of output per person employed or output per hour worked. The latter measure is generally considered the more appropriate one since the development of output per person employed is influenced also by the average number of hours worked. Given the increasing importance of part-time work, the use of output per person employed would lead to a downward bias of productivity figures in the euro area in particular.

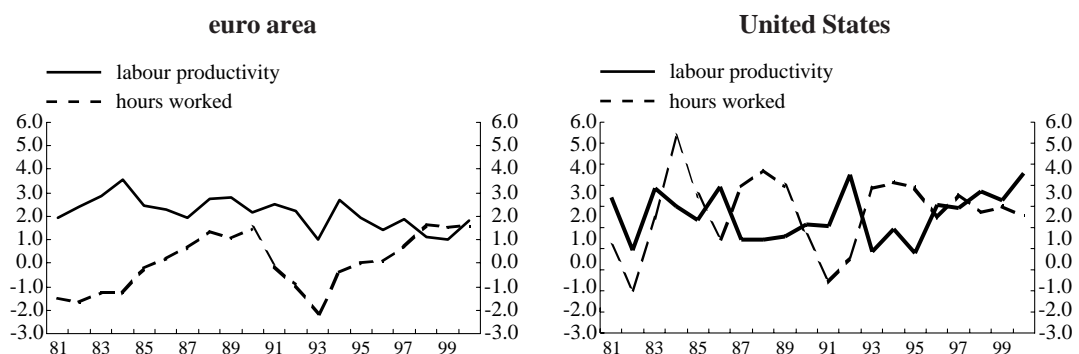
Chart I shows that labour productivity growth in the United States displayed no

Table I
Decomposition of annual growth in GDP per capita, 1990-2000
(percentages and percentage points)

	GDP per capita	Working age population/ total population	Labour force participation rate	Employment/ labour force	GDP per person employed	Average hours worked	GDP per hour worked
		(a)	(b)	(c)		(d)	
Euro area	1.8	-0.04	0.32	0.01	1.5	-0.37	1.8
United States	2.2	0.03	0.34	0.12	1.7	0.03	1.7

Source: ECB calculations based on data from the European Commission and the OECD.
Note: Figures may not add up due to rounding.

Chart I
Labour productivity and employment growth, 1981-2000
(annual percentage change in real GDP per hour worked and in total hours worked)



Source: ECB calculations based on data from the European Commission and the OECD.

Box I

United States: recent developments in labour productivity and private business investment

In the United States, the rise in labour productivity growth in the non-farm business sector during the second half of the 1990s is considered to be the main explanation for the combination of rapid output growth with subdued inflation during that period (see Chart A). However, a consensus view has not yet emerged about the source of the productivity growth and, by extension, about whether the recent productivity gains are mostly a cyclical phenomenon or, instead, have more permanent implications. A large majority of studies argue that capital accumulation, especially through investment in computer hardware and software, has been the driving force behind labour productivity growth (the “capital deepening” explanation). Furthermore, this surge in labour productivity is seen mostly as a cyclical phenomenon. More recently, however, some studies have argued that technical progress has been the main source of output growth (the “total factor productivity” explanation), with a sizeable impact on the long-run rate of productivity growth, i.e. on trend productivity growth.

Empirical work in this area has been polarised by Robert Gordon’s contributions – highlighting capital deepening factors with a small effect on trend productivity – and by Stephen Oliner and Daniel Sichel’s work – supporting the idea of a larger effect on trend productivity growth.¹ Gordon estimates the increase in trend productivity growth in the period from 1996 to 1999 from the period from 1972 to 1995 to be only 0.62 percentage point, with half of this increase explained by capital deepening and the remaining half by a rise in total factor productivity, concentrated only in the durable goods producing sector. On the other hand, Oliner and Sichel estimate labour productivity growth in the period from 1996 to 1999 to be 1.05 percentage points higher than over the period from 1990 to 1995. Most of this difference is explained by deepening in information and communication technologies (ICT) capital, while the remainder is explained by the increase in total factor productivity – both in the ICT sector and in the rest of the non-farm business sector. At the root of the difference in results between the two studies lies the different methodological approach employed to decompose productivity growth into the contributions of capital, labour and the “residual” (total factor productivity). In a series of recent studies, Nordhaus provides evidence confirming Oliner and Sichel’s results, showing that productivity growth in the business sector in the period from 1996 to 1998 accelerated to 3.2%, up from 1.3% in the period from 1978 to 1995, and that about one third of the productivity acceleration comes from non-ICT producing sectors.²

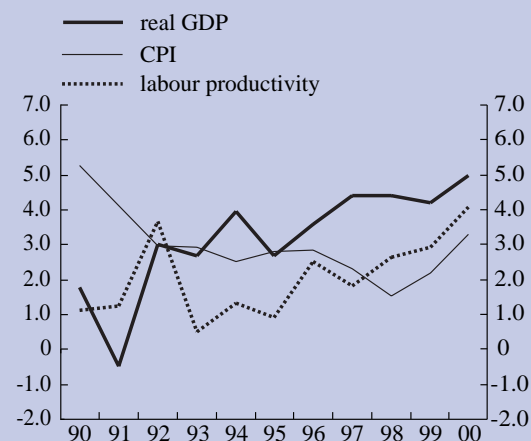
Against this background, it is safe to argue that while the contribution of total factor productivity remains uncertain, the sharp rise in investment, especially in ICT capital goods, that occurred in the United States since 1992 has certainly increased the rate of productivity growth of the economy as a whole. In this context, the issue remains whether such high growth rates of investment, especially in the ICT sector, are sustainable or not.

1 Oliner, S. D. and Sichel, D. E., “The resurgence of growth in the late 1990s: is information technology the story?” and Gordon, R. J., “Does the “New Economy” measure up to the great inventions of the past?”, both published in the *Journal of Economic Perspectives*, Vol. 14, Fall 2000.

2 See, among others, “Productivity growth and the New Economy” (NBER WP 8096), January 2001.

Chart A: Real GDP, output per hour (non-farm business sector) and the Consumer Price Index (CPI) in the United States

(annual percentage change)



Labour productivity growth and contributions

(average annual percentage growth rates, difference between selected periods)

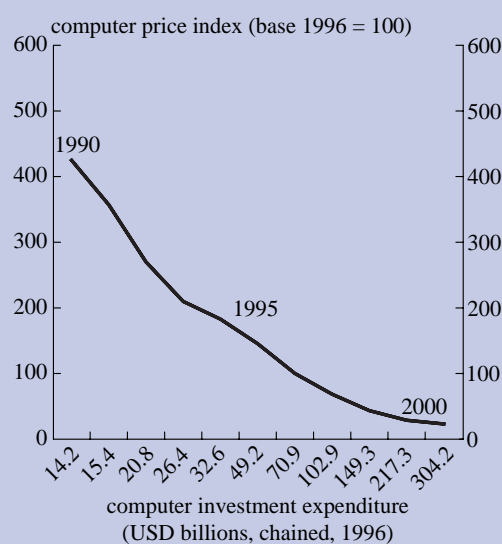
	Labour productivity (interval)	Of which capital deepening	Of which TFP	Of which price measurement	Of which labour quality
Oliner-Sichel	1.05 (1996-99 vs. 1991-95)	0.49	0.68	-	-0.13
Gordon	0.81 ¹⁾ (1995-99 vs. 1972-95)	0.33	0.29	0.14	0.05
Nordhaus	1.9 (1996-98 vs. 1978-95)	-	-	-	-

1) Figures refer to "trend" productivity growth.

In this regard, a critical aspect is whether the declining trend of computer prices – both in absolute and relative terms – will come to a halt in the years ahead. Indeed, during the last decade, declining computer prices resulted in a demand shift from "traditional" goods to ICT capital goods and have therefore been associated with the overall increase in investment expenditure on ICT capital goods (illustrated by Chart B). In the context of historically diminishing returns for investment in ICT capital goods, further decreases in computer prices appear therefore to be a prerequisite for the sustained growth of computer investment and, consequently, of total investment.

Future developments of investment spending on ICT capital goods will shed light on the extent to which computer technology has really founded a "New Economy". Confirmation of such a structural shift in the US economy's production possibility frontier would be provided by a continuation of growth in ICT capital goods even in the absence of further computer price declines (i.e. the demand curve in Chart B shifts to the right).

Chart B: Private business investment – the demand schedule for computer capital goods, 1990-2000



particular trend up to the mid-1990s. Thereafter, in the period up to and including 2000, labour productivity growth clearly accelerated. While the rate of productivity growth attained in that period is in itself not without precedent, the acceleration has, in contrast to the past, been achieved with steady employment growth. Moreover, the acceleration of labour productivity growth in the United States has been accompanied by an increase in investment growth, to a large extent driven by strong ICT investment (see also Box I "United States: recent

developments in labour productivity and private business investment"). This clear break with past experiences would suggest that the US economy has developed new characteristics.

Developments in the euro area have been different. Labour productivity has on average grown at a relatively high, though slightly downward trending, rate. Over longer periods, this relatively high rate of productivity growth has been accompanied by adverse developments in total hours worked, in

particular in the first halves of the 1980s and the 1990s. However, in the second half of the 1990s employment growth accelerated

again. As yet, this has not been accompanied by a clear change in labour productivity developments.

3 The importance of ICT for the euro area

Several recent studies concluded that ICT have played an increasing role in explaining economic growth in the euro area in recent years. A study by the European Commission, for example, presented a number of scenarios, the most optimistic of which suggests that Europe would at present be lagging the United States by only approximately five years in terms of experiencing the impact of ICT on economic growth.¹ It thus seems warranted to further investigate the contribution of ICT to economic growth in the euro area, as a driving force behind a possible acceleration in productivity over a longer term horizon.

effects from the use of ICT should become apparent in sectors other than the ICT producing sectors themselves. The ICT using sectors are defined as having a relatively high ratio of ICT investment to industry output and a relatively high share of the overall ICT capital stock. Other sectors use ICT as well, and indeed it could be argued that even a limited use of ICT might make for a clear improvement in the production process. The ICT using sectors distinguished here might thus be seen as only a rough measure of the importance of ICT use.

3.1 Sectoral developments

To assess the importance of ICT for economic developments in the euro area, this section considers developments in economic growth at the sectoral level, in the ICT sector in particular. The ICT sector has been broken down into ICT producing and ICT using sectors (see Table 2).² This last distinction is of interest, because any positive spillover

Data on gross value added and employment at a detailed sectoral level were available for four euro area countries: Germany, France, Italy and Finland (accounting for around 73% of euro area nominal gross value added). The

¹ European Commission, "The EU Economy 2000 Review", November 2000.

² The classification of ICT producing industries closely follows that of the OECD. The classification of ICT using industries closely follows the classification made in Van Ark, B., "The Renewal of the Old Economy: Europe in an Internationally Comparative Perspective", update of English translation of a paper for Preadviezen 2000 of the Netherlands Royal Economic Society, March 2001.

Table 2
Classification of ICT producing and using industries

ICT producing sector, manufacturing:

Office, accounting and computing machinery (code 30) and radio, television and communication equipment (code 32).

ICT producing sector, services:

Post and telecommunications (code 64) and computer and related activities (code 72).

ICT using sector, manufacturing:

Chemicals and chemical products (code 24), electrical machinery and apparatus, not elsewhere classified (code 31), and medical, precision and optical instruments (code 33).

ICT using sector, services:

Financial intermediation (code 65), insurance and pension funding (code 66), activities related to financial intermediation (code 67), renting of machinery and equipment (code 71), research and development (code 73), and "other business activities" (code 74).

Note: Codes in brackets are from the international standard industry classification, revision 3. Only about half of the category "other business services" qualifies as ICT using. Therefore, a 50% split was applied to this category.

Table 3
Sectoral developments in the euro area ¹⁾

	Share in nominal value added		Growth in real value added		Growth in employment		Growth in labour productivity	
	1991	1998	1991-98	1995-98	1991-98	1995-98	1991-98	1995-98
	%	%	%	%	%	%	%	%
ICT producing sectors, manufacturing	0.9	0.7	6.5	11.5	-5.6	-2.3	12.9	14.2
ICT producing sectors, services	3.6	4.2	5.5	8.1	-0.5	0.1	6.1	7.9
ICT using sectors, manufacturing	4.5	3.9	0.8	1.6	-3.0	-1.1	3.9	2.7
ICT using sectors, services	11.3	12.0	2.4	3.2	2.2	2.9	0.2	0.3
Manufacturing	21.0	18.6	0.7	1.5	-2.5	-0.6	3.3	2.1
Business services	47.9	51.8	2.2	2.7	1.0	1.8	1.2	0.9
Total economy	100	100	1.5	1.9	-0.3	0.4	1.8	1.4

Source: ECB calculations based on data from the OECD STAN database.

Note: Owing to the rapid decline of measured prices in the ICT producing manufacturing sector, its share in nominal value added decreased, despite high rates of growth in real value added. Manufacturing and business services include the ICT sectors.

1) Euro area estimate based on Germany, France, Italy and Finland, which together account for around 73% of euro area nominal gross value added.

data from these four countries were used to calculate a euro area estimate for gross value added and employment (in persons) by sector.³ Unfortunately, data for all four countries are available only for the years 1991 through 1998.

Table 3 shows that the ICT producing sectors, both in manufacturing and services, were by far the most dynamic sectors in the euro area in terms of growth rates of real value added and labour productivity, with a clear pick-up in growth rates of both variables in the second half of the 1990s. However, the size of these sectors is relatively small, at less than 5% of total nominal value added. This implies that their impact on developments in economic activity in the euro area as a whole is limited, albeit noticeable, as they do account for about one sixth (0.3 percentage point) of total euro area labour productivity growth over the years 1991-1998. As for the ICT using sectors, there has been no clear increase in the growth rates of real value added or labour productivity. In the ICT using services sector, measured labour productivity growth has even been close to zero. This is also

the sector with the highest employment growth, reaching almost 3% annually in the second half of the 1990s. Indeed, the ICT using manufacturing sector and the ICT producing sectors had zero or even negative employment growth. Lastly, the absence of stronger dynamics in the ICT using sectors than on average in the manufacturing and the business services sectors suggests that, over the period examined, positive spillover effects from the use of ICT have only been limited if present at all.

In comparing these results with those of the United States (see Table 4), four points come to the fore.⁴ First, the growth rates in labour productivity of the ICT producing sectors in

³ The euro area economic structure may differ from the euro area estimate presented here, which is based on only a sub-set of countries. Furthermore, the aggregation of gross value added is not fully harmonised across euro area countries, as use is made of both chain-weighted and fixed-weight aggregates. Moreover, considerably different price indicators are used, including hedonic deflators. However, here (and in the following sub-section), these factors are not taken into consideration. All this implies that there is a bias in the euro area estimate as presented here, the precise size and direction of which are however unknown.

⁴ Due consideration should be given to the fact that the results may be influenced by differences in cyclical positions, in particular for the shorter time period shown (1995-98).

the euro area seem comparable to those in the United States, at 14.2% and 21.3% respectively in the second half of the 1990s, especially since part of the measured difference may be related to statistical problems. The hedonic method used in the United States to separate price and quality changes produces lower price and higher output changes than the approaches used in most of the euro area, where only France uses the hedonic approach (see also Box 2 “Measurement problems related to productivity”). For the period from 1995 to 1998, for example, the average annual decline in the implicit value added deflator for the ICT producing manufacturing sector amounted to 7.1% in the euro area and 12.5% in the United States. The difference of 5.4 percentage points is close to the difference in measured labour productivity growth. Second, in the United States, high productivity growth rates went hand in hand with an above average increase in employment in the ICT producing sectors, which contrasts with employment developments in those sectors in the euro area over this period. This could point to barriers to the creation of firms, resulting for example from the regulatory framework or the relative dearth of venture capital, or to a lack of human capital in these sectors in the euro area. Third, the

share of the ICT producing manufacturing sector in total nominal value added was, at 1.8% in 1998, more than twice as high as the corresponding share in the euro area. This implies that the impact of this most dynamic sector on economy-wide developments is clearly stronger in the United States than in the euro area. Moreover, the output share of all ICT sectors taken together clearly increased in the United States from 19.3% in the first half of the 1990s to 22.7% in the second half, whereas it was more or less stable in the euro area at 20.3% and 20.7% respectively. Fourth, as in the euro area, in the United States the dynamics of the ICT using sectors in terms of value added and labour productivity appear not to be particularly strong when compared with the benchmark sectors (total manufacturing and total business services). This suggests that also in the United States there is little evidence of positive spillover effects from ICT producing sectors to the rest of the economy in the period from 1991 to 1998.

Overall, it can be concluded that output and labour productivity growth in ICT producing sectors in the euro area are clearly higher than in other sectors of the economy. This points to a positive impact of ICT on

Table 4
Sectoral developments in the United States

	Share in nominal value added		Growth in real value added		Growth in employment		Growth in labour productivity	
	1991 %	1998 %	1991-98 %	1995-98 %	1991-98 %	1995-98 %	1991-98 %	1995-98 %
ICT producing sectors, manufacturing	1.5	1.8	20.9	25.6	1.4	3.5	19.2	21.3
ICT producing sectors, services	4.0	4.8	6.3	7.8	3.9	5.3	2.3	2.4
ICT using sectors, manufacturing	3.4	3.0	2.4	2.9	-0.9	0.1	3.3	2.7
ICT using sectors, services	10.4	13.1	4.7	7.4	3.4	4.5	1.2	2.7
Manufacturing	17.4	16.4	4.5	4.1	0.3	0.6	4.2	3.5
Business services	48.3	52.7	4.8	6.6	2.6	2.9	2.2	3.7
Total economy	100	100	3.5	4.0	1.8	2.0	1.7	2.0

Source: ECB calculations based on data from the OECD STAN database.

Note: Owing to the rapid decline of measured prices in the ICT producing manufacturing sector, its share in nominal value added hardly increased, despite high rates of growth in real value added. Manufacturing and business services include the ICT sectors.

Box 2

Measurement problems related to productivity

The problem of measurement of macroeconomic data has featured prominently in recent discussions on the “New Economy”. The techniques to account for quality changes in ICT production and expenditure in the national accounts have received particular attention. However, other measurement problems such as differences in methods to take account of changes in relative prices and problems related to measuring services sector output may be just as important in this regard. This box attempts to shed more light on these measurement issues.

It has been argued that, because conventionally constructed price indices do not fully capture quality improvements, price changes and hence volume changes may be distorted. In particular, it is sometimes argued that measured real GDP growth would be higher if prices of ICT goods were fully adjusted for quality improvements, for instance by using hedonic methods (i.e. a deflation technique based on a regression of the prices of a basket of goods on a set of qualities or characteristics of those goods, in order to identify price changes due to quality changes). However, the effects of such adjustments to ICT deflators would offset each other to some extent at the aggregate (GDP) level, even though disaggregated measures of input, output and expenditure could be affected substantially. Hence, in adjusting the deflation methods used, there is a need for a consistent approach.

This means that, viewed from the production side, hedonic deflators for ICT – or other appropriate adjustments for quality improvements – would have to be used on both the output and input sides. As ICT is often used as an input (intermediate consumption) in other sectors of the economy, input volumes in these sectors are likely to be higher if fuller account is taken of quality improvements, reducing value added in these sectors to the extent that real output is not affected. Consequently, measured productivity increases in the ICT using sectors would be lower. However, the opposite would be true for the ICT producing sectors, where value added would be higher. Viewed from the expenditure side, fuller allowance for quality improvements would not only raise real consumption and investment, but also entail corrections to imports and exports of ICT goods and services, which on balance would lower the contribution of net trade to economic growth for countries which are net importers of ICT. Thus, while the net impact on GDP of the use of hedonic deflators – or any other approach which appropriately adjusts for quality improvements – is likely to be positive, its exact size is difficult to assess a priori.

Furthermore, a consistent use of aggregation procedures to arrive at area-wide aggregates would be required as well. At present, several countries within the euro area use chain-type indices with annually changing weights in their national accounts to compute growth rates of real GDP and its components, as is done in the United States, while other euro area countries do not. Chain-type indices use adjacent period weights to allow for changes in relative prices and output over time. By contrast, some euro area countries use a fixed weight basis. The difference between the two methods is small as long as relative weights do not change significantly over time. However, in the event of significant changes in the relative weights, the use of a fixed basis leads to some distortion of the price and growth measurement, and this bias tends to increase with the distance from the base period. According to EU standards for national accounts (ESA 95), the use of annually chain-weighted measures is to be completed by 2005.

Apart from the issue of ICT deflators and aggregation procedures, there are other sources of measurement error which influence measured output and productivity. In particular, distinguishing between the price and quantity components of output has become increasingly difficult, as the share of services in total value added has increased over time. Identifying volume and price changes in the services sectors is difficult for a number of reasons. First, there is a relative dearth of primary statistics for the services sectors. Second, it is often conceptually more difficult to define the quantity of a particular service provided than the quantity of a

tangible good. In many cases, output of the services sectors is estimated on the basis of inputs, which implies a likely under-estimate of productivity growth. As the size of the services sectors has increased over time, it is likely that the measurement error has increased as well. For instance, in the euro area, the share of services (including government) in nominal value added increased from 56.9% in 1980 to 69.4% in 1999. The extent to which this will influence the international comparability of data is difficult to determine. In principle, any measurement problems associated with the increasing share of services in GDP would be common to all advanced economies. Nevertheless, the share of services may differ across countries. Moreover, and more generally, different accounting practices among statistical agencies could lead to a dissimilar impact. For instance, there are substantial differences in methodologies for distributing ICT expenditure between final and intermediate uses. Differences are observed, for example, in the recording of the business expenditure on software, for which the share that is allocated to investment is generally higher in the United States than in euro area countries.

In summary, differences in existing statistical practices between countries appear to hamper comparisons of output and productivity across countries and sectors. However, since the biases do not work systematically in one direction, the bias in aggregate output and productivity measures is expected to be smaller than the biases at the sectoral level. Thus, while measurement errors do cloud the picture, it seems unlikely that they are the major explanation for the lower recorded productivity growth in the euro area in recent years.

economic growth. However, the size of these sectors is still relatively small, implying that there has so far been only a limited impact on overall economic developments. Moreover, the fact that the growth rates of labour productivity in the ICT using sectors did not rise appreciably faster than in the non-ICT using sectors casts doubt, for the time being, on the existence of positive spillover effects from the use of ICT.

3.2 Contribution of new technologies to growth

To assess the relative importance of ICT for economic growth, a growth accounting exercise has been carried out (see Box 3 below). In particular, the contribution of ICT capital to output and labour productivity growth has been determined and estimates have been made of TFP growth (overall

Table 5
Decomposition of euro area output growth¹⁾

	1991-95 absolute contribution to growth (percentage points)	1996-99 absolute contribution to growth (percentage points)	1991-95 relative contribution to growth (as a percentage of total)	1996-99 relative contribution to growth (as a percentage of total)
ICT capital	0.22	0.42	14	22
- information equipment	0.09	0.15	6	8
- software	0.08	0.22	5	12
- communications equipment	0.05	0.05	3	3
Other capital	0.56	0.47	37	24
Total hours worked	-0.66	0.43	-43	22
TFP	1.41	0.61	92	32
	annual average percentage growth			
Gross real value added	1.5	1.9	100	100

Source: ECB calculations based on data from the OECD and national accounts.

1) Euro area estimate based on France, Germany, Italy and the Netherlands, which together account for around 77% of euro area nominal gross value added.

efficiency of the economic process) for the period from 1991 to 1999. Usually TFP growth shows a pro-cyclical pattern. However, in view of the difficulties in separating trend from cycle, especially over short time periods, no attempt has been made to distinguish trend productivity growth from cyclical effects. Rather, the focus is on actual developments in the course of the 1990s. For the euro area, there is a scarcity of national accounts data on ICT investment. However, the euro area estimates presented below are based on national accounts data from four countries (Germany, France, Italy and the Netherlands), which together account for around 77% of euro area nominal gross value added.⁵

Table 5 presents the decomposition of growth of total real value added of the euro area estimate. The table presents absolute contributions to output growth, as well as relative contributions, which represent the share in total growth. It appears that the relative contribution of ICT capital to growth increased from 14% in the first half of the 1990s to 22% in the second half, largely owing to software and, to a lesser extent, information equipment. The contribution of communications equipment has been remarkably stable over time. The increased contribution of ICT capital to the growth of real value added has been accompanied

⁵ See footnote 3.

Box 3

Accounting for growth

In a growth accounting framework, the growth rate of output (\dot{Y}) is equal to the weighted growth rates of labour input (\dot{L}) and capital input (\dot{K}), plus growth in total factor productivity (\dot{TFP}). The following formula has been used here:

$$\dot{Y} = \alpha_L \dot{L} + \alpha_{K-ict} \dot{K}_{ict} + \alpha_{K-other} \dot{K}_{other} + \dot{TFP}$$

Labour input growth is measured in total hours worked. The share of labour (α_L) can be calculated from the wage share in gross value added (which can be directly extracted from the national accounts) adjusted for the imputed wage income of the self-employed. Owing to data limitations, no measure for the development of the quality of labour has been included in the exercise.

As regards capital inputs, a distinction is made between the contribution of ICT capital (K_{ict}) and that of other, non-ICT capital (K_{other}) to output. In all, six categories of capital have been distinguished. ICT capital consists of the stock of information equipment (including computers), the stock of software, and the stock of communications equipment. Non-ICT capital consists of the stocks of “other machinery and equipment”, transport equipment and non-residential construction. The capital stocks have been constructed using the perpetual inventory method, which uses the past pattern of real investment and assumptions on service lives and age-efficiency patterns of the different types of capital goods. The sum of the shares of the various types of capital is assumed to be equal to $1 - \alpha_L$, a standard assumption in this kind of exercise reflecting constant returns to scale. The relative weights of the different capital goods are based on the user cost of capital, i.e. the gross rate of return that must cover the internal rate of return (assumed common to all capital), the depreciation rate, and the capital gain/loss of the specific capital good.

Ideally, TFP growth should reflect the increase in efficiency in the economic process. Any positive spillover effects from ICT investment should thus be reflected in an increase in the estimate of TFP growth. However, as TFP growth is a residual term, it captures all elements not included in the growth rates of capital and labour inputs and thus also reflects the impact of omitted variables such as the quality of labour and any biases stemming for example from measurement problems. It is thus difficult to draw any firm conclusions from changes in measured TFP growth about the progress of overall efficiency.

by a decline in the absolute and relative contributions of non-ICT capital. The contribution of total hours worked to output growth turned positive in the second half of the 1990s, rising to 22% in relative terms, following a substantial decrease in hours worked in the first half of the decade. So far, there has been no evidence of an increase in TFP growth. On the contrary, TFP growth declined markedly in both absolute and relative terms in the 1995-99 period. In this context, it should be noted that the measure of TFP growth used here implicitly also includes changes in the quality of labour. In a situation of increasing labour market flexibility associated with rising employment also of relatively low-skilled and inexperienced people, the quality of labour input may grow at a slower pace than in a situation in which these people would not enter employment. Hence, the decrease in measured TFP growth in the second half of the 1990s is not necessarily a negative sign, as it probably also reflects the rise in employment.

A closely related exercise focuses on the decomposition of labour productivity growth, whereby the growth in total hours worked is subtracted from the growth in output and

from the growth in the various inputs. Under this approach, growth in labour productivity reflects increases in the amount of capital available per hour worked (capital deepening) and the growth rate of TFP. Table 6 presents the results. It appears that labour productivity growth decelerated from 2.4% in the first half of the 1990s to 1.3% in the second half. This deceleration can be attributed to both a decline in TFP growth and a decrease in the rate of capital deepening of non-ICT capital. By contrast, the capital deepening of ICT increased over the same period from 11% to 30% in terms of relative contributions, in particular on account of software and information equipment.

Overall, these outcomes suggest that the importance of ICT capital accumulation for economic growth in the euro area increased in the second half of the 1990s. The euro area is thus experiencing positive growth effects from ICT. However, on the basis of the data available, it has not been possible to detect positive spillover effects from ICT investment on the rest of the economy, since, according to the estimates presented here, TFP growth did not increase in the course of the last decade.

Table 6
Decomposition of euro area labour productivity growth¹⁾

	1991-95 absolute contribution to growth (percentage points)	1996-99 absolute contribution to growth (percentage points)	1991-95 relative contribution to growth (as a percentage of total)	1996-99 relative contribution to growth (as a percentage of total)
ICT capital deepening	0.26	0.39	11	30
- information equipment	0.10	0.14	4	11
- software	0.10	0.21	4	16
- communications equipment	0.06	0.04	3	3
Other capital deepening	0.73	0.28	30	22
TFP	1.41	0.61	59	47
	annual average percentage growth			
Labour productivity	2.4	1.3	100	100

Source: ECB calculations based on data from the OECD and national accounts.

Note: Figures may not add up due to rounding.

1) Euro area estimate based on France, Germany, Italy and the Netherlands, which together account for around 77% of euro area nominal gross value added.

4 Concluding remarks

The analysis of output and productivity developments in the euro area undertaken in this article suggests that in the period up to 2000 there were only very limited, if any, positive spillover effects from the use of ICT. For the period since then, based on partial information, there is no evidence that this picture would have significantly changed. There is thus no reason to believe that the growth rate of potential output of the euro area would have risen significantly in recent years as a result of ICT developments. However, at the same time, there is evidence of an increased contribution from ICT to overall economic growth.

Looking forward, it thus might be that the forces of technological change are already discretely operating in the background. An enhancement of structural reform in the euro area economies would clearly contribute to reaping the full benefits of the new technological possibilities. In this respect, it is somewhat disconcerting that, in the period examined, even the dynamic ICT producing sectors have not contributed to employment growth in the euro area. The introduction of new technologies requires flexible markets

for other input factors, including labour, if production processes are to be organised more efficiently.

Taken on its own, however, the increased importance of ICT for economic growth in the euro area implies that the uncertainties surrounding estimates of medium-term developments in potential output growth have become skewed to the upside. Against this background, the ECB will continue to analyse closely whether the production and use of ICT will lead to an acceleration of productivity growth in the euro area.

The uncertainty surrounding the estimates of current or future potential output is one reason why the ECB treats these estimates with caution and does not mechanistically link its policy to them. Rather, the approach taken by the ECB in its two-pillar monetary policy strategy explicitly takes into account such uncertainty and thereby contributes to robust decision-making based on all available information. This enables the ECB to react flexibly to any new developments, including those which would signal an acceleration of productivity growth.

Measures of underlying inflation in the euro area

The primary objective of the ECB is to maintain price stability in the euro area. The Governing Council of the ECB has defined price stability as “a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%”. It has also made clear that price stability is to be maintained over the medium term.

The HICP – a weighted average of prices of a large number of individual goods and services consumed in the euro area – was chosen to quantify the ECB’s primary objective because this is the homogeneous statistic that most closely approximates the price of the basket of consumption goods and services purchased by private households in the euro area.

The rate of HICP inflation, or “headline” inflation, is subject, in the short term, to a number of sector-specific disturbances. The latter, if large, may temporarily mask longer-term trends in consumer prices, thereby complicating the interpretation of headline HICP figures. This fact, common to consumer price indices in all countries, has motivated the development of suitably modified indices, characterised by the attempt to exclude the erratic or sector-specific influences, and aimed at capturing the “underlying” component related to general trends. While the objective of the ECB is unambiguously defined in terms of the headline HICP, measures of underlying inflation may be useful to identify and illustrate longer-term price trends and the nature and sources of the forces driving headline price dynamics.

Whilst intuitively appealing, underlying inflation has proven to be an elusive concept in practical applications. Many alternative methodologies have been proposed to operationalise it. This article summarises the properties of various approaches and presents some of the measures that can be computed for the euro area.

I Introduction

The Treaty stipulates that the maintenance of price stability is the primary objective of the ECB. In this context, the Governing Council of the ECB decided to publish a quantitative definition of price stability in early October 1998. The following definition was adopted: “price stability shall be defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2%”. The Governing Council also indicated that price stability was to be maintained over the medium term.

The headline HICP is the measure chosen to quantify the ECB’s primary objective, because this is the homogeneous statistic that most closely approximates the price of the basket of consumption goods and services purchased by private households in the euro area. The focus on the headline HICP guarantees effective protection against the loss of purchasing power for the public. The focus

on the medium term reflects the fact – confirmed by a substantial body of economic research – that price developments can be determined by monetary policy over this horizon. It also acknowledges that the prices of goods and services are, over shorter horizons, subject to other factors, related, for example, to seasonal effects or other sources of volatility. These short-run influences are typically sector-specific (“idiosyncratic” or “relative price” effects). In the HICP, which is a weighted average of prices of many individual goods and services, idiosyncratic developments normally cancel one another out over time and do not significantly affect developments over the time horizon over which price stability is to be maintained. With regard to seasonal effects, the ECB also publishes seasonally adjusted HICP series (see the document entitled “Seasonal adjustment of monetary aggregates and Consumer Price Indices (HICP) for the

euro area” (August 2000), available on the ECB’s website, and Table 4.1 in the “Euro area statistics” section).

However, when temporary or idiosyncratic developments are large, they may have a significant short-run impact on the “headline” aggregate price index and temporarily mask underlying developments in the general level of prices. In order to identify the common and lasting trends in the general level of prices, a number of measures of “underlying”, or “core”, inflation have been proposed in the economic literature. All these measures aim at purging the “headline” measure of inflation from specific idiosyncratic and/or one-off influences.

Whilst intuitively appealing, the concept of underlying inflation has proven to be fraught with ambiguities in practical applications. Most frequently, the various measures lack theoretical foundations, with adjustments to the headline series often motivated by judgemental or statistical criteria. Moreover, there is no consensus on the criteria to be used for the empirical evaluation of the different proposals. As a result, a number of methodologies have been put forward to determine when a price change can be

considered “erratic”, or “persistent”, paving the way for the construction of many measures of underlying inflation.

This article reviews the foundations and properties of available measures, in the more general context of a comprehensive analysis of short-term price developments. Various measures of underlying inflation could help to identify the nature and sources of the shocks affecting headline prices. However, none of them can be trusted to provide consistently useful indications over time. Hence, such measures cannot be used as key indicators for policy analysis.

The ECB systematically monitors various narrow measures of consumer price inflation, such as the HICP excluding unprocessed food and energy. These are studied in the context of the analysis of price developments, and discussed extensively in the ECB Monthly Bulletin. Such narrow measures of inflation help, *inter alia*, to identify the driving forces behind developments in headline HICP inflation (see Box 3 on “An analysis of price developments: the breakdown of the overall HICP into its main components” in the December 2000 issue of the ECB Monthly Bulletin).

2 Underlying inflation: approaches and purposes

There are two broad approaches to the problem of measuring underlying inflation.

The first approach refers explicitly to the time dimension and views underlying inflation as persistent, or lasting, inflation. Measures of underlying inflation that reflect this view try to eliminate “temporary” price changes from the headline index. Such price changes are deemed to produce an impact on headline inflation which dies away automatically over the medium term. Examples of temporary price changes are those generated by events that occur on an occasional basis, or by events that, although perhaps recurrent, generate short-term fluctuations in prices which cannot be eliminated by monetary

policy given the lags with which changes in policy affect prices. These measures are normally based on the time series analysis of the aggregate price index, rather than on its various components at each point in time. However, measures that exploit additionally the information contained in individual price components have also been proposed.

The second approach interprets underlying inflation as generalised inflation, *i.e.* the component of price changes which is common to all individual goods and services. In this case, the relevant distinction is between changes in the general level of prices, on the one hand, and relative price changes, owing to sector-specific demand or supply shocks

affecting individual goods and services, on the other hand. While the first component may signal a risk of widespread inflation, it is argued that the second component captures either erratic movements (“noise”) around the relevant common developments, or simply reflects the normal and desirable flexibility in relative prices. According to this view, measures of underlying inflation are obtained after excluding erratic price changes from the headline index. These measures are typically based on the analysis, at each point in time, of the cross-section of price changes of all individual goods and services included in the overall index.

The two approaches are interrelated. For example, measures of underlying inflation that capture the common component of individual price changes may also capture their persistent component as the effects of erratic, and thus probably temporary, price changes have been excluded.

In the light of its multifaceted nature, the empirical measures of underlying inflation can serve a number of different purposes.

Their most straightforward application is to help in the *analysis of the characteristics of the factors affecting headline inflation*. The source, nature and duration of the shocks influencing prices are uncertain at the time they arise. Hence, this sort of analysis is routinely conducted by most central banks, including the ECB (see an earlier article entitled “Price

and cost indicators for the euro area: an overview”, which was published in the August 2000 issue of the Monthly Bulletin). Knowing that certain developments in the HICP are attributable to movements of a specific group of prices, for example, makes it easier to gauge whether those developments should be attributed to a shock affecting only relative prices, or to more broadly based inflationary or deflationary pressures.

Measures of underlying inflation have also been proposed as *coincident indicators*, which might help in assessing the current trend, or tendency, of headline inflation. Changes in underlying inflation occur when the effect on prices of any given shock is generalised and persistent, thus entrenched in headline inflation. An increase – or decrease – in underlying inflation could therefore provide evidence that headline inflation has drifted towards a higher – or lower – mean.

Conceivably, measures of underlying inflation might also serve as *leading indicators* of future headline inflation. As they are meant to capture the persistent component of inflation, they should in principle better foreshadow changes in the observed headline index. In this respect, the usefulness of underlying inflation measures depends crucially on the future horizon over which they may show leading indicator properties, a feature which must be analysed empirically on a case-by-case basis.

3 Empirical approaches to measuring underlying inflation

The two concepts of underlying inflation – as a way of discriminating between transitory and persistent developments in inflation, or as a way of distinguishing between common and idiosyncratic (i.e. sector-specific) components in the price changes of individual goods and services – have been given operational content in different ways. Existing empirical approaches to measuring underlying inflation differ along several dimensions.

The most clear-cut distinction relates to whether time series or cross-section information is used to estimate underlying inflation. By and large, these two paths are followed by the approaches emphasising the persistent and the generalised nature of price changes respectively.

Empirical approaches, however, could also be grouped along other dimensions. One of these pertains to the type of data used. Some

Table I
Empirical approaches to the measurement of underlying inflation

		Methodology ¹⁾			
		Time series		Cross-section	
		Economic basis	Statistical basis	Economic basis	Statistical basis
Data	Individual price changes	.	Dynamic Factor Index	.	Exclusion-based measures, trimmed means, variability-adjusted measures
	Headline inflation rate (possibly together with other variables)	VARs	Moving averages, Filtered series	-	-

1) See Wynne, M. (1999), "Core inflation: a review of some conceptual issues," ECB Working Paper No. 5.

approaches use the information contained in individual price series, while other approaches focus on aggregate price changes, sometimes extending the information to consider the interplay with economic variables other than prices themselves (such as developments in economic activity or monetary aggregates). A third dimension relates to the choice of using purely statistical techniques to distinguish between "temporary" and "persistent" inflationary developments, rather than economic theories to derive a definition of underlying inflation and its corresponding measure. No consensus has yet emerged on how to choose among the empirical measures.

Table I presents the most frequently used approaches to measuring underlying inflation along the three aforementioned dimensions. In the remainder of this section, these approaches, grouped according to whether the cross-section or the time series dimension is used, are described in some detail.

Measures based on time series information

Measures within this class attempt to discriminate between "temporary" and "persistent" components of developments in the headline index, in order to identify underlying inflation with the second component. Sufficiently long data series are necessary for this purpose. In most cases, the lack of solid theoretical foundations for the definition of underlying inflation is taken for granted, so that the trend component of headline inflation is identified by using purely statistical techniques. A few attempts, however, have also been made to derive a concept and a corresponding measure of underlying inflation from economic theory, leading to applications based on vector autoregressions (VARs). Some selected measures of underlying inflation, based on time series information, are described in Box I.

Box I

Selected time series-based measures

Smoothing techniques

A frequently used approach for distinguishing between temporary and persistent, or trend, inflationary developments is to define the trend as the average of current and past headline inflation rates over a certain number of time periods. These "moving averages" have a backward-looking nature since, by construction, they do not take into account expected future developments. This approach has the advantage of simplicity, but it has the drawbacks of being rather mechanistic and slow to capture new trends in the data.

The Dynamic Factor Index model

In order to address the problem related to the backward-looking nature of moving averages, it is necessary to make further assumptions on the time series characteristics of trend inflation. When such assumptions are coupled with the use of information on individual price changes, in addition to aggregate ones, the so-called Dynamic Factor Index model is obtained. This model can account for persistence in both the idiosyncratic and the common components of price changes. The measure based on the Dynamic Factor Index model makes use of two technical assumptions: first, the idiosyncratic and common components of price changes follow mean reverting dynamic time series models; second, underlying inflation is unaffected by past, present or future idiosyncratic disturbances.

Vector autoregressions

The assumption that trend inflation follows a certain dynamic time series model has the disadvantage of being based on purely statistical considerations, possibly difficult to justify on economic grounds. Other proposals to measure underlying inflation have therefore focused on assumptions derived from economic theory, notably that monetary policy has no effects on real economic variables in the long run. Practical implementations are typically based on time series statistical models (“vector autoregressions”, or VARs) including inflation and other economic variables. Underlying inflation is identified with the part of headline inflation whose movements have no cumulated effect on real variables in the long run.

The computation of time series measures of underlying inflation for the euro area faces a major difficulty, namely the fact that HICP data are only available from 1995. Given this constraint, applications to the euro area need to exploit mainly the cross-section dimension of the data.

Measures based on cross-section information

Measures within this class attempt to distinguish the common component of

individual price changes, which reflects monetary developments in the economy, from the relative price component, which reflects events that affect only particular markets. The existing approaches differ in the way they use the cross-section information in order to select the price changes to be excluded from the headline index. Some commonly used measures based on cross-section information are described in Box 2.

Box 2

Selected cross-section-based measures

Exclusion-based measures

The so-called exclusion-based measures are calculated by excluding from the index certain prices of individual goods and services deemed to be particularly volatile. The selection of such goods and services is based on historical experience. Once chosen, these prices are excluded from the headline index irrespective of their volatility in subsequent periods. An example is the price of energy products, which, based on several historical episodes, has been found to be particularly volatile. Often excluded are also the prices of certain consumption goods, such as unprocessed food, alcoholic beverages or tobacco, which can be heavily influenced by factors such as seasonality or tax changes.

Variability-adjusted measures

Rather than choosing between the extreme alternatives of excluding or including certain prices, an intermediate approach is to apply weights related to the variability that those prices have displayed in the past. In the Edgeworth index, for example, each individual price change is weighted by the inverse of its variance over a certain period. An advantage of the Edgeworth index is that it allows for a systematic update of the weights as relative price volatilities change over time. An important limitation, however, is that the weight attached to each individual price when computing underlying inflation is completely unrelated to the expenditure weight of the same price in the headline index of consumer prices. Equally volatile prices are therefore treated equally, even if they have different expenditure weights. In order to address this limitation, “double weighting” schemes, combining expenditure and variance-based weights, have also been proposed.

Trimmed means

An alternative approach to measuring underlying inflation, which does not focus on the volatility of individual prices over time, is based on “trimmed means”. The distinguishing feature of these means, compared with headline inflation, is that they are computed over a restricted number of individual price changes, rather than on all price changes included in the headline index. Excluded, or trimmed, prices are those displaying, at each point in time, the largest and smallest values in the sample of price changes. Depending on the number of excluded observations, different trimmed means can be obtained. A 5% symmetric trimmed mean, for example, excludes the upper and lower 5% from each side of the price distribution. The limiting case of trimmed means is the sample median, corresponding to a symmetric trimming of 50% (i.e. leaving only the median price in the sample). In Section 4 of this article (“An illustration for the euro area”), results related to two frequently used levels of trim, equal to 5% and 15%, are reported.

The exclusion-based measures are probably the most commonly used measures of underlying inflation. Based on the experience of the oil shocks in the 1970s, fuels used in the production of energy are often selected as one component to be removed, leading to the “excluding energy” measure. In order to remove erratic fluctuations associated with the weather (i.e. harvest failures, bumper crops), food prices, especially of goods directly produced as a result of agricultural and farming activities, are also often excluded from the headline index. This gives rise to the so-called “excluding unprocessed food” or “excluding seasonal food” indices. Finally, in combination with the previously mentioned one, the “excluding energy and unprocessed food” measure is also frequently used.

Exclusion-based measures do not require any complex estimation and statistical offices typically compute them directly together with the headline measure. For example, each month Eurostat reports three such measures

(“excluding energy”, “excluding energy, food, alcohol and tobacco”, and “excluding tobacco”) as part of the monthly HICP statistical release. Nevertheless, they do not always effectively exclude the most volatile components from the headline index, simply because the excluded items do not turn out to be the most volatile components in every period.

Table 2 shows the components of the HICP that proved to be the most and least volatile in the euro area over the four years from 1997 to 2000. The components shown in bold are those excluded by the “excluding energy and unprocessed food” measure of underlying inflation. The table clearly shows that such components were indeed among the most volatile, in terms of standard deviation, of the 94 components included in the HICP. Given the large fluctuations in oil prices in 1999 and 2000, it is not surprising to find “liquid fuels” at the highest position in the table. However, the price of fruit, which

Table 2**The ten most volatile components of the HICP ...**

Description	HICP weight ¹⁾	Mean	Standard deviation
Liquid fuels	0.8	11.7	23.5
Heat energy	0.5	4.4	9.2
Fuels and lubricants for personal transport equipment	4.0	5.5	8.6
Gas	1.3	3.9	6.2
Coffee, tea and cocoa	0.6	0.6	6.2
Vegetables	1.8	1.5	4.3
Oils and fats	0.6	-1.7	3.8
Passenger transport by sea and inland waterway	0.1	3.9	3.8
Insurance connected with transport	0.7	2.4	3.5
Fruit	1.2	1.2	3.0

... and the ten least volatile

Hairdressing salons and personal grooming establishments	1.2	2.2	0.3
Major household appliances, electric or not, small elect. hous. appl.	1.1	-0.7	0.3
Newspapers and periodicals	1.0	2.0	0.3
Glassware, tableware and household utensils	0.6	1.4	0.2
Bread and cereals	2.7	1.1	0.2
Maintenance and repair of personal transport equipment	2.5	2.2	0.2
Restaurants, cafés and the like	6.2	2.1	0.2
Major tools and equipment and small tools and misc. accessories	0.5	0.5	0.2
Other personal effects	0.5	0.9	0.2
Furniture and furnishings	2.9	1.2	0.2

Sources: Eurostat and ECB calculations.

1) In 2000, as percentages. Based on 12-month changes and four-digit disaggregation over the 1997-2000 period. Items excluded by the “excluding energy and unprocessed food” measure are shown in bold.

is relatively stable with respect to that of liquid fuels, is still 15 times more volatile than the price of components included in the bottom half of the table. On the other hand, Table 2 shows that other prices characterised by a high degree of volatility over the sample period are not kept out of the “excluding energy and unprocessed food” measure.

Variability-adjusted measures should be capable of addressing this limitation of exclusion-based measures, since they play down, by construction, the effects of all historically volatile items. The Edgeworth index, for example, weighs each individual price change by the inverse of its variance over a certain period. At each point in time, the weights are updated together with the estimates of the individual variances. Table 3 reports the Edgeworth weights assigned, on average over the 1997-2000 period, to the most and least volatile HICP components already presented in Table 2. The HICP

expenditure weights are also displayed for comparison.

On average, the Edgeworth index tends to reduce the weights of highly volatile components. “Liquid fuels”, for example, weigh approximately 0.01% in the Edgeworth index, as compared with a value of 0.8% in the HICP. The opposite normally applies to the least volatile components, receiving a weight of up to 1.8% each. By and large, HICP components that have a very low weight in the Edgeworth index tend to coincide with those excluded by the “excluding energy and unprocessed food” measure of underlying inflation. Table 3 also highlights the main drawback of the Edgeworth index, i.e. the fact that it is defined independently from the HICP weights. As a result, it is not necessarily the case that highly volatile goods will receive a lower weight than in the headline HICP. The “passenger transport by sea and inland waterway” item,

for example, receives an Edgeworth weight higher, by over 70%, than the corresponding HICP weight, even if the influence of this item should be played down because of its high volatility. The opposite can happen for low volatility items, as is most evident in the case of “restaurants, cafés and the like”.

It has been documented for many countries that the distribution of price changes fails to conform to the normality hypothesis. This result can be shown to hold also for the euro area. It suggests that trimmed means – which are robust to deviations of the data from normality – could represent useful additional measures of underlying inflation. Unlike the exclusion-based measures, the list of items included in/excluded from the computation of trimmed means does not remain constant over time. Table 4 presents the HICP items

that are most often excluded from a 15% symmetric trimmed mean. The table reports the number of months, as a percentage of the total, in which each item is excluded from the computation of the mean, because its price change is either among the smallest (“from bottom of distribution”), or among the largest (“from top of distribution”). The table shows that while various items in the table correspond to those excluded by the “excluding energy and unprocessed food” measure, there are also exceptions. Such exceptions coincide with goods and services whose price changes, although not highly volatile, are not representative of general inflationary trends (for example tobacco). Trimmed means, however, base the exclusion of individual items on purely statistical considerations, which could sometimes be judged inappropriate on economic grounds.

Table 3
Edgeworth weights for the ten most volatile components of the HICP ...

Description	Edgeworth weight ¹⁾ (a)	HICP weight ²⁾ (b)	Difference in % 100·((a-b)/b)
Liquid fuels	0.01	0.8	-98.8
Heat energy	0.06	0.5	-88.0
Fuels and lubricants for personal transport equipment	0.05	4.0	-98.8
Gas	0.10	1.3	-92.3
Coffee, tea and cocoa	0.04	0.6	-93.3
Vegetables	0.10	1.8	-94.4
Oils and fats	0.25	0.6	-58.3
Passenger transport by sea and inland waterway	0.17	0.1	70.0
Insurance connected with transport	0.15	0.7	-78.6
Fruit	0.17	1.2	-85.8
... and for the ten least volatile			
Hairdressing salons and personal grooming establishments	1.49	1.2	24.2
Major household appliances, electric or not, small elect. hous. appl.	0.47	1.1	-57.3
Newspapers and periodicals	1.79	1.0	79.0
Glassware, tableware and household utensils	1.79	0.6	198.3
Bread and cereals	1.79	2.7	-33.7
Maintenance and repair of personal transport equipment	1.76	2.5	-29.6
Restaurants, cafés and the like	1.79	6.2	-71.1
Major tools and equipment and small tools and misc. accessories	1.72	0.5	244.0
Other personal effects	1.79	0.5	258.0
Furniture and furnishings	1.79	2.9	-38.3

Sources: Eurostat and ECB calculations.³⁾

1) Average weights over the sample period, as percentages.

2) In 2000, as percentages. Based on 12-month changes and four-digit disaggregation over the 1997-2000 period. Items excluded by the “excluding energy and unprocessed food” measure are shown in bold.

3) For a more detailed description of the methodology, see J. L. Vega and M. Wynne (2001), “An evaluation of some measures of core inflation for the euro area,” ECB Working Paper No. 53.

Table 4**The ten HICP items that are most often excluded from the 15% symmetric trimmed mean**

Description	Frequency of exclusion ¹⁾		
	From bottom of distribution (a)	From top of distribution (b)	Total (a+b)
Telephone and telefax equipment	100.0	0.0	100.0
Telephone and telefax services	100.0	0.0	100.0
Equip. for reception, recording and reprod. of sound and pictures	100.0	0.0	100.0
Photographic and cinematographic equipment and optical instruments	100.0	0.0	100.0
Information processing equipment	100.0	0.0	100.0
Liquid fuels	41.7	56.2	97.9
Heat energy	35.4	52.1	87.5
Tobacco	0.0	87.5	87.5
Gas	31.2	54.2	85.4
Major household appliances, electric or not, small elect. hous. appl.	83.3	0.0	83.3

Sources: Eurostat and ECB calculations.

1) Number of months, as a percentage of the total, in which each item is excluded from the computation of the mean. Based on 12-month changes and four-digit disaggregation over the 1997-2000 period.

For example, trimmed means disregard the prices of telecommunications, computers and other electronic equipment, which are typically among those displaying extremely small, and possibly negative, changes. Economic reasoning, however, suggests that, although abnormal with respect to those of other goods and services, the current dynamics of the prices of electronic equipment might be a long-lasting phenomenon. If this turned out to be the case, they could usefully be included in a measure of underlying inflation.

Other features of the alternative measures of underlying inflation

In order to play a useful role in the analysis of current price developments, measures of underlying inflation should satisfy standard statistical criteria, such as efficiency and unbiasedness. These features need to be analysed empirically on a case-by-case basis. Other characteristics of different measures of underlying inflation, however, tend to be valid on a general basis, and independently from the selected case study.

All measures based on cross-section information are typically available on a timely basis, in the sense that they can be computed as soon as new headline inflation figures are released. Measures based on VARs, on the contrary, may only be available with a delay with respect to headline inflation, if they include variables, such as output, which are published with some lag.

Statistical measures are typically not robust to changes in auxiliary assumptions. This is an important limitation, because different assumptions are often equally justifiable, in the sense that they may be characterised by advantages and drawbacks in similar proportions. Such assumptions are related, for example, to the horizon over which price changes are computed – often chosen to be equal to one month or 12 months – or to the level of disaggregation of the analysis, which can exploit both the geographical and the sectoral dimensions. Choosing between these alternative assumptions is often difficult. With regard to the horizon over which price changes are computed, for example, analyses based on one-month changes have the advantage of exploiting each month only new information, while focusing on 12-month

changes allows the analyst to remove seasonal components that may characterise individual price changes. Even if exclusion-based measures do not rely on explicit auxiliary assumptions, they are also not robust in the sense that many measures can be devised depending on which specific price components are judged to be highly volatile.

Developments in some measures of underlying inflation are easier to interpret in terms of their economic determinants. More precisely, measures which exploit the cross-section information of individual prices make it easier to determine which price components are

responsible for any divergence occurring between underlying and headline inflation at any point in time. From this viewpoint, VAR-based measures may prove more difficult to interpret.

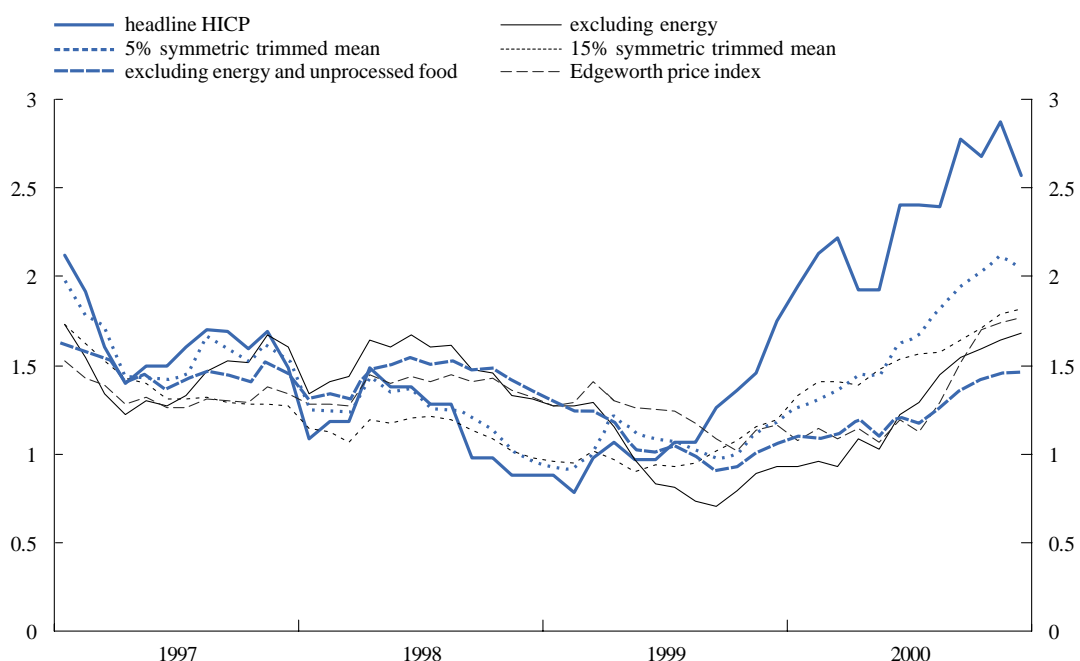
Finally, all measures that are obtained as a result of econometric estimation along the time series dimension have the drawback that past underlying inflation may change significantly when new data are released. The whole history of a proposed measure of underlying inflation may therefore change when new information becomes available and a new estimation is run.

4 An illustration for the euro area

Chart I shows the evolution of the HICP and of selected measures of underlying inflation for the euro area over the period from 1997 to 2000. The chart plots the “excluding energy and unprocessed food” and the “excluding

energy” measures, two trimmed means with frequently used levels of trim (see Box 2) and different horizons for the calculation of price changes and, finally, the Edgeworth price index. For illustrative purposes, one of the two

Chart
Headline inflation and measures of underlying inflation in the euro area: 1997 to 2000
 (monthly data)



Sources: Eurostat and ECB calculations. Trimmed means and the Edgeworth index are based on euro area data at the maximum level of disaggregation. The 5% symmetric trimmed mean and the Edgeworth index are based on 12-month changes; the 15% symmetric trimmed mean is based on one-month changes.

trimmed means is computed on the basis of one-month, rather than 12-month, changes.

Broadly speaking, all measures provide mutually consistent indications. They all tend to attribute to temporary components a significant fraction of the increase in the rate of HICP inflation that occurred in the second half of 1999 and in 2000. In addition, they all tend to be lagging indicators of the reversal in the rate of HICP inflation occurred at the beginning of 1999, when the latter started increasing, but all measures of underlying inflation continued to decrease as in previous months.

Significant divergences between different measures can be observed over selected sub-

periods. For instance, the “excluding energy and unprocessed food” and the “excluding energy” measures have tended to increase less than the two trimmed means since the second half of 1999. The reason is that the trimmed means reflect the exclusion of abnormally low price increases, or price reductions (e.g. in telecommunications and computers). The Edgeworth index, which displays remarkable similarities to the “excluding energy and unprocessed food” measure over most of the sample, becomes closer to the 15% symmetric trimmed mean at the very end of 2000. Finally, the 15% symmetric trimmed mean reacted less slowly, relative to the other measures, to the reversal in the rate of HICP inflation in 1999.

5 Conclusions

This article has provided a review of concepts and empirical methodologies that are behind the construction of measures of underlying inflation. It has also provided an illustration of some of these measures for the euro area, based on data for the Harmonised Index of Consumer Prices.

Underlying inflation is an elusive concept: various measures can be calculated, depending on a number of assumptions, and their interpretation is often ambiguous. Alternative measures of underlying inflation should therefore always be interpreted with caution and analysed jointly with other information, including headline inflation. In no way can a single measure be trusted to capture, by itself, the deep sources of inflationary or deflationary pressures prevailing in the economy, and so replace a broadly based assessment of price developments. The analysis of price developments conducted and periodically published by the ECB covers the main components of the HICP, thereby facilitating the early detection of the nature of inflationary and deflationary shocks and the identification of their causes.

The ECB has a clear mandate, which is to maintain price stability in the euro area. The Governing Council has unambiguously defined the primary objective of price stability in terms of the year-on-year rate of increase in the HICP for the euro area. The HICP is the homogeneous statistic that most closely approximates the price of the basket of consumption goods and services purchased by households in the euro area. HICP figures, published by Eurostat, are available to the public in a regular and timely fashion. Hence, the focus on headline HICP enhances the transparency of the ECB's monetary policy.

While the ECB's objective is defined in terms of the headline HICP, different measures of underlying inflation can occasionally be useful in summarising information on the nature and size of the shocks affecting headline inflation. By highlighting the transitory nature of certain inflationary shocks, they may contribute to focusing the public's attention on medium-term price developments.



Euro area statistics



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

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

In the tables, the break is shown by means of a line denoting the enlargement of the euro area. In the charts, the break is indicated by a dotted line. Absolute and percentage changes for 2001 calculated from a base in 2000 use, as far as possible, a series which takes into account the impact of the entry of Greece.

For analytical purposes, data for the euro area plus Greece up to end-2000 are shown in the additional tables starting on page 71* (for details, see the general notes).

Conventions used in the tables

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

Euro area overview table

Summary table of economic indicators for the euro area

(annual percentage changes, unless otherwise indicated)

1. Monetary developments and interest rates

	M1 ¹⁾	M2 ¹⁾	M3 ¹⁾²⁾		MFI loans to euro area residents excluding MFIs and general government ¹⁾	Securities issued by non-financial and non-monetary financial corporations ¹⁾	3-month interest rate (EURIBOR, % per annum, period averages) ⁷⁾	10-year government bond yield (% per annum, period averages) ⁸⁾
				3-month moving average (centred)				
	1	2	3	4	5	6	7	8
1999	12.4	6.8	5.7	-	10.0	19.2	2.96	4.66
2000	8.0	4.4	5.5	-	9.6	20.0	4.40	5.44
2000 Q3	6.9	4.1	5.2	-	9.4	18.5	4.74	5.44
Q4	5.6	3.8	4.8	-	9.6	18.2	5.02	5.28
<i>Euro area enlargement</i>								
2001 Q1	2.4	2.9	4.6	-	9.1	23.6	4.75	4.99
Q2	.	.	.	-	.	.	4.60	5.19
2001 Jan.	1.5	2.6	4.5	4.6	9.2	22.7	4.77	5.01
Feb.	2.0	2.8	4.4	4.5	8.9	24.1	4.76	5.02
Mar.	2.1	3.3	4.6	4.6	8.6	26.5	4.71	4.94
Apr.	1.9	3.3	4.8	4.9	8.4	24.1	4.69	5.10
May	3.5	3.8	5.4	.	8.0	.	4.64	5.26
June	.	.	.	.	.	.	4.45	5.21

2. Price and real economy developments

	HICP	Industrial producer prices	Hourly labour costs (whole economy)	Real GDP	Industrial production (excluding construction)	Capacity utilisation in manufacturing (percentages)	Employment (whole economy)	Unemployment (% of labour force)
1999	1.1	-0.4	2.3	2.5	2.0	81.8	1.6	9.9
2000	2.3	5.4	3.9	3.4	5.6	83.8	2.0	8.9
2000 Q3	2.5	5.8	3.8	3.3	5.8	83.9	2.0	8.7
Q4	2.7	6.1	3.6	2.9	5.5	84.7	2.2	8.5
<i>Euro area enlargement</i>								
2001 Q1	2.5	4.5	.	2.5	4.3	84.4	.	8.4
Q2	.	.	.	.	.	83.7	.	.
2001 Jan.	2.4	4.8	-	-	5.6	-	-	8.5
Feb.	2.6	4.5	-	-	4.3	-	-	8.4
Mar.	2.6	4.2	-	-	3.1	-	-	8.4
Apr.	2.9	4.2	-	-	1.7	-	-	8.3
May	3.4	3.6	-	-	.	-	-	8.3
June	.	.	-	-	.	-	-	.

3. Balance of payments, reserve assets and exchange rates

(EUR billions, unless otherwise indicated)

	Balance of payments (net flows)				Reserve assets (end-of-period positions)	Effective exchange rate of the euro: broad group (1999 Q1 = 100)		US dollar/euro exchange rate
	Current and capital accounts	Of which goods	Direct investment	Portfolio investment		Nominal	Real (CPI)	
1999	7.7	83.4	-120.6	-41.7	372.3	96.6	95.8	1.066
2000	-24.2	53.0	-21.5	-136.4	377.7	88.2	86.3	0.924
2000 Q3	-4.5	17.9	-94.3	3.5	408.0	87.3	85.3	0.905
Q4	-10.4	11.2	-57.0	0.9	377.7	85.9	83.6	0.868
<i>Euro area enlargement</i>								
2001 Q1	-5.8	6.7	-47.5	-38.5	393.4	91.4	88.8	0.923
Q2	.	.	.	.	.	89.5	86.7	0.873
2001 Jan.	-7.1	-1.9	-4.5	-45.5	386.0	91.7	89.0	0.938
Feb.	3.6	3.3	-0.8	0.9	384.3	91.0	88.5	0.922
Mar.	-2.3	5.3	-42.3	6.1	393.4	91.4	88.9	0.910
Apr.	-1.1	5.3	0.1	-20.9	386.7	91.0	88.4	0.892
May	.	.	.	.	408.9	89.3	86.5	0.874
June	.	.	.	.	.	88.1	85.2	0.853

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

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

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

2) Excluding holdings of money market fund shares/units by non-residents of the euro area.

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 euro area credit institutions in euro	Main refinancing operations	Longer-term refinancing operations	Fine-tuning reverse operations
		1	2	3	4	5	6	7	8
2001	2 Feb.	118,611	264,109	20,800	4,895	238,202	188,000	49,998	0
	9	118,612	263,935	19,529	5,104	234,240	184,000	49,998	0
	16	118,612	263,845	19,827	5,363	215,455	165,307	49,998	0
	23	118,612	263,734	20,292	5,472	273,967	220,305	49,998	0
	2 Mar.	118,612	261,032	21,542	5,612	237,017	182,000	54,999	0
	9	118,612	260,395	21,156	5,831	225,058	169,999	54,999	0
	16	118,612	257,433	21,235	5,824	249,571	194,000	54,999	0
	23	118,612	256,078	23,197	5,791	241,408	186,000	54,999	0
	30	118,464	271,583	20,123	5,410	244,282	184,999	59,102	0
	6 Apr.	118,464	269,050	21,952	5,335	227,143	167,984	59,102	0
	13	118,464	269,145	21,763	4,915	211,297	142,948	59,102	0
	20	118,464	268,162	21,809	5,125	256,277	196,950	59,102	0
	27	118,464	266,450	23,097	5,136	236,228	176,999	59,100	0
	4 May	118,464	266,005	22,816	5,182	217,129	84,995	59,100	0
	11	118,464	265,647	23,056	5,295	218,172	158,996	59,100	0
	18	118,464	270,299	20,613	5,622	210,191	150,999	59,100	0
	25	118,464	267,707	23,033	5,365	221,196	162,002	59,100	0
	1 June	118,464	269,198	22,368	5,174	226,403	167,001	59,100	0
	8	118,464	269,037	22,207	5,225	224,204	165,001	59,100	0
	15	118,464	269,055	22,943	5,322	214,433	155,000	59,100	0
	22	118,454	270,437	23,176	5,303	217,891	158,001	59,100	0
	29	128,512	279,018	22,540	5,654	236,201	176,000	59,999	0

2. Liabilities

		Banknotes in circulation	Liabilities to euro area credit institutions in euro	Current accounts (covering the minimum reserve system)	Deposit facility	Fixed-term deposits	Fine-tuning reverse operations	Deposits related to margin calls	Other liabilities to euro area credit institutions in euro	Debt certificates issued
		1	2	3	4	5	6	7	8	9
2001	2 Feb.	357,130	119,172	117,436	1,736	0	0	0	7,949	3,784
	9	356,364	120,930	120,808	122	0	0	0	7,381	3,784
	16	353,878	93,343	91,629	1,714	0	0	0	7,372	3,784
	23	352,004	144,476	143,724	752	0	0	0	7,477	3,784
	2 Mar.	355,137	118,928	118,887	41	0	0	0	7,584	3,784
	9	355,046	110,334	110,292	42	0	0	0	7,602	3,784
	16	352,886	127,324	126,675	648	0	0	1	7,601	3,784
	23	350,384	113,375	108,462	4,912	0	0	1	7,414	3,784
	30	351,685	126,879	126,738	141	0	0	0	6,116	3,784
	6 Apr.	356,089	119,056	118,997	59	0	0	0	6,065	3,784
	13	360,869	99,094	99,063	31	0	0	0	6,102	3,784
	20	353,674	160,289	159,406	103	0	0	780	6,097	3,784
	27	352,680	133,176	133,145	23	0	0	8	6,070	3,784
	4 May	355,925	121,749	121,639	106	0	0	4	6,083	3,784
	11	353,624	126,337	126,264	72	0	0	1	6,278	3,784
	18	350,877	124,887	124,774	111	0	0	2	6,295	3,784
	25	350,233	121,103	120,955	146	0	0	2	6,228	3,784
	1 June	352,925	127,020	126,953	65	0	0	2	6,052	3,784
	8	353,479	127,240	127,184	50	0	0	6	6,197	3,784
	15	351,772	122,114	122,005	109	0	0	0	6,195	3,784
	22	348,463	131,206	130,178	1,023	0	0	5	6,097	3,784
	29	350,199	117,841	117,569	272	0	0	0	6,097	3,784

Source: ECB.

								Total		
Structural reverse operations	Marginal lending facility	Credits related to margin calls	Other claims on euro area credit institutions in euro	Securities of euro area residents in euro	General government debt in euro	Other assets				
9	10	11	12	13	14	15	16			
0	163	41	1,130	27,474	70,207	89,787	835,215	2001	2	Feb.
0	213	29	586	27,533	70,207	89,991	829,737		9	
0	127	23	503	27,358	70,207	90,451	811,621		16	
0	3,648	16	864	27,499	70,207	90,942	871,589		23	
0	7	11	820	27,555	70,207	89,142	831,539		2	Mar.
0	17	43	822	27,368	70,207	88,741	818,190		9	
0	524	48	503	27,363	70,207	89,364	840,112		16	
0	348	61	318	27,428	70,211	89,734	832,777		23	
0	128	53	554	27,880	70,211	89,452	847,959		30	
0	9	48	431	27,880	70,211	88,643	829,109		6	Apr.
0	9,191	56	530	28,306	70,211	90,089	814,720		13	
0	142	83	706	27,666	70,168	90,392	858,769		20	
0	64	65	462	27,786	70,168	91,417	839,272		27	
72,999	25	10	616	27,869	70,168	91,426	819,675		4	May
0	51	25	313	27,889	70,174	91,888	820,898		11	
0	65	27	329	27,838	70,168	91,417	814,941		18	
0	66	28	383	27,785	70,168	91,326	825,427		25	
0	273	29	276	27,979	70,168	90,401	830,431		1	June
0	57	46	241	28,128	70,168	89,766	827,440		8	
0	292	41	241	28,110	70,168	90,313	819,049		15	
0	760	30	242	28,024	70,168	90,749	824,444		22	
0	175	27	538	27,665	70,168	92,471	862,767		29	

								Total			
Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves				
10	11	12	13	14	15	16	17	18			
60,481	11,452	5,054	11,947	7,168	77,371	119,274	54,433	835,215	2001	2	Feb.
53,668	10,734	5,001	13,367	7,168	77,633	119,274	54,433	829,737		9	
64,859	9,985	4,996	13,399	7,168	78,207	119,274	55,356	811,621		16	
73,957	10,152	4,984	14,463	7,168	78,432	119,274	55,418	871,589		23	
57,893	9,787	4,981	13,138	7,168	78,447	119,274	55,418	831,539		2	Mar.
53,188	9,841	4,936	12,450	7,168	79,148	119,274	55,419	818,190		9	
61,006	10,653	4,902	9,896	7,168	79,265	119,274	56,353	840,112		16	
69,459	9,972	4,795	11,110	7,168	79,689	119,274	56,353	832,777		23	
60,504	8,542	3,772	12,978	6,984	82,491	126,268	57,956	847,959		30	
53,735	8,328	3,796	12,767	6,984	73,302	126,268	58,935	829,109		6	Apr.
54,424	8,438	3,790	13,345	6,984	72,721	126,268	58,901	814,720		13	
43,892	8,530	3,789	12,868	6,984	73,693	126,268	58,901	858,769		20	
53,869	8,444	3,780	12,399	6,984	72,574	126,268	59,244	839,272		27	
42,408	8,847	3,782	12,263	6,984	72,337	126,268	59,245	819,675		4	May
40,734	8,549	3,779	12,947	6,984	72,369	126,268	59,245	820,898		11	
38,409	8,694	3,784	13,611	6,984	72,036	126,270	59,310	814,941		18	
52,925	8,880	3,758	13,596	6,984	71,777	126,258	59,901	825,427		25	
49,626	8,622	3,756	14,173	6,984	70,779	126,258	60,452	830,431		1	June
46,793	8,529	3,915	13,854	6,984	69,943	126,258	60,464	827,440		8	
43,787	8,754	3,833	14,548	6,984	70,556	126,258	60,464	819,049		15	
41,828	8,685	3,887	15,897	6,984	70,890	126,258	60,465	824,444		22	
69,722	10,226	3,902	16,977	7,183	75,031	141,340	60,465	862,767		29	

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

With effect from ¹⁾	Deposit facility		Main refinancing operations			Marginal lending facility	
			Fixed rate tenders	Variable rate tenders			
	Level 1	Change 2	Fixed rate	Minimum bid rate	Change 5	Level 6	Change 7
			Level 3	Level 4			
1999 1 Jan.	2.00	-	3.00	-	-	4.50	-
4 ²⁾	2.75	0.75	3.00	-	...	3.25	-1.25
22	2.00	-0.75	3.00	-	...	4.50	1.25
9 Apr.	1.50	-0.50	2.50	-	-0.50	3.50	-1.00
5 Nov.	2.00	0.50	3.00	-	0.50	4.00	0.50
2000 4 Feb.	2.25	0.25	3.25	-	0.25	4.25	0.25
17 Mar.	2.50	0.25	3.50	-	0.25	4.50	0.25
28 Apr.	2.75	0.25	3.75	-	0.25	4.75	0.25
9 June	3.25	0.50	4.25	-	0.50	5.25	0.50
28 ³⁾	3.25	...	-	4.25	...	5.25	...
1 Sep.	3.50	0.25	-	4.50	0.25	5.50	0.25
6 Oct.	3.75	0.25	-	4.75	0.25	5.75	0.25
<i>Euro area enlargement</i>							
2001 11 May	3.50	-0.25	-	4.50	-0.25	5.50	-0.25

Source: ECB.

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

Table 1.3**Eurosystem monetary policy operations allotted through tenders ¹⁾***(EUR millions; interest rates in percentages per annum)***1. Main refinancing operations ²⁾**

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders	Variable rate tenders			Running for (...) days
			Fixed rate	Minimum bid rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6	7
2001 3 Jan.	136,434	101,000	-	4.75	4.76	4.78	14
10	95,841	95,000	-	4.75	4.75	4.75	14
17	137,641	101,000	-	4.75	4.75	4.77	14
24	118,546	104,000	-	4.75	4.75	4.76	14
31	137,610	84,000	-	4.75	4.76	4.77	14
7 Feb.	104,384	100,000	-	4.75	4.75	4.75	14
14	65,307	65,307	-	4.75	4.75	4.75	12
21	200,526	155,000	-	4.75	4.78	4.83	14
26	109,632	27,000	-	4.75	4.78	4.79	16
7 Mar.	189,927	143,000	-	4.75	4.76	4.77	14
14	130,260	51,000	-	4.75	4.77	4.78	14
21	182,057	135,000	-	4.75	4.77	4.78	14
28	57,526	50,000	-	4.75	4.75	4.75	14
4 Apr.	129,101	118,000	-	4.75	4.75	4.75	15
11	24,949	24,949	-	4.75	4.75	4.75	14
19	257,706	172,000	-	4.75	4.86	4.91	11
25	83,303	5,000	-	4.75	4.78	4.80	12
30	147,324	80,000	-	4.75	4.77	4.78	15
7 May	164,985	79,000	-	4.75	4.78	4.78	16
15	160,715	72,000	-	4.50	4.54	4.56	15
23	157,987	90,000	-	4.50	4.53	4.54	14
30	159,877	77,000	-	4.50	4.55	4.55	14
6 June	120,631	88,000	-	4.50	4.51	4.53	14
13	135,442	67,000	-	4.50	4.51	4.52	14
20	148,877	91,000	-	4.50	4.51	4.52	14
27	155,894	85,000	-	4.50	4.54	4.55	14
4 July	104,399	81,000	-	4.50	4.50	4.51	14

2. Longer-term refinancing operations

Date of settlement	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders		Running for (...) days
			Fixed rate	Marginal rate ³⁾	Weighted average rate		
	1	2	3	4	5	6	
1999 14 Jan.	79,846	15,000	-	3.13	-	42	
14	39,343	15,000	-	3.10	-	70	
14	46,152	15,000	-	3.08	-	105	
25 Feb.	77,300	15,000	-	3.04	-	91	
25 Mar.	53,659	15,000	-	2.96	2.97	98	
29 Apr.	66,911	15,000	-	2.53	2.54	91	
27 May	72,294	15,000	-	2.53	2.54	91	
1 July	76,284	15,000	-	2.63	2.64	91	
29	64,973	15,000	-	2.65	2.66	91	
26 Aug.	52,416	15,000	-	2.65	2.66	91	
30 Sep.	41,443	15,000	-	2.66	2.67	84	
28 Oct.	74,430	25,000	-	3.19	3.42	91	
25 Nov.	74,988	25,000	-	3.18	3.27	98	
23 Dec.	91,088	25,000	-	3.26	3.29	98	
2000 27 Jan.	87,052	20,000	-	3.28	3.30	91	
2 Mar.	72,960	20,000	-	3.60	3.61	91	
30	74,929	20,000	-	3.78	3.80	91	
27 Apr.	64,094	20,000	-	4.00	4.01	91	
1 June	64,317	20,000	-	4.40	4.42	91	
29	41,833	20,000	-	4.49	4.52	91	
27 July	40,799	15,000	-	4.59	4.60	91	
31 Aug.	35,417	15,000	-	4.84	4.87	91	
28 Sep.	34,043	15,000	-	4.84	4.86	92	
26 Oct.	43,085	15,000	-	5.06	5.07	91	
30 Nov.	31,999	15,000	-	5.03	5.05	91	
29 Dec.	15,869	15,000	-	4.75	4.81	90	
<i>Euro area enlargement</i>							
2001 25 Jan.	31,905	20,000	-	4.66	4.69	90	
1 Mar.	45,755	20,000	-	4.69	4.72	91	
29	38,169	19,101	-	4.47	4.50	91	
25 Apr.	43,416	20,000	-	4.67	4.70	92	
31 May	46,448	20,000	-	4.49	4.51	91	
28 June	44,243	20,000	-	4.36	4.39	91	

3. Other tender operations

Date of settlement	Type of operation	Bids (amount)	Allotment (amount)	Fixed rate tenders		Variable rate tenders		Running for (...) days
				Fixed rate	Marginal rate ³⁾	Weighted average rate		
		1	2	3	4	5	6	7
2000 5 Jan.	Collection of fixed-term deposits	14,420	14,420	-	3.00	3.00	7	
21 June	Reverse transaction	18,845	7,000	-	4.26	4.28	1	
<i>Euro area enlargement</i>								
2001 30 Apr.	Reverse transaction	105,377	73,000	-	4.77	4.79	7	

Source: ECB.

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

2) On 8 June 2000 the ECB announced that, starting from the operation to be settled on 28 June 2000, the main refinancing operations of the Eurosystem would be conducted as variable rate tenders. The minimum bid rate refers to the minimum interest rate at which counterparties may place their bids.

3) The marginal rate refers to the lowest rate at which funds were allotted.

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) ²	Debt securities up to 2 years' agreed maturity ³	Money market paper ⁴	Deposits (over 2 years' agreed maturity and notice period) ⁵	Repos ⁶	Debt securities over 2 years' agreed maturity ⁷
2000 May	9,641.5	5,390.3	118.4	188.4	1,241.3	541.4	2,161.7
June	9,539.4	5,316.9	120.4	184.7	1,250.6	506.7	2,160.1
July	9,590.1	5,348.0	119.8	192.3	1,258.0	489.9	2,182.2
Aug.	9,686.5	5,393.8	122.9	197.1	1,269.0	502.5	2,201.3
Sep.	9,773.3	5,465.7	123.6	193.6	1,270.2	502.1	2,218.2
Oct.	9,931.2	5,531.9	127.6	201.1	1,283.2	534.2	2,253.2
Nov. ³⁾	10,074.5	5,653.4	130.0	199.9	1,282.2	561.5	2,247.6
Dec. ³⁾	10,071.5	5,711.3	136.7	187.2	1,273.6	528.3	2,234.3
<i>Euro area enlargement</i>							
2001 Jan.	10,164.2	5,712.6	139.2	196.7	1,275.6	574.6	2,265.6
Feb.	10,247.4	5,724.4	145.3	201.2	1,284.7	597.8	2,294.0
Mar.	10,503.6	5,883.5	151.1	203.4	1,292.6	654.7	2,318.3
Apr.	10,554.6	5,924.3	154.5	202.8	1,292.1	657.7	2,323.2
May ^(p)	10,686.1	5,984.5	165.7	198.9	1,307.5	693.2	2,336.4

Source: ECB.

- 1) Liabilities vis-à-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks, are excluded from the reserve base. If a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years and of money market paper held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. This percentage was 10% for calculating the reserve base until November 1999, and 30% thereafter.
- 2) Maintenance periods start on the 24th of the month and run to the 23rd of the following month; the required reserve is calculated from the reserve base as at the end of the preceding month.
- 3) Includes the reserve base of credit institutions in Greece (EUR 134.4 billion in November and 134.6 billion in December 2000, EUR 107.3 billion and EUR 110.3 billion of which qualify for the 2% coefficient respectively). On a transitional basis, credit institutions located in participating Member States could choose to deduct from their own reserve base liabilities to credit institutions in Greece. Starting from the reserve base as at end-January 2001 the standard treatment applies.

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

Maintenance period ending in:	Required reserves ²⁾	Actual reserves ³⁾	Excess reserves ⁴⁾	Deficiencies ⁵⁾	Interest rate on minimum reserves ⁶⁾
	1	2	3	4	5
2000 July	113.3	114.0	0.7	0.0	4.28
Aug.	111.8	112.3	0.5	0.0	4.32
Sep.	112.6	113.1	0.5	0.0	4.57
Oct.	113.7	114.2	0.5	0.0	4.69
Nov.	115.1	115.5	0.4	0.0	4.81
Dec.	116.6	117.2	0.6	0.0	4.78
<i>Euro area enlargement</i>					
2001 Jan. ⁷⁾	118.5	119.0	0.5	0.0	4.77
Feb.	120.1	120.6	0.5	0.0	4.76
Mar.	120.4	120.9	0.5	0.0	4.77
Apr.	120.8	121.3	0.5	0.0	4.77
May	124.2	124.8	0.7	0.0	4.71
June	125.0	125.6	0.6	0.0	4.52
July ^(p)	126.4	-	-	-	-

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).
- 7) Owing to the adoption of the euro by Greece on 1 January 2001, the reserve requirement is an average, weighted by the number of calendar days, of the reserve requirements for the Euro 11 from 24 to 31 December 2000 and the reserve requirements for the Euro 12 from 1 to 23 January 2001 (i.e. 8/31 * EUR 116.9 billion + 23/31 * EUR 119.1 billion).

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

Maintenance period ending in:	Liquidity-providing factors					Liquidity-absorbing factors					Credit institutions' current accounts ⁴⁾	Base money ⁵⁾
	Monetary policy operations of the Eurosystem					Deposit facility	Other liquidity-absorbing operations ²⁾	Banknotes in circulation	Central government deposits with the Eurosystem	Other factors (net) ³⁾		
	Eurosystem's net assets in gold and foreign currency ¹⁾	Main refinancing operations	Longer-term refinancing operations	Marginal lending facility	Other liquidity-providing operations ²⁾							
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Oct.	349.7	143.0	45.0	0.3	0.0	0.6	0.0	342.5	45.4	45.9	103.5	446.7
Nov.	351.8	140.5	53.7	0.3	0.0	0.4	0.0	343.1	51.5	47.3	104.2	447.6
Dec.	351.7	150.4	65.0	0.3	0.0	1.0	0.0	354.3	59.0	47.5	105.6	460.8
2000 Jan.	362.3	138.5	75.0	1.9	0.0	0.5	3.3	363.0	41.0	61.2	108.7	472.3
Feb.	367.8	130.9	70.5	0.1	0.0	0.2	0.0	347.6	49.2	64.2	108.1	455.9
Mar.	369.2	136.1	66.2	0.2	0.0	0.3	0.0	347.6	51.7	63.5	108.6	456.4
Apr.	377.1	136.7	61.0	0.2	0.0	0.9	0.0	349.7	45.6	69.1	109.7	460.3
May	378.8	142.6	60.0	0.4	0.0	2.3	0.0	353.8	41.9	71.8	112.0	468.2
June	378.1	140.9	59.9	0.3	0.2	0.8	0.0	354.1	38.3	72.1	114.2	469.1
July	380.8	157.9	59.9	0.4	0.0	0.5	0.0	357.0	50.4	76.8	114.1	471.7
Aug.	382.0	163.1	55.4	0.1	0.0	0.3	0.0	359.2	48.8	80.0	112.4	471.9
Sep.	381.6	173.1	51.1	0.3	0.0	0.2	0.0	354.8	56.6	81.2	113.3	468.3
Oct.	396.3	176.5	45.7	0.5	0.0	0.2	0.0	354.5	47.4	102.5	114.4	469.1
Nov.	398.6	183.7	45.0	0.2	0.0	0.2	0.0	352.7	49.8	109.2	115.7	468.6
Dec.	394.4	210.4	45.0	0.4	0.0	0.2	0.0	360.4	61.1	111.1	117.4	478.0
<i>Euro area enlargement</i>												
2001 Jan.	383.7	205.3	45.0	0.5	0.0	0.6	0.0	368.3	52.2	94.2	119.1	488.0
Feb.	377.9	188.9	49.8	2.6	0.0	0.4	0.0	354.8	57.0	86.3	120.7	476.0
Mar.	375.6	185.2	54.1	0.4	0.0	0.5	0.0	353.0	53.0	87.7	121.0	474.5
Apr.	382.1	172.4	58.4	2.2	0.0	0.5	0.0	354.6	49.5	89.1	121.4	476.4
May	384.4	144.0	59.1	0.4	17.0	0.6	0.0	352.7	39.4	87.5	124.8	478.1
June	385.0	161.7	59.1	0.2	0.0	0.4	0.0	351.1	41.3	87.5	125.7	477.3

Source: ECB.

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

2 Monetary developments in the euro area

Table 2.1
Aggregated balance sheet of the Eurosystem

(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 ¹⁾	Fixed assets	Re-remaining assets	Total
	1	MFIs ¹⁾	General government	Other euro area residents	5	MFIs	General government	Other euro area residents	9	MFIs	Other euro area residents					11
1998	225.2	204.6	20.4	0.1	87.8	1.1	86.2	0.5	5.5	1.8	3.7	322.3	7.9	49.3	698.0
1999 Q2	807.8	787.2	20.4	0.2	92.4	1.5	90.0	0.9	8.7	4.4	4.3	498.6	9.7	46.6	1,463.7
Q3	471.7	451.1	20.4	0.2	92.4	1.4	89.9	1.1	8.7	4.3	4.4	427.9	9.8	47.5	1,058.0
Q4	444.6	424.3	19.7	0.5	89.1	1.9	86.1	1.1	14.1	4.3	9.8	400.6	9.9	56.2	1,014.5
2000 Q1	443.4	424.5	18.4	0.5	96.2	2.4	92.7	1.1	14.4	4.3	10.1	439.1	9.8	48.9	1,051.8
2000 May	469.2	450.3	18.4	0.5	97.1	2.7	93.2	1.2	14.4	4.4	10.1	441.9	10.0	51.8	1,084.4
June	580.7	561.8	18.4	0.5	97.4	2.6	93.6	1.2	14.7	4.4	10.4	454.8	10.0	51.7	1,209.3
July	501.4	482.6	18.4	0.5	98.2	2.5	94.5	1.2	14.7	4.4	10.3	449.7	10.1	51.5	1,125.6
Aug.	482.5	463.7	18.4	0.5	98.5	2.8	94.4	1.3	14.7	4.4	10.3	435.4	10.2	52.3	1,093.5
Sep.	493.1	474.4	18.2	0.5	98.5	2.9	94.6	1.0	14.6	4.4	10.2	459.1	10.2	54.3	1,129.8
Oct.	478.8	460.1	18.2	0.5	98.7	2.6	94.9	1.2	15.0	4.4	10.7	454.7	10.5	53.9	1,111.6
Nov.	431.5	412.8	18.2	0.5	98.8	2.6	94.9	1.4	15.4	4.4	11.1	402.8	10.3	54.2	1,013.0
Dec.	445.0	427.4	17.1	0.5	97.4	2.5	93.6	1.3	15.3	4.3	11.0	380.7	11.2	56.1	1,005.7
<i>Euro area enlargement</i>															
2001 1 Jan.	457.0	429.3	27.1	0.6	105.3	2.5	101.4	1.3	15.3	4.3	11.0	394.2	11.3	57.4	1,040.4
2001 Jan.	401.5	373.7	27.2	0.6	104.5	2.6	100.8	1.0	15.5	4.7	10.8	390.4	11.4	54.0	977.3
Feb.	398.8	371.0	27.2	0.6	105.2	2.5	101.5	1.2	14.9	4.6	10.3	386.2	11.3	53.7	970.1
Mar.	401.7	373.9	27.2	0.6	105.0	2.7	101.2	1.1	14.8	4.6	10.2	396.8	11.2	54.4	983.9
Apr.	376.1	348.3	27.2	0.6	106.5	2.6	102.7	1.3	14.7	4.6	10.1	390.3	11.7	53.6	952.9
May ^(p)	398.5	370.7	27.2	0.6	106.4	2.9	102.3	1.3	14.3	4.6	9.7	398.9	11.8	53.2	983.1

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs ¹⁾			Central government	Other general government/ other euro area residents	Money market paper	Debt securities issued	Capital and reserves	External liabilities ¹⁾	Remaining liabilities	Total
			3	4	5								
1998	359.1	152.0	94.2	54.4	3.5	8.5	5.3	97.1	18.6	57.4	698.0		
1999 Q2	356.1	743.2	691.3	43.1	8.9	4.9	5.3	139.9	171.4	43.0	1,463.7		
Q3	359.7	405.3	347.7	50.1	7.6	3.3	5.3	145.5	88.8	50.1	1,058.0		
Q4	393.3	341.5	279.3	53.4	8.8	3.3	4.6	175.1	49.8	46.8	1,014.5		
2000 Q1	366.2	372.1	319.8	43.1	9.1	1.7	4.6	186.8	75.1	45.4	1,051.8		
2000 May	371.8	390.7	345.1	34.1	11.5	1.7	4.6	188.6	82.4	44.7	1,084.4		
June	374.3	497.9	432.8	52.6	12.5	1.7	4.6	193.8	92.0	45.0	1,209.3		
July	377.7	414.9	354.7	49.7	10.5	1.7	4.6	196.6	84.6	45.6	1,125.6		
Aug.	373.2	401.0	336.1	53.8	11.2	1.7	4.6	200.1	66.6	46.3	1,093.5		
Sep.	373.5	404.2	346.1	45.6	12.5	0.0	4.6	222.0	75.0	50.6	1,129.8		
Oct.	372.6	388.1	323.3	51.1	13.7	0.0	4.6	226.2	69.5	50.6	1,111.6		
Nov.	372.2	334.6	265.6	54.9	14.0	0.0	3.8	222.5	29.3	50.6	1,013.0		
Dec.	390.2	327.3	270.4	47.1	9.8	0.0	3.8	199.2	29.9	55.3	1,005.7		
<i>Euro area enlargement</i>													
2001 1 Jan.	399.3	346.2	288.0	47.9	10.4	0.0	5.6	200.9	30.9	57.4	1,040.4		
2001 Jan.	373.1	313.3	250.9	51.5	10.9	0.0	5.5	197.0	30.6	57.9	977.3		
Feb.	370.6	313.1	249.7	52.0	11.4	0.0	5.5	195.1	27.9	57.9	970.1		
Mar.	370.5	312.6	253.4	46.8	12.4	0.0	5.5	205.4	26.8	63.0	983.9		
Apr.	372.5	289.9	234.8	41.2	13.8	0.0	5.5	206.5	25.3	53.1	952.9		
May ^(p)	369.4	317.5	266.5	36.0	15.1	0.0	5.5	212.2	27.6	50.9	983.1		

Source: ECB.

1) Since the end of November 2000, balances arising from the TARGET system are netted by novation on a daily basis. This implies that the bilateral positions of each NCB vis-à-vis the ECB and other NCBs have been replaced by a single net bilateral position vis-à-vis the ECB. For the TARGET gross end-month positions in 1999 and in 2000 (January to October), see the corresponding footnote in the February 2000 and December 2000 issues of the ECB Monthly Bulletin.

Table 2.2

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

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

1. Assets

	Loans to euro area residents				Holdings of securities other than shares issued by euro area residents	MFIs			Money market paper	Holdings of shares/other equity issued by euro area residents	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	9,088.3	3,154.6	822.0	5,111.7	2,020.9	720.7	1,112.0	188.1	107.3	521.0	168.5	352.6	1,591.7	150.6	776.8	14,256.6
1999 Q2	9,462.4	3,321.6	817.8	5,323.0	2,142.6	801.1	1,128.9	212.5	102.8	585.8	171.5	414.3	1,660.3	151.7	867.4	14,973.0
Q3	9,580.5	3,377.2	810.7	5,392.6	2,183.8	828.8	1,137.5	217.5	112.1	587.9	180.5	407.3	1,668.8	153.4	814.2	15,100.8
Q4	9,778.0	3,413.1	828.2	5,536.7	2,179.8	828.4	1,124.6	226.7	129.9	650.7	211.3	439.4	1,720.6	154.0	919.1	15,532.1
2000 Q1	10,020.0	3,510.6	821.3	5,688.1	2,225.3	869.5	1,128.0	227.8	131.9	729.6	230.2	499.4	1,823.0	152.0	977.6	16,059.2
2000 May	10,146.8	3,550.8	817.4	5,778.6	2,232.8	895.1	1,094.7	243.0	157.2	763.3	237.4	525.8	1,909.6	153.1	1,018.4	16,381.1
June	10,126.9	3,463.8	817.2	5,845.8	2,211.1	894.9	1,073.2	243.0	155.2	704.0	210.0	494.0	1,888.5	154.2	1,021.1	16,261.0
July	10,080.7	3,391.1	815.5	5,874.1	2,218.0	920.6	1,046.3	251.2	152.8	700.3	201.6	498.8	1,920.8	154.8	1,070.0	16,297.5
Aug.	10,139.2	3,442.9	803.6	5,892.6	2,216.6	927.1	1,034.2	255.3	152.9	704.1	203.7	500.4	1,980.4	155.1	1,108.0	16,456.2
Sep.	10,239.1	3,461.2	799.8	5,978.1	2,231.5	940.5	1,033.8	257.2	145.6	707.6	204.1	503.6	1,999.6	155.8	1,030.0	16,509.3
Oct.	10,304.1	3,481.4	801.7	6,021.0	2,222.9	939.1	1,020.6	263.1	151.7	709.4	206.0	503.3	2,056.6	157.5	1,100.7	16,702.8
Nov.	10,387.8	3,522.7	808.8	6,056.3	2,216.7	937.0	1,017.3	262.3	157.8	732.0	227.2	504.8	2,081.5	157.5	1,048.9	16,782.1
Dec.	10,419.8	3,510.6	818.7	6,090.5	2,192.4	932.7	995.8	263.8	146.0	750.9	240.3	510.6	2,022.2	158.7	1,022.3	16,712.2
<i>Euro area enlargement</i>																
2001 1 Jan.	10,527.9	3,547.5	826.7	6,153.6	2,253.8	932.9	1,054.6	266.3	146.0	762.2	243.0	519.3	2,005.0	161.6	1,046.4	16,904.1
2001 Jan.	10,590.6	3,578.4	830.7	6,181.4	2,253.0	936.4	1,046.4	270.3	156.0	776.2	247.4	528.9	2,069.2	160.4	1,066.4	17,071.8
Feb.	10,658.3	3,634.4	822.8	6,201.1	2,288.0	955.4	1,053.8	278.8	158.3	785.0	248.7	536.3	2,091.0	161.0	1,068.7	17,210.3
Mar.	10,799.2	3,706.1	824.1	6,268.9	2,322.7	968.9	1,067.0	286.8	162.1	809.2	256.4	552.8	2,236.6	161.1	1,092.2	17,583.2
Apr.	10,780.0	3,650.1	816.2	6,313.7	2,335.7	975.0	1,069.7	290.9	168.1	836.1	260.6	575.5	2,220.7	161.9	1,069.3	17,571.8
May ^(p)	10,793.6	3,649.8	810.8	6,333.1	2,378.0	990.8	1,090.1	297.1	168.9	835.7	259.5	576.2	2,273.1	163.3	1,107.2	17,719.9

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs	Central government	Other general government/other euro area residents					Money market fund shares/units	Debt securities issued	Money market paper	Capital and reserves	External liabilities	Remaining liabilities	Total
						Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements								6	7	8	9	10	11	12	13	14	15	16
1998	0.4	8,286.3	3,305.2	95.4	4,885.7	1,387.1	1,928.9	1,393.2	176.5	241.4	2,099.8	161.6	754.6	1,521.8	1,205.5	14,256.6
1999 Q2	0.5	8,466.2	3,443.7	81.9	4,940.6	1,484.3	1,965.9	1,323.9	166.5	291.9	2,265.3	183.2	794.3	1,688.0	1,283.6	14,973.0
Q3	0.6	8,529.0	3,510.4	83.2	4,935.4	1,471.5	1,981.4	1,321.9	160.6	293.2	2,325.7	204.1	806.4	1,710.3	1,231.4	15,100.8
Q4	0.7	8,733.1	3,589.0	88.6	5,055.4	1,537.0	2,042.8	1,331.4	144.2	293.4	2,361.3	242.1	849.6	1,798.9	1,253.1	15,532.1
2000 Q1	0.7	8,809.6	3,612.5	87.1	5,110.0	1,568.0	2,052.7	1,312.0	177.3	325.1	2,421.0	248.8	890.7	2,018.8	1,344.6	16,059.2
2000 May	0.6	8,874.3	3,649.6	79.8	5,144.9	1,586.5	2,080.6	1,296.6	181.2	352.2	2,469.2	260.0	907.1	2,137.9	1,379.8	16,381.1
June	0.6	8,849.9	3,623.7	93.4	5,132.8	1,596.1	2,078.1	1,291.3	167.3	344.7	2,478.1	261.1	898.5	2,032.6	1,395.4	16,261.0
July	0.6	8,770.1	3,545.4	85.0	5,139.7	1,594.6	2,088.5	1,284.6	172.0	342.1	2,502.5	272.6	903.8	2,076.0	1,429.7	16,297.5
Aug.	0.0	8,801.9	3,579.6	86.8	5,135.5	1,566.4	2,120.2	1,279.6	169.4	346.3	2,529.4	276.1	906.8	2,142.5	1,453.3	16,456.2
Sep.	0.0	8,858.5	3,599.9	113.7	5,144.9	1,577.0	2,124.2	1,272.3	171.4	334.8	2,550.2	272.2	913.5	2,192.0	1,388.0	16,509.3
Oct.	0.0	8,903.8	3,630.1	121.3	5,152.4	1,577.0	2,141.3	1,263.5	170.6	337.6	2,574.0	281.3	917.9	2,258.1	1,430.1	16,702.8
Nov.	0.0	8,957.1	3,669.8	113.9	5,173.4	1,594.9	2,147.4	1,257.6	173.5	342.9	2,570.2	278.5	930.8	2,277.2	1,425.3	16,782.1
Dec.	0.0	9,057.4	3,679.5	117.4	5,260.4	1,648.9	2,158.3	1,278.3	174.9	323.3	2,563.2	262.2	940.0	2,186.4	1,379.7	16,712.2
<i>Euro area enlargement</i>																
2001 1 Jan.	0.0	9,201.4	3,700.7	118.4	5,382.3	1,663.4	2,196.6	1,329.7	195.2	323.3	2,563.4	262.2	958.5	2,117.5	1,404.5	16,904.1
2001 Jan.	0.0	9,187.9	3,726.6	95.6	5,365.8	1,611.2	2,209.7	1,330.9	214.0	337.2	2,594.7	274.7	965.0	2,298.2	1,414.0	17,071.8
Feb.	0.0	9,234.6	3,758.3	102.4	5,373.9	1,612.9	2,220.6	1,324.6	215.8	347.0	2,631.0	274.1	969.7	2,314.9	1,439.0	17,210.3
Mar.	0.0	9,346.3	3,829.2	103.4	5,413.7	1,625.4	2,239.8	1,323.7	224.8	358.8	2,657.6	276.0	978.3	2,506.6	1,459.6	17,583.2
Apr.	0.0	9,306.3	3,749.0	111.0	5,446.3	1,659.1	2,239.2	1,324.7	223.3	367.1	2,669.7	283.2	982.5	2,529.6	1,433.4	17,571.8
May ^(p)	0.0	9,335.2	3,742.5	110.4	5,482.3	1,682.7	2,242.1	1,322.5	235.0	379.3	2,700.5	276.8	986.6	2,595.6	1,446.0	17,719.9

Source: ECB.

Table 2.3

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

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

1. Assets: levels

	Assets						Total				
	Loans to euro area residents	General government	Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government	Other euro area residents	Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	
	1	2	3	4	5	6	7	8	9	10	11
1999 Nov.	6,357.5	853.5	5,504.0	1,461.6	1,237.3	224.3	430.7	2,191.9	164.5	921.9	11,528.1
Dec.	6,385.1	847.9	5,537.2	1,438.5	1,210.7	227.8	449.2	2,121.2	164.0	931.1	11,489.2
2000 Jan.	6,422.0	840.6	5,581.5	1,450.4	1,221.7	228.7	453.4	2,166.3	162.3	955.5	11,609.8
Feb.	6,453.5	836.1	5,617.3	1,465.5	1,230.7	234.8	468.7	2,203.4	161.8	972.6	11,725.7
Mar.	6,528.3	839.7	5,688.6	1,449.6	1,220.7	228.9	509.5	2,262.0	161.8	994.1	11,905.4
Apr.	6,591.4	842.4	5,749.0	1,435.6	1,198.6	237.0	522.2	2,362.9	162.6	1,034.3	12,109.1
May	6,614.9	835.8	5,779.1	1,432.0	1,187.9	244.2	535.9	2,351.4	163.0	1,035.3	12,132.6
June	6,681.9	835.6	5,846.3	1,411.0	1,166.8	244.2	504.3	2,343.3	164.2	1,039.0	12,143.7
July	6,708.5	833.8	5,874.6	1,393.1	1,140.7	252.4	509.0	2,370.5	164.9	1,086.3	12,232.3
Aug.	6,715.1	822.0	5,893.1	1,385.2	1,128.6	256.6	510.7	2,415.8	165.2	1,124.9	12,316.9
Sep.	6,796.6	818.0	5,978.5	1,386.6	1,128.4	258.2	513.8	2,458.7	166.0	1,049.9	12,371.5
Oct.	6,841.4	819.9	6,021.5	1,379.8	1,115.5	264.3	514.0	2,511.3	168.0	1,118.7	12,533.2
Nov.	6,883.8	827.0	6,056.8	1,375.9	1,112.2	263.7	515.8	2,484.3	167.7	1,067.7	12,495.2
Dec.	6,926.8	835.9	6,090.9	1,354.6	1,089.4	265.1	521.5	2,402.9	169.9	1,035.7	12,411.3
<i>Euro area enlargement</i>											
2001 1 Jan.	7,008.1	853.9	6,154.2	1,423.6	1,156.0	267.6	530.3	2,298.5	172.9	1,059.7	12,593.8
2001 Jan.	7,040.0	858.0	6,182.0	1,418.5	1,147.2	271.3	539.7	2,459.7	171.7	1,082.4	12,712.0
Feb.	7,051.7	850.0	6,201.7	1,435.3	1,155.3	280.0	546.7	2,477.2	172.3	1,086.0	12,769.1
Mar.	7,120.9	851.4	6,269.5	1,456.1	1,168.1	287.9	562.9	2,633.4	172.4	1,111.4	13,057.0
Apr.	7,157.7	843.4	6,314.3	1,464.6	1,172.4	292.2	585.6	2,611.0	173.6	1,085.4	13,078.0
May ^(p)	7,171.6	838.0	6,333.7	1,490.8	1,192.4	298.4	585.9	2,672.0	175.0	1,122.8	13,218.2

2. Liabilities: levels

	Liabilities										Total			
	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities ²⁾	Remaining liabilities	Excess of inter-MFI liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1999 Nov.	330.1	146.1	4,998.1	1,516.3	2,010.1	1,313.0	158.6	414.1	1,525.4	779.1	1,931.6	1,371.6	32.1	11,528.1
Dec.	349.9	142.0	5,064.2	1,545.8	2,042.8	1,331.4	144.2	408.9	1,535.5	809.2	1,848.7	1,299.9	30.9	11,489.2
2000 Jan.	333.0	133.7	5,089.6	1,574.8	2,028.0	1,331.7	155.0	412.4	1,534.8	825.6	1,935.0	1,339.1	6.7	11,609.8
Feb.	331.1	144.6	5,095.4	1,568.2	2,045.9	1,321.9	159.5	430.9	1,550.5	828.8	1,966.4	1,357.4	20.6	11,725.7
Mar.	334.6	130.2	5,119.1	1,577.1	2,052.7	1,312.0	177.3	443.7	1,553.7	842.9	2,093.9	1,390.0	-2.7	11,905.4
Apr.	337.7	131.8	5,157.8	1,612.6	2,061.0	1,304.4	179.8	451.6	1,573.6	852.8	2,212.8	1,411.3	-20.4	12,109.1
May	337.5	113.9	5,156.4	1,598.0	2,080.6	1,296.6	181.2	456.7	1,575.9	853.8	2,220.3	1,424.5	-6.5	12,132.6
June	341.2	146.0	5,145.3	1,608.7	2,078.2	1,291.3	167.3	452.3	1,585.1	877.9	2,124.7	1,440.5	30.8	12,143.7
July	343.0	134.7	5,150.2	1,605.1	2,088.5	1,284.6	172.0	463.6	1,584.0	894.4	2,160.6	1,475.3	26.4	12,232.3
Aug.	337.9	140.6	5,146.7	1,577.6	2,120.2	1,279.6	169.4	471.2	1,604.1	898.8	2,209.0	1,499.6	9.1	12,316.9
Sep.	338.9	159.3	5,157.4	1,589.5	2,124.2	1,272.3	171.4	461.5	1,611.4	927.1	2,267.0	1,438.6	10.4	12,371.5
Oct.	336.7	172.3	5,166.1	1,590.7	2,141.3	1,263.5	170.6	467.2	1,636.8	933.7	2,327.5	1,480.7	12.0	12,533.2
Nov.	336.8	168.8	5,187.5	1,608.9	2,147.4	1,257.6	173.5	463.6	1,634.4	921.8	2,306.5	1,476.0	-0.1	12,495.2
Dec.	347.5	164.6	5,270.2	1,658.7	2,158.3	1,278.3	174.9	439.6	1,631.7	894.6	2,216.3	1,435.0	11.8	12,411.3
<i>Euro area enlargement</i>														
2001 1 Jan.	355.3	166.2	5,392.7	1,673.4	2,197.0	1,329.7	195.2	439.6	1,632.4	912.1	2,219.0	1,462.0	11.9	12,593.8
2001 Jan.	335.2	147.1	5,376.7	1,621.8	2,210.0	1,330.9	214.0	455.9	1,661.2	909.9	2,328.8	1,471.9	25.4	12,712.0
Feb.	334.2	154.4	5,385.3	1,623.9	2,221.0	1,324.6	215.8	462.8	1,678.6	911.5	2,342.8	1,497.0	2.6	12,769.1
Mar.	335.3	150.1	5,426.1	1,637.4	2,240.2	1,323.7	224.8	472.7	1,691.4	922.7	2,533.4	1,522.7	2.7	13,057.0
Apr.	335.1	152.2	5,460.1	1,672.6	2,239.6	1,324.7	223.3	482.2	1,697.6	923.8	2,555.0	1,486.5	-14.5	13,078.0
May ^(p)	331.8	146.4	5,497.4	1,697.4	2,242.5	1,322.5	235.0	487.1	1,712.3	934.6	2,623.1	1,496.9	-11.5	13,218.2

Source: ECB.

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

2) See Table 2.1, footnote 1.

3. Assets: flows ¹⁾

	Loans to euro area residents		Other euro area residents	Holdings of securities other than shares issued by euro area residents		Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	Total	
	General government			General government	Other euro area residents						
	1	2	3	4	5	6	7	8	9	10	11
1999 Dec.	30.0	-5.8	35.8	-28.5	-31.7	3.2	13.2	-80.5	-0.4	5.6	-60.7
2000 Jan.	32.6	-7.5	40.1	15.0	13.8	1.2	3.9	22.2	-1.6	24.3	96.5
Feb.	32.1	-4.4	36.5	15.5	9.3	6.2	13.7	31.7	-0.4	17.0	109.6
Mar.	72.0	4.5	67.4	-13.8	-7.0	-6.8	39.1	33.4	0.0	22.5	153.2
Apr.	55.9	2.3	53.6	-14.7	-21.4	6.7	11.7	13.1	0.8	32.9	99.7
May	22.4	-6.3	28.8	0.0	-7.5	7.5	12.4	11.3	0.5	1.0	47.5
June	60.5	-0.5	60.9	-17.1	-18.1	1.0	-31.9	7.8	1.4	4.5	25.2
July	22.3	-1.3	23.6	-19.1	-26.8	7.6	3.6	-3.6	0.7	46.9	50.9
Aug.	7.1	-8.6	15.7	-6.1	-9.7	3.6	1.9	3.8	0.3	38.5	45.6
Sep.	67.3	-4.1	71.5	0.4	-3.0	3.4	3.0	17.7	0.7	-75.9	13.4
Oct.	40.6	1.9	38.6	-8.2	-15.4	7.2	1.4	9.2	3.2	68.9	115.0
Nov.	49.1	7.2	41.9	-1.8	-1.4	-0.4	1.0	8.7	-0.3	-51.0	5.7
Dec.	60.9	9.8	51.1	-14.4	-17.7	3.4	5.5	6.9	1.2	-22.2	38.0
<i>Euro area enlargement</i>											
2001 Jan.	31.2	2.8	28.3	-1.2	-6.0	4.8	9.7	60.7	-1.0	22.1	121.6
Feb.	12.3	-7.9	20.2	15.3	6.2	9.1	7.7	13.5	0.5	2.7	51.8
Mar.	61.5	1.0	60.5	21.8	13.3	8.5	15.8	106.5	0.1	26.7	231.7
Apr.	38.5	-7.9	46.4	10.9	6.3	4.6	19.6	-17.6	1.2	-26.8	25.8
May ^(p)	2.4	-6.0	8.4	28.9	22.5	6.4	0.9	5.1	1.4	35.8	73.5

4. Liabilities: flows ¹⁾

	Currency in circulation	Deposits of central government	Deposits of other general government/ other euro area residents	Over-night	With agreed maturity	Redeemable at notice	Repurchase agreements	Money market fund shares/ units and money market paper	Debt securities issued	Capital and reserves	External liabilities ²⁾	Re-maining liabilities	Excess of inter-MFI liabilities	Total
1999 Dec.	19.5	-4.1	65.6	29.3	32.3	18.4	-14.4	-15.1	10.5	12.6	-89.4	-60.8	0.5	-60.7
2000 Jan.	-16.9	-8.3	23.0	28.1	-16.0	0.3	10.7	0.4	-2.5	17.9	66.8	43.1	-27.0	96.5
Feb.	-1.8	10.9	5.4	-6.8	17.5	-9.9	4.5	18.4	15.6	4.5	26.3	16.4	13.9	109.6
Mar.	3.5	-14.5	20.5	7.6	5.0	-10.0	17.8	12.3	1.2	12.8	107.2	33.4	-23.2	153.2
Apr.	3.3	1.6	33.0	33.4	4.9	-7.7	2.4	-0.4	19.1	9.4	35.8	14.5	-16.5	99.7
May	-0.2	-17.9	1.6	-11.3	20.3	-8.9	1.4	8.2	6.3	2.7	28.9	11.9	6.0	47.5
June	3.6	32.1	-7.9	12.0	-0.7	-5.3	-13.9	-4.5	15.8	18.9	-78.0	19.1	26.1	25.2
July	1.9	-11.3	1.1	-5.0	7.4	-6.1	4.7	10.9	-7.1	15.6	8.5	38.3	-7.0	50.9
Aug.	-5.1	5.9	-7.9	-29.3	29.3	-5.1	-2.7	6.3	11.7	5.1	11.8	33.3	-15.4	45.6
Sep.	1.0	18.7	4.6	10.8	-0.9	-7.4	2.0	-10.1	3.3	19.5	43.2	-65.9	-1.1	13.4
Oct.	-2.2	13.1	3.3	-0.8	13.8	-8.8	-0.8	4.6	17.0	5.1	20.0	44.8	9.4	115.0
Nov.	0.1	-3.6	26.0	20.0	8.8	-5.8	3.0	-2.5	4.7	-11.6	11.8	-5.9	-13.4	5.7
Dec.	10.7	-4.2	95.9	53.8	19.8	20.9	1.5	-13.4	5.1	-23.4	-16.1	-22.7	5.9	38.0
<i>Euro area enlargement</i>														
2001 Jan.	-20.1	-19.1	-18.2	-51.5	13.3	1.2	18.8	18.0	23.4	-3.3	111.9	18.0	11.0	121.6
Feb.	-1.0	7.5	8.1	1.9	10.7	-6.3	1.9	6.8	16.7	2.3	10.4	23.8	-22.8	51.8
Mar.	1.1	-4.2	35.2	11.6	15.8	-1.0	8.9	8.4	8.7	13.3	145.4	30.2	-6.5	231.7
Apr.	-0.2	2.1	34.3	35.0	-0.2	1.0	-1.5	8.5	5.1	1.9	26.3	-35.6	-16.6	25.8
May ^(p)	-3.3	-5.8	29.4	22.0	-1.8	-2.4	11.7	3.2	2.0	7.5	12.9	26.4	1.2	73.5

Table 2.4
Monetary aggregates ¹⁾ and counterparts
(EUR billions (not seasonally adjusted) and annual growth rates, unless otherwise indicated)
1. Monetary aggregates: levels at the end of the period

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Index Dec. 98=100 ³⁾
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Index Dec. 98=100 ³⁾				
			3	4	5	6	7	8
1999 Nov.	330.1	1,580.5	1,910.6	107.01	860.8	1,265.2	4,036.6	102.80
Dec.	349.9	1,614.1	1,964.0	109.97	881.6	1,287.7	4,133.3	105.24
2000 Jan.	333.0	1,642.4	1,975.4	110.55	864.8	1,288.9	4,129.1	105.09
Feb.	331.1	1,634.3	1,965.4	109.99	879.9	1,278.0	4,123.4	104.98
Mar.	334.6	1,642.8	1,977.4	110.58	888.2	1,267.5	4,133.1	105.16
Apr.	337.7	1,680.9	2,018.6	112.78	896.3	1,260.1	4,174.9	106.11
May	337.5	1,662.8	2,000.3	111.95	914.1	1,251.9	4,166.3	105.98
June	341.2	1,674.1	2,015.3	112.85	912.7	1,244.6	4,172.5	106.21
July	343.0	1,672.3	2,015.3	112.78	922.8	1,236.8	4,174.9	106.20
Aug.	337.9	1,643.1	1,981.0	110.75	953.3	1,230.4	4,164.6	105.84
Sep.	338.9	1,654.4	1,993.4	111.38	956.1	1,220.3	4,169.8	105.92
Oct.	336.7	1,656.8	1,993.6	111.28	972.2	1,211.1	4,176.8	105.99
Nov.	336.8	1,675.2	2,012.1	112.42	984.9	1,202.3	4,199.3	106.65
Dec.	347.5	1,728.6	2,076.1	116.22	990.2	1,221.4	4,287.8	109.15
<i>Euro area enlargement</i>								
2001 1 Jan.	355.3	1,743.2	2,098.5	-	1,027.1	1,271.5	4,397.2	-
2001 Jan.	335.2	1,690.3	2,025.4	112.18	1,040.9	1,275.1	4,341.5	107.78
Feb.	334.2	1,691.0	2,025.2	112.15	1,053.0	1,269.7	4,347.9	107.92
Mar.	335.3	1,704.8	2,040.1	112.86	1,069.3	1,269.5	4,378.8	108.58
Apr.	335.1	1,741.3	2,076.4	114.87	1,071.2	1,273.1	4,420.7	109.62
May ^(p)	331.8	1,765.3	2,097.1	115.85	1,071.8	1,272.9	4,441.8	109.97

2. Monetary aggregates: flows ⁴⁾

	M2							
	M1				Deposits with agreed maturity up to 2 years	Deposits redeemable at notice up to 3 months	Total	Annual growth rate ³⁾
	Currency in circulation ¹⁾	Overnight deposits ²⁾	Total	Annual growth rate ³⁾				
			3	4	5	6	7	8
1999 Dec.	19.5	33.4	52.9	10.0	20.6	22.5	96.0	5.2
2000 Jan.	-16.9	27.4	10.4	9.3	-17.7	1.1	-6.1	4.2
Feb.	-1.8	-8.2	-10.1	10.7	16.5	-10.9	-4.4	5.3
Mar.	3.5	7.2	10.6	10.1	7.1	-10.6	7.1	5.1
Apr.	3.3	36.0	39.2	11.4	5.7	-7.6	37.3	5.5
May	-0.2	-14.7	-14.9	8.7	19.0	-9.2	-5.1	4.7
June	3.6	12.6	16.2	7.1	0.3	-7.3	9.2	4.3
July	1.9	-3.2	-1.3	6.9	8.3	-7.5	-0.5	3.7
Aug.	-5.1	-31.1	-36.3	7.1	28.9	-6.5	-13.9	4.3
Sep.	1.0	10.3	11.3	6.2	1.7	-10.1	2.9	4.1
Oct.	-2.2	0.4	-1.8	5.8	13.8	-9.3	2.7	3.7
Nov.	0.1	20.3	20.4	5.1	14.6	-8.6	26.4	3.7
Dec.	10.7	57.2	68.0	5.7	10.9	19.3	98.2	3.7
<i>Euro area enlargement</i>								
2001 Jan.	-20.1	-52.8	-72.9	1.5	14.1	3.6	-55.3	2.6
Feb.	-1.0	0.4	-0.6	2.0	11.9	-5.4	5.9	2.8
Mar.	1.1	11.8	12.9	2.1	14.0	-0.4	26.5	3.3
Apr.	-0.2	36.4	36.2	1.9	2.2	3.7	42.0	3.3
May ^(p)	-3.3	21.1	17.8	3.5	-3.5	-0.5	13.9	3.8

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) Excluding holdings of money market fund shares/units by non-residents of the euro area.

M3 ²⁾							
Repurchase agreements	Money market fund shares/units and money market paper ²⁾	Debt securities up to 2 years	Total	Index Dec. 98=100 ³⁾			
9	10	11	12	13		14	
158.6	414.1	76.2	4,685.5	104.35		1999 Nov.	
144.2	408.9	88.8	4,775.1	106.13		Dec.	
155.0	412.4	87.2	4,783.7	106.20		2000 Jan.	
159.5	430.9	90.9	4,804.5	106.69		Feb.	
177.3	443.7	90.7	4,844.8	107.50		Mar.	
179.8	451.6	89.7	4,896.0	108.40		Apr.	
181.2	456.7	87.5	4,891.6	108.46		May	
167.3	452.3	86.8	4,878.9	108.30		June	
172.0	463.6	76.7	4,887.3	108.40		July	
169.4	471.2	81.0	4,886.2	108.24		Aug.	
171.4	461.5	81.5	4,884.2	108.14		Sep.	
170.6	467.2	88.2	4,902.8	108.41		Oct.	
173.5	463.6	97.3	4,933.8	109.22		Nov.	
174.9	439.6	106.4	5,008.7	111.33		Dec.	
<i>Euro area enlargement</i>							
195.2	439.6	106.6	5,138.5	-		2001 1 Jan.	
214.0	455.9	106.8	5,118.1	110.93		2001 Jan.	
215.8	462.8	115.5	5,142.0	111.44		Feb.	
224.8	472.7	118.3	5,194.5	112.43		Mar.	
223.3	482.2	122.5	5,248.6	113.58		Apr.	
235.0	487.1	131.6	5,295.6	114.35		May ⁴⁾	

M3 ²⁾							
Repurchase agreements	Money market fund shares/units and money market paper ²⁾	Debt securities up to 2 years	Total	Annual growth rate ³⁾	3-month moving average (centred)		
9	10	11	12	13	14		
-14.4	-15.1	13.1	79.6	6.1	5.8	1999 Dec.	
10.7	0.4	-1.9	3.2	5.2	5.8	2000 Jan.	
4.5	18.4	3.7	22.2	6.2	6.0	Feb.	
17.8	12.3	-1.0	36.3	6.6	6.5	Mar.	
2.4	-0.4	1.4	40.8	6.7	6.4	Apr.	
1.4	8.2	-1.7	2.8	6.0	6.0	May	
-13.9	-4.5	1.7	-7.4	5.3	5.5	June	
4.7	10.9	-10.7	4.5	5.1	5.3	July	
-2.7	6.3	3.2	-7.1	5.5	5.2	Aug.	
2.0	-10.1	0.6	-4.6	5.0	5.1	Sep.	
-0.8	4.6	5.6	12.0	4.9	4.9	Oct.	
3.0	-2.5	10.1	36.9	4.7	4.8	Nov.	
1.5	-13.4	9.1	95.4	4.9	4.7	Dec.	
<i>Euro area enlargement</i>							
18.8	18.0	0.0	-18.5	4.5	4.6	2001 Jan.	
1.9	6.8	8.7	23.3	4.4	4.5	Feb.	
8.9	8.4	2.2	46.0	4.6	4.6	Mar.	
-1.5	8.5	4.0	53.1	4.8	4.9	Apr.	
11.7	3.2	6.7	35.4	5.4	-	May ⁴⁾	

3) For the calculations of the index and the growth rates, see the Technical notes.

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.

Table 2.4 (cont'd)
Monetary aggregates ¹⁾ and counterparts
(EUR billions (not seasonally adjusted) and annual growth rates, unless otherwise indicated)
3. Main counterparts of M3: levels at the end of the period

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Index Dec. 98 =100 ³⁾		
	1	2	3	4	5	6	7	8	9	10
1999 Nov.	1,149.8	110.2	1,449.1	779.1	2,090.7	6,159.0	5,504.0	108.82	260.4	164.5
Dec.	1,161.6	112.2	1,446.8	809.2	2,058.6	6,214.3	5,537.2	109.52	272.5	164.0
2000 Jan.	1,163.6	111.4	1,447.7	825.6	2,062.3	6,263.5	5,581.5	110.32	231.3	162.3
Feb.	1,166.4	112.4	1,459.7	828.8	2,066.9	6,320.9	5,617.3	111.04	237.1	161.8
Mar.	1,164.9	113.2	1,463.0	842.9	2,060.4	6,427.0	5,688.6	112.37	168.2	161.8
Apr.	1,165.1	112.8	1,483.9	852.8	2,041.0	6,508.3	5,749.0	113.43	150.1	162.6
May	1,167.0	114.0	1,488.5	853.8	2,023.7	6,559.1	5,779.1	114.00	131.1	163.0
June	1,165.8	115.5	1,498.3	877.9	2,002.3	6,594.9	5,846.3	115.20	218.6	164.2
July	1,166.2	116.6	1,507.2	894.4	1,974.5	6,636.0	5,874.6	115.66	209.9	164.9
Aug.	1,167.3	118.2	1,523.1	898.8	1,950.6	6,660.4	5,893.1	115.97	206.8	165.2
Sep.	1,168.5	120.5	1,529.9	927.1	1,946.4	6,750.6	5,978.5	117.38	191.7	166.0
Oct.	1,169.4	121.3	1,548.6	933.7	1,935.4	6,799.8	6,021.5	118.14	183.7	168.0
Nov.	1,162.8	124.0	1,537.2	921.8	1,939.2	6,836.3	6,056.8	118.96	177.8	167.7
Dec.	1,168.4	126.4	1,525.2	894.6	1,925.3	6,877.6	6,090.9	119.96	186.6	169.9
<i>Euro area enlargement</i>										
2001 1 Jan.	1,170.2	127.7	1,525.8	912.1	2,009.9	6,952.1	6,154.2	-	79.5	172.9
2001 Jan.	1,169.4	127.9	1,554.4	909.9	2,005.1	6,993.0	6,182.0	120.52	130.8	171.7
Feb.	1,168.3	128.0	1,563.0	911.5	2,005.3	7,028.4	6,201.7	120.91	134.4	172.3
Mar.	1,171.2	127.6	1,573.2	922.7	2,019.5	7,120.4	6,269.5	122.09	100.0	172.4
Apr.	1,168.6	125.6	1,575.2	923.8	2,015.8	7,192.1	6,314.3	123.00	56.0	173.6
May ^(p)	1,170.8	123.4	1,580.7	934.6	2,030.4	7,218.0	6,333.7	123.16	48.9	175.0

4. Main counterparts of M3: flows ⁴⁾

	Longer-term MFI liabilities				Credit ²⁾				Net external assets	Fixed assets
	Deposits with agreed maturity over 2 years	Deposits redeemable at notice over 3 months	Debt securities over 2 years	Capital and reserves	Credit to government	Credit to other euro area residents	Of which loans	Annual growth rate ³⁾		
	1	2	3	4	5	6	7	8	9	10
1999 Dec.	11.7	2.1	-2.6	12.6	-37.5	52.2	35.8	9.5	8.9	-0.4
2000 Jan.	1.6	-0.9	-0.6	17.9	6.3	45.2	40.1	8.8	-44.6	-1.6
Feb.	1.0	1.0	11.9	4.5	4.9	56.4	36.5	9.5	5.4	-0.4
Mar.	-2.0	0.8	2.2	12.8	-2.4	99.7	67.4	9.9	-73.8	0.0
Apr.	-0.8	-0.4	17.6	9.4	-19.2	72.0	53.6	10.5	-22.7	0.8
May	1.3	1.2	8.0	2.7	-13.8	48.7	28.8	10.3	-17.6	0.5
June	-1.0	1.5	14.1	18.9	-18.6	30.1	60.9	9.4	85.8	1.4
July	-0.8	1.4	3.6	15.6	-28.0	34.9	23.6	9.1	-12.0	0.7
Aug.	0.4	1.7	8.5	5.1	-18.3	21.2	15.7	9.5	-7.9	0.3
Sep.	-2.5	2.2	2.7	19.5	-7.1	77.9	71.5	10.0	-25.5	0.7
Oct.	0.0	0.8	11.3	5.1	-13.5	47.1	38.6	9.8	-10.7	3.2
Nov.	-5.9	2.7	-5.4	-11.6	5.8	42.4	41.9	9.3	-3.1	-0.3
Dec.	8.9	2.5	-4.0	-23.4	-7.9	59.9	51.1	9.5	22.9	1.2
<i>Euro area enlargement</i>										
2001 Jan.	-0.8	0.2	23.4	-3.3	-3.2	42.9	28.3	9.2	-51.1	-1.0
Feb.	-1.2	0.1	8.0	2.3	-1.8	37.0	20.2	8.9	3.2	0.5
Mar.	1.8	-0.4	6.5	13.3	14.3	84.9	60.5	8.6	-38.9	0.1
Apr.	-2.4	-2.0	1.1	1.9	-1.6	70.6	46.4	8.4	-43.8	1.2
May ^(p)	1.6	-2.2	-4.7	7.5	16.5	15.8	8.4	8.0	-7.8	1.4

1) See page 16*, footnote 1.

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

3) See page 17*, footnote 3.

4) See page 17*, footnote 4.

5. Seasonally adjusted levels at the end of the period

	M3 ¹⁾										Loans to other euro area residents (excluding government)	
	M2				Marketable instruments ⁴⁾				Total	Index ²⁾	Total	Index ²⁾
	M1		Other short-term deposits ³⁾		Total	Index ²⁾	Total	Index ²⁾	9	10		
	Total	Index ²⁾	Total	Index ²⁾	5	6	7	8				
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Nov.	1,911.1	107.03	2,148.0	100.32	4,059.1	103.37	652.1	115.99	4,711.2	104.92	5,508.3	108.90
Dec.	1,915.0	107.23	2,151.3	100.46	4,066.4	103.54	667.6	117.02	4,734.0	105.21	5,520.4	109.19
2000 Jan.	1,965.1	109.98	2,132.6	99.54	4,097.7	104.29	668.2	116.52	4,765.9	105.80	5,573.4	110.16
Feb.	1,982.7	110.96	2,145.4	100.21	4,128.1	105.10	678.3	118.28	4,806.4	106.73	5,626.4	111.22
Mar.	1,998.2	111.75	2,144.7	100.12	4,142.9	105.41	700.6	121.93	4,843.5	107.47	5,687.9	112.36
Apr.	2,012.2	112.42	2,150.8	100.28	4,163.0	105.80	705.7	121.82	4,868.7	107.80	5,751.0	113.47
May	2,000.4	111.95	2,161.0	100.76	4,161.4	105.85	705.4	122.39	4,866.8	107.91	5,792.0	114.25
June	1,984.8	111.15	2,165.1	101.03	4,149.9	105.64	702.6	122.31	4,852.5	107.71	5,825.9	114.80
July	1,996.5	111.72	2,171.8	101.28	4,168.3	106.03	713.0	123.93	4,881.2	108.26	5,851.9	115.22
Aug.	2,014.1	112.60	2,184.4	101.78	4,198.4	106.70	717.2	124.25	4,915.6	108.89	5,913.7	116.38
Sep.	2,013.4	112.50	2,192.3	102.10	4,205.7	106.83	719.0	124.52	4,924.8	109.04	5,990.4	117.61
Oct.	2,018.1	112.66	2,201.1	102.40	4,219.3	107.06	735.4	126.95	4,954.7	109.55	6,029.2	118.29
Nov.	2,018.0	112.75	2,207.3	102.78	4,225.3	107.31	738.4	127.85	4,963.7	109.88	6,058.6	119.00
Dec.	2,014.5	112.77	2,197.4	102.58	4,211.8	107.21	749.3	131.65	4,961.1	110.27	6,075.4	119.66
<i>Euro area enlargement</i>												
2001 1 Jan.	2,036.2	-	2,283.8	-	4,320.0	-	770.5	-	5,090.5	-	6,138.5	-
2001 Jan.	2,028.1	112.33	2,293.0	103.01	4,321.1	107.27	790.4	135.32	5,111.5	110.79	6,175.8	120.39
Feb.	2,049.1	113.47	2,307.2	103.63	4,356.3	108.13	791.4	135.47	5,147.7	111.56	6,212.8	121.13
Mar.	2,054.1	113.64	2,325.8	104.36	4,379.9	108.61	801.7	136.90	5,181.6	112.16	6,268.3	122.07
Apr.	2,065.9	114.29	2,341.2	105.06	4,407.1	109.29	810.9	138.26	5,218.0	112.92	6,315.7	123.02
May ⁵⁾	2,090.8	115.51	2,339.7	104.80	4,430.5	109.69	829.8	140.76	5,260.3	113.59	6,347.4	123.43

6. Seasonally adjusted flows ⁵⁾

	M3 ¹⁾										Loans to other euro area residents (excluding government)	
	M2				Marketable instruments ⁴⁾				Total	Change on previous month (%)	Total	Change on previous month (%)
	M1		Other short-term deposits ³⁾		Total	Change on previous month (%)	Total	Change on previous month (%)	9	10		
	Total	Change on previous month (%)	Total	Change on previous month (%)	5	6	7	8				
1	2	3	4	5	6	7	8	9	10	11	12	
1999 Dec.	3.5	0.2	3.1	0.1	6.6	0.2	5.8	0.9	12.4	0.3	14.6	0.3
2000 Jan.	49.1	2.6	-19.7	-0.9	29.4	0.7	-2.9	-0.4	26.5	0.6	48.9	0.9
Feb.	17.5	0.9	14.2	0.7	31.7	0.8	10.1	1.5	41.8	0.9	53.6	1.0
Mar.	14.2	0.7	-1.9	-0.1	12.2	0.3	20.9	3.1	33.2	0.7	57.7	1.0
Apr.	12.0	0.6	3.6	0.2	15.6	0.4	-0.7	-0.1	15.0	0.3	56.2	1.0
May	-8.4	-0.4	10.3	0.5	1.9	0.0	3.3	0.5	5.2	0.1	39.7	0.7
June	-14.4	-0.7	5.8	0.3	-8.5	-0.2	-0.4	-0.1	-9.0	-0.2	27.7	0.5
July	10.3	0.5	5.2	0.2	15.5	0.4	9.3	1.3	24.8	0.5	21.2	0.4
Aug.	15.7	0.8	10.8	0.5	26.5	0.6	1.8	0.3	28.3	0.6	59.1	1.0
Sep.	-1.7	-0.1	6.7	0.3	5.0	0.1	1.6	0.2	6.5	0.1	62.7	1.1
Oct.	2.7	0.1	6.4	0.3	9.2	0.2	14.1	2.0	23.2	0.5	34.4	0.6
Nov.	1.6	0.1	8.2	0.4	9.8	0.2	5.2	0.7	15.0	0.3	36.0	0.6
Dec.	0.3	0.0	-4.2	-0.2	-3.8	-0.1	21.9	3.0	18.1	0.4	33.7	0.6
<i>Euro area enlargement</i>												
2001 Jan.	-8.6	-0.4	9.8	0.4	1.1	0.0	21.9	2.8	23.0	0.5	37.7	0.6
Feb.	20.7	1.0	14.0	0.6	34.6	0.8	0.9	0.1	35.5	0.7	37.5	0.6
Mar.	3.1	0.1	16.2	0.7	19.2	0.4	8.3	1.1	27.6	0.5	48.3	0.8
Apr.	11.8	0.6	15.6	0.7	27.3	0.6	8.0	1.0	35.3	0.7	49.0	0.8
May ⁵⁾	22.0	1.1	-5.8	-0.2	16.2	0.4	14.7	1.8	30.9	0.6	20.7	0.3

Source: ECB.

1) Excluding holdings of money market fund shares/units by non-residents of the euro area.

2) See page 17*, footnote 3.

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

4) Marketable instruments comprise repurchase agreements, money market fund shares/units (excluding holdings by non-residents of the euro area) and money market paper together with debt securities issued with an original maturity of up to two years.

5) See page 17*, footnote 4.

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

	Non-financial corporations ²⁾³⁾				Households ²⁾³⁾	Consumer credit ⁴⁾			Lending for house purchase ⁴⁾			Other lending			Non-profit institutions serving households ²⁾			
	1	Up to 1 year	Over 1 and up to 5 years	Over 5 years		6	Up to 1 year	Over 1 and up to 5 years	Over 5 years	9	Up to 1 year	Over 1 and up to 5 years	Over 5 years	12		Up to 1 year	Over 1 and up to 5 years	Over 5 years
1999 Q3	2,353.5	832.2	362.8	1,158.4	2,661.7	85.9	157.3	196.6	19.6	64.4	1,568.6	136.0	96.2	337.1	36.2			
Q4	2,427.5	858.8	372.9	1,195.8	2,726.7	88.4	156.4	195.6	19.9	60.4	1,626.4	141.7	98.5	339.3	37.4			
2000 Q1	2,501.3	902.0	392.3	1,207.0	2,775.0	89.1	162.5	200.5	20.2	58.9	1,659.7	141.0	100.4	342.8	39.0			
Q2	2,561.7	919.1	406.0	1,236.7	2,826.0	93.6	161.7	201.8	21.3	60.7	1,698.5	144.9	102.2	341.4	37.6			
Q3	2,633.9	954.6	422.5	1,256.8	2,888.1	96.5	165.1	208.2	22.8	63.1	1,747.0	142.5	100.9	342.1	37.5			
Q4	2,684.8	968.4	428.6	1,287.8	2,941.1	98.2	165.5	212.8	23.1	62.5	1,790.7	146.4	101.7	340.1	38.2			
<i>Euro area enlargement</i>																		
2001 Q1 ^(p)	2,792.0	1,030.6	442.2	1,319.3	2,986.4	100.2	169.4	213.0	22.0	62.1	1,826.3	146.4	101.9	345.0	37.2			

2. Loans to non-monetary financial corporations

	Non-monetary financial intermediaries except insurance corporations and pension funds ²⁾				Insurance corporations and pension funds ²⁾			
	1	Up to 1 year	Over 1 and up to 5 years	Over 5 years	5	Up to 1 year	Over 1 and up to 5 years	Over 5 years
1999 Q3	299.4	181.9	53.8	63.7	41.9	33.1	2.8	6.0
Q4	315.7	191.4	55.1	69.2	29.4	20.7	2.7	5.9
2000 Q1	335.7	207.1	56.2	72.4	37.1	25.7	4.0	7.4
Q2	381.7	246.0	60.8	74.9	38.8	29.1	3.8	5.8
Q3	385.6	247.0	64.8	73.8	33.0	25.3	2.9	4.8
Q4	394.9	252.6	68.8	73.5	31.5	21.8	4.1	5.6
<i>Euro area enlargement</i>								
2001 Q1 ^(p)	417.9	272.4	71.5	74.0	34.5	24.9	4.0	5.6

3. Loans to government

	General government ²⁾										
	1	Central government ⁵⁾	Other general government								Social security funds
			State government				Local government				
			3	Up to 1 year	Over 1 and up to 5 years	Over 5 years	7	Up to 1 year	Over 1 and up to 5 years	Over 5 years	
1999 Q3	831.1	206.4	278.4	10.1	21.3	247.0	329.5	19.9	10.5	299.1	16.8
Q4	847.9	199.5	292.9	15.0	25.1	252.7	339.9	20.6	11.7	307.7	15.6
2000 Q1	839.7	193.8	291.9	13.2	27.4	251.3	338.1	21.3	10.8	306.0	16.0
Q2	835.6	186.8	290.0	9.9	28.1	252.1	339.0	21.6	11.5	305.9	19.7
Q3	818.0	173.3	288.4	8.9	27.2	252.4	337.8	21.5	11.1	305.2	18.5
Q4	835.9	173.1	297.3	13.7	28.1	255.4	350.9	22.8	12.3	315.7	14.6
<i>Euro area enlargement</i>											
2001 Q1 ^(p)	851.4	188.9	295.3	9.9	30.1	255.3	351.8	24.1	12.4	315.2	15.5

Source: ECB.

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

2) Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S.123 (including financial auxiliaries, S.124); insurance corporations and pension funds, S.125; general government, S.13.

3) As a result of the implementation of a new reporting scheme in January 1999, data prior to the first quarter of 1999 are not directly comparable with those referring to later periods.

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

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

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

	Non-financial corporations ^{2) 3)}					Households ^{2) 3)}				
	1	Overnight	With agreed maturity	Redeemable at notice	Repos	6	Overnight	With agreed maturity	Redeemable at notice	Repos
		2	3	4	5		7	8	9	10
1999 Q3	747.4	429.6	270.1	25.6	22.1	3,239.2	845.0	1,077.0	1,283.3	33.9
Q4	772.7	446.0	281.3	23.9	21.5	3,306.4	871.6	1,100.2	1,295.3	39.4
2000 Q1	787.9	440.2	292.2	24.4	31.1	3,297.7	887.2	1,093.5	1,274.7	42.4
Q2	818.6	459.7	307.9	24.1	26.9	3,287.2	888.3	1,097.7	1,254.6	46.6
Q3	843.7	464.2	329.9	24.7	25.0	3,273.6	874.4	1,112.3	1,235.3	51.6
Q4	872.7	497.4	324.9	24.1	26.3	3,339.6	907.1	1,133.9	1,241.6	57.1
	<i>Euro area enlargement</i>									
2001 Q1 ^(p)	900.3	480.6	348.8	37.4	33.5	3,446.2	904.4	1,189.4	1,273.6	78.9

2. Deposits held by non-monetary financial corporations

	Non-monetary financial intermediaries except insurance corporations and pension funds ^{2) 3)}					Insurance corporations and pension funds ²⁾				
	1	Overnight	With agreed maturity	Redeemable at notice	Repos	6	Overnight	With agreed maturity	Redeemable at notice	Repos
		2	3	4	5		7	8	9	10
1999 Q3	391.2	122.5	173.0	5.2	90.5	436.6	32.0	389.8	3.3	11.5
Q4	398.9	143.1	181.7	4.7	69.3	447.7	32.2	400.4	3.3	11.9
2000 Q1	435.3	162.2	180.1	5.6	87.4	458.8	35.4	407.0	3.2	13.1
Q2	425.3	164.5	178.7	5.3	76.8	460.7	34.6	411.0	3.5	11.6
Q3	424.4	158.6	184.2	5.1	76.6	464.4	34.1	413.7	3.7	12.9
Q4	428.4	153.7	194.8	5.9	74.0	477.6	40.6	418.4	3.2	15.3
	<i>Euro area enlargement</i>									
2001 Q1 ^(p)	444.7	154.7	194.8	5.8	89.4	481.4	36.4	423.1	3.5	18.3

3. Deposits held by government

	General government ²⁾																
	1	Central government		Other general government													
		2	State government						Local government				Social security funds				
			3	Overnight	With agreed maturity	Redeemable at notice	Repos	8	Overnight	With agreed maturity	Redeemable at notice	Repos	13	Overnight	With agreed maturity	Redeemable at notice	Repos
		4	5	6	7		9	10	11	12		14	15	16	17		
1999 Q3	261.9	133.3	27.3	8.3	18.7	0.1	0.2	54.6	24.5	25.6	3.4	1.1	46.7	17.1	27.3	0.9	1.5
Q4	280.5	142.0	31.2	9.7	21.1	0.1	0.2	59.2	27.1	27.5	3.4	1.2	48.2	16.0	30.6	0.7	0.7
2000 Q1	269.7	130.2	28.1	7.7	20.2	0.1	0.1	58.6	25.8	27.7	3.3	1.8	52.7	18.7	31.9	0.7	1.4
Q2	299.6	146.0	31.6	10.0	21.5	0.1	0.1	62.7	28.7	28.7	3.1	2.3	59.3	23.0	32.7	0.5	3.0
Q3	310.5	159.3	30.3	9.4	20.7	0.1	0.1	63.2	27.4	30.8	2.9	2.1	57.8	21.5	32.8	0.5	3.1
Q4	316.5	164.6	30.6	10.6	19.8	0.1	0.1	68.2	30.9	33.0	3.0	1.4	53.2	18.5	33.3	0.5	0.9
	<i>Euro area enlargement</i>																
2001 Q1 ^(p)	303.6	150.5	31.0	9.8	20.9	0.1	0.1	65.1	28.6	31.1	2.8	2.5	57.1	22.6	32.1	0.5	2.0

Source: ECB.

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

2) Corresponding ESA 95 sector codes: non-financial corporations, S.11; households, S.14; non-profit institutions serving households, S.15; non-monetary financial intermediaries except insurance corporations and pension funds (corresponding to other financial intermediaries in the ESA 95), S.123 (including financial auxiliaries, S.124); insurance corporations and pension funds, S.125; general government, S.13.

3) As a result of the implementation of a new reporting scheme in January 1999, data prior to the first quarter of 1999 are not directly comparable with those referring to later periods.

Table 2.7**Main outstanding MFI claims on and liabilities to non-residents of the euro area ¹⁾***(EUR billions (not seasonally adjusted; end of period))***1. Eurosystem ²⁾**

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents						
	1	Banks ³⁾⁴⁾		Non-banks		5	Banks ³⁾		Non-banks		9	10	11	12	Banks ³⁾		Non-banks	
		2	3	4	6		7	8	13	14					15			
																General government	Other	General government	Other
1999 Q3	108.1	99.0	6.8	2.3	176.2	4.0	168.1	4.1	0.4	0.1	0.3	82.6	80.6	0.4	1.5			
Q4	59.6	45.6	10.5	3.5	193.9	5.7	184.4	3.8	0.6	0.1	0.5	43.2	39.8	0.3	3.2			
2000 Q1	89.9	78.8	8.9	2.2	202.7	4.8	192.2	5.7	0.5	0.1	0.4	68.3	66.7	0.2	1.4			
Q2	104.6	91.5	10.3	2.7	201.9	4.5	193.4	4.0	0.4	0.1	0.3	85.3	82.8	0.5	2.0			
Q3	83.7	72.7	8.2	2.7	221.9	5.3	211.2	5.5	1.0	0.1	0.9	67.9	64.6	1.0	2.4			
Q4	30.3	20.9	7.0	2.3	205.8	5.2	195.7	4.9	1.0	0.1	0.9	23.2	19.9	1.1	2.2			
<i>Euro area enlargement</i>																		
2001 Q1 ⁴⁾	37.3	26.0	7.9	3.4	211.4	4.6	201.4	5.4	1.2	0.1	1.1	19.8	15.5	1.5	2.8			

2. MFIs excluding the Eurosystem

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents						
	1	Banks ³⁾⁴⁾		Non-banks		5	Banks ³⁾		Non-banks		9	10	11	12	Banks ³⁾		Non-banks	
		2	3	4	6		7	8	13	14					15			
																General government	Other	General government	Other
1999 Q3	1,259.5	829.9	67.3	362.2	320.2	105.4	88.7	126.1	87.5	39.9	47.6	1,696.1	1,249.7	62.2	384.2			
Q4	1,287.2	842.5	68.2	376.5	339.4	111.8	88.7	138.9	92.3	38.3	54.0	1,782.6	1,302.8	72.0	407.8			
2000 Q1	1,339.4	865.5	70.5	403.4	370.5	124.6	98.9	146.9	111.3	47.3	64.0	2,000.8	1,468.0	71.2	461.6			
Q2	1,353.3	886.4	70.6	396.3	415.1	148.4	109.5	157.2	117.9	50.7	67.2	1,967.1	1,422.5	76.7	467.8			
Q3	1,416.1	906.4	71.0	438.6	443.2	162.9	110.3	170.0	138.5	58.0	80.5	2,117.8	1,513.2	80.7	523.8			
Q4	1,439.3	924.3	71.8	443.2	439.6	165.9	94.9	178.8	140.6	61.5	79.1	2,115.8	1,530.6	83.5	501.6			
<i>Euro area enlargement</i>																		
2001 Q1 ⁴⁾	1,609.9	1,030.8	69.2	509.9	467.6	185.5	86.7	195.4	157.7	65.4	92.2	2,421.5	1,767.6	87.5	566.4			

3. MFIs including the Eurosystem

	Loans to non-residents				Holdings of securities other than shares issued by non-residents				Holdings of shares and other equity issued by non-residents			Deposits held by non-residents						
	1	Banks ³⁾⁴⁾		Non-banks		5	Banks ³⁾		Non-banks		9	10	11	12	Banks ³⁾		Non-banks	
		2	3	4	6		7	8	13	14					15			
																General government	Other	General government	Other
1999 Q3	1,367.5	928.9	74.1	364.5	496.4	109.4	256.8	130.2	87.9	40.0	47.9	1,778.7	1,330.3	62.7	385.7			
Q4	1,346.8	888.1	78.7	380.0	533.3	117.5	273.1	142.7	92.8	38.4	54.5	1,825.8	1,342.5	72.3	410.9			
2000 Q1	1,429.3	944.3	79.4	405.7	573.2	129.4	291.1	152.6	111.8	47.4	64.4	2,069.1	1,534.7	71.4	463.0			
Q2	1,457.9	977.9	81.0	399.0	617.1	153.0	302.9	161.3	118.3	50.8	67.5	2,052.4	1,505.4	77.2	469.8			
Q3	1,499.7	979.1	79.3	441.4	665.1	168.2	321.5	175.4	139.4	58.0	81.4	2,185.7	1,577.8	81.7	526.2			
Q4	1,469.5	945.2	78.8	445.5	645.4	171.1	290.6	183.7	141.6	61.6	80.0	2,139.1	1,550.5	84.6	503.9			
<i>Euro area enlargement</i>																		
2001 Q1 ⁴⁾	1,647.1	1,056.8	77.1	513.3	679.0	190.0	288.1	200.8	158.8	65.5	93.3	2,441.4	1,783.0	89.1	569.2			

Source: ECB.

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

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

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

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

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

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1999 Q3	3,858.1	3,450.8	53.0	354.3	251.2	24.4	57.9	20.9	5,076.3	4,915.1	27.5	133.7	96.7	16.3	12.2	8.5
Q4	3,868.4	3,456.8	46.6	364.9	261.7	29.5	54.7	19.0	5,206.2	5,041.1	25.8	139.3	101.4	17.3	11.7	8.9
2000 Q1	3,932.4	3,496.3	55.0	381.1	265.8	32.5	60.5	22.3	5,249.3	5,074.7	30.5	144.1	105.1	17.6	11.9	9.5
Q2	4,056.4	3,620.9	52.8	382.7	265.3	34.8	62.3	20.2	5,291.3	5,111.2	27.9	152.2	113.0	17.1	13.2	9.0
Q3	3,946.0	3,485.3	58.1	402.7	279.6	38.3	64.9	20.0	5,316.7	5,127.5	29.1	160.1	121.0	16.5	12.5	10.1
Q4	3,949.8	3,526.6	47.5	375.8	264.9	34.4	61.0	15.6	5,434.8	5,256.5	27.3	150.9	115.1	14.6	11.3	10.0
<i>Euro area enlargement</i>																
2001 Q1 ³⁾	4,082.7	3,583.4	55.8	443.5	318.8	38.7	66.8	19.2	5,576.2	5,366.2	31.3	178.7	130.4	23.9	12.3	12.1

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

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1999 Q3	1,330.3	566.3	127.2	636.8	512.7	40.2	54.1	29.8	448.4	208.6	41.7	198.0	158.4	18.5	10.7	10.4
Q4	1,342.5	532.7	114.2	695.7	570.4	45.9	51.0	28.4	483.3	218.9	44.2	220.1	180.8	17.4	12.1	9.8
2000 Q1	1,534.7	605.5	151.1	778.1	615.3	66.4	65.8	30.6	534.4	244.1	51.4	238.9	195.3	21.6	11.4	10.8
Q2	1,505.4	598.7	134.0	772.7	613.8	60.9	63.2	34.8	547.0	243.3	52.1	251.6	203.7	22.0	15.1	10.7
Q3	1,577.8	612.0	145.4	820.4	661.5	63.1	63.4	32.4	607.9	252.7	61.0	294.2	245.5	23.1	13.8	11.8
Q4	1,550.5	590.3	126.8	833.5	684.6	53.1	65.7	30.1	588.5	254.0	64.0	270.5	225.5	20.5	12.3	12.2
<i>Euro area enlargement</i>																
2001 Q1 ³⁾	1,783.0	703.5	140.4	939.2	769.8	64.9	69.2	35.2	658.3	291.8	70.7	295.8	251.9	17.8	14.2	11.9

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

	Debt securities								Money market paper							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1999 Q3	2,331.0	2,072.0	38.9	220.2	128.4	43.6	31.2	17.0	207.4	187.8	1.8	17.8	11.6	3.2	2.4	0.6
Q4	2,365.9	2,101.0	40.0	224.8	128.6	48.2	30.7	17.3	245.4	220.5	1.8	23.1	15.4	4.2	2.3	1.2
2000 Q1	2,425.5	2,139.7	43.1	242.8	136.3	53.8	33.8	18.8	250.5	226.0	1.8	22.7	14.5	4.6	2.0	1.7
Q2	2,482.6	2,185.5	40.6	256.6	145.5	58.9	33.6	18.6	262.8	234.9	1.4	26.4	17.2	5.4	2.5	1.4
Q3	2,554.8	2,226.6	47.7	280.5	158.2	65.3	37.4	19.7	272.2	233.6	2.2	36.4	26.6	5.7	2.8	1.3
Q4	2,566.9	2,246.0	46.5	274.4	157.3	62.1	35.4	19.7	262.2	215.8	2.4	44.1	34.0	5.6	2.9	1.5
<i>Euro area enlargement</i>																
2001 Q1 ³⁾	2,663.1	2,325.5	48.5	289.1	169.6	62.0	37.2	20.3	276.0	224.6	2.6	48.7	40.8	3.4	2.6	1.9

Source: ECB.

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

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

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

Table 2.8 (cont'd)
Currency analysis of certain liabilities and assets of the euro area MFIs ¹⁾
(EUR billions (not seasonally adjusted; end of period))
Assets outstanding
4. Loans to euro area residents

	MFIs								Non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1999 Q3	3,828.3	-	-	-	-	-	-	-	6,223.9	6,003.4	24.5	196.0	105.7	23.8	60.4	6.2
Q4	3,837.4	-	-	-	-	-	-	-	6,385.1	6,151.9	23.4	209.9	115.8	28.3	62.0	3.8
2000 Q1	3,935.1	-	-	-	-	-	-	-	6,528.3	6,261.2	34.0	233.1	128.3	35.1	65.9	3.7
Q2	4,025.6	-	-	-	-	-	-	-	6,681.9	6,388.3	35.4	258.1	144.9	38.4	70.5	4.3
Q3	3,935.6	-	-	-	-	-	-	-	6,796.5	6,485.4	34.8	276.3	155.8	44.4	72.2	4.0
Q4	3,938.0	-	-	-	-	-	-	-	6,926.8	6,622.6	32.4	271.7	151.5	41.2	74.3	4.7
<i>Euro area enlargement</i>																
2001 Q1 ^(p)	4,080.0	-	-	-	-	-	-	-	7,120.9	6,780.3	36.1	304.5	176.7	45.6	76.8	5.4

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

	Issued by MFIs								Issued by non-MFIs							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1999 Q3	830.2	796.1	7.5	26.6	17.1	5.4	2.0	2.2	1,446.0	1,415.7	3.1	27.2	13.5	11.0	1.6	1.2
Q4	830.3	795.7	8.1	26.5	17.4	5.0	2.5	1.6	1,438.6	1,406.0	5.6	27.0	13.5	11.0	1.2	1.3
2000 Q1	871.8	834.7	11.6	25.5	16.4	5.0	2.4	1.7	1,449.6	1,417.1	4.8	27.6	14.2	11.3	1.2	0.8
Q2	897.5	858.1	12.5	26.9	17.8	4.9	2.6	1.7	1,411.0	1,377.3	6.0	27.7	14.7	10.5	1.6	0.9
Q3	943.4	898.7	10.6	34.1	24.5	5.3	2.5	1.9	1,386.6	1,353.3	3.6	29.7	16.6	11.0	1.2	0.9
Q4	935.3	895.0	10.8	29.5	19.7	5.9	2.1	1.7	1,354.6	1,320.7	5.6	28.2	16.7	9.7	1.0	0.9
<i>Euro area enlargement</i>																
2001 Q1 ^(p)	971.7	931.5	9.7	30.6	20.5	6.4	1.8	1.8	1,456.1	1,415.9	5.0	35.2	20.6	12.8	1.1	0.6

6. Loans to non-residents of the euro area

	Banks ³⁾								Non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1999 Q3	928.9	443.9	78.0	406.9	292.5	42.7	28.6	43.1	438.6	153.2	37.6	247.8	209.3	10.6	17.2	10.7
Q4	888.1	384.3	74.9	428.9	317.3	49.2	30.0	32.5	458.7	146.6	41.4	270.7	234.0	11.1	19.4	6.2
2000 Q1	944.3	423.4	95.5	425.4	306.9	49.3	33.0	36.2	485.1	154.7	40.8	289.6	248.9	13.9	20.4	6.3
Q2	977.9	462.9	92.1	422.9	308.4	44.9	33.2	36.4	480.0	149.6	42.0	288.4	246.1	14.1	21.4	6.8
Q3	979.1	445.8	90.9	442.4	331.8	42.1	33.8	34.7	520.6	156.0	46.1	318.5	273.9	14.5	23.3	6.9
Q4	945.2	409.7	89.2	446.3	337.9	44.1	32.6	31.7	524.3	163.3	45.3	315.8	271.2	11.5	25.9	7.2
<i>Euro area enlargement</i>																
2001 Q1 ^(p)	1,056.8	471.0	99.0	486.8	370.9	45.7	32.3	37.8	590.4	196.4	48.7	345.3	299.1	11.8	26.7	7.8

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

	Issued by banks ³⁾								Issued by non-banks							
	All currencies 1	Euro ²⁾ 2	Other EU currencies 3	Other currencies 4	Other currencies				All currencies 9	Euro ²⁾ 10	Other EU currencies 11	Other currencies 12	Other currencies			
					USD 5	JPY 6	CHF 7	Other 8					USD 13	JPY 14	CHF 15	Other 16
1999 Q3	109.4	46.0	7.9	55.6	42.5	6.9	2.8	3.3	386.9	87.2	24.6	275.1	240.5	23.5	4.1	7.1
Q4	117.5	50.0	8.6	58.9	44.1	8.0	3.0	3.8	415.8	98.9	23.6	293.3	258.2	23.0	4.2	8.0
2000 Q1	129.4	52.8	9.0	67.6	51.7	7.8	3.0	5.1	443.7	94.9	27.8	321.1	279.3	27.1	5.6	9.1
Q2	153.0	59.4	13.7	79.8	63.7	7.9	2.7	5.5	464.1	95.7	28.3	340.1	299.4	26.9	4.5	9.3
Q3	168.2	60.6	17.1	90.4	75.1	8.2	2.7	4.4	496.9	109.1	32.2	355.6	312.0	30.3	4.2	9.0
Q4	171.1	61.1	19.7	90.3	75.6	7.7	2.4	4.6	474.3	111.5	31.7	331.0	290.6	27.1	3.6	9.7
<i>Euro area enlargement</i>																
2001 Q1 ^(p)	190.0	67.9	22.2	99.9	85.9	7.4	2.5	4.2	489.0	118.8	25.4	344.7	305.5	26.4	2.6	10.2



3 Financial markets and interest rates in the euro area

Table 3.1

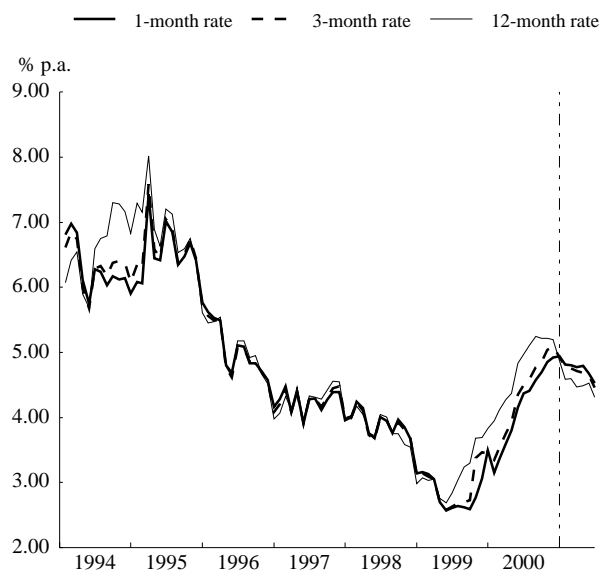
Money market interest rates ¹⁾

(percentages per annum)

	Euro area ⁴⁾					United States ⁶⁾	Japan ⁶⁾
	Overnight deposits ^{2) 3)} 1	1-month deposits ⁵⁾ 2	3-month deposits ⁵⁾ 3	6-month deposits ⁵⁾ 4	12-month deposits ⁵⁾ 5	3-month deposits ⁵⁾ 6	3-month deposits ⁵⁾ 7
1996	4.04	4.95	4.92	4.89	4.93	5.51	0.57
1997	3.98	4.23	4.24	4.25	4.28	5.76	0.62
1998	3.09	3.84	3.83	3.78	3.77	5.57	0.66
1999	2.74	2.86	2.96	3.06	3.19	5.42	0.22
2000	4.12	4.24	4.40	4.55	4.78	6.53	0.28
2000 June	4.29	4.37	4.50	4.68	4.96	6.79	0.13
July	4.31	4.41	4.58	4.84	5.11	6.73	0.22
Aug.	4.42	4.57	4.78	5.01	5.25	6.69	0.32
Sep.	4.59	4.70	4.85	5.04	5.22	6.67	0.41
Oct.	4.76	4.85	5.04	5.10	5.22	6.78	0.52
Nov.	4.83	4.92	5.09	5.13	5.19	6.75	0.55
Dec.	4.83	4.94	4.93	4.91	4.87	6.54	0.62
<i>Euro area enlargement</i>							
2001 Jan.	4.75	4.81	4.77	4.68	4.58	5.73	0.50
Feb.	4.99	4.80	4.76	4.67	4.59	5.35	0.41
Mar.	4.78	4.78	4.71	4.58	4.47	4.96	0.19
Apr.	5.06	4.79	4.69	4.57	4.49	4.63	0.10
May	4.65	4.67	4.64	4.57	4.53	4.11	0.07
June	4.54	4.53	4.45	4.35	4.31	3.83	0.07
2001 1 June	4.54	4.56	4.51	4.42	4.40	3.94	0.07
8	4.53	4.53	4.45	4.36	4.32	3.92	0.07
15	4.52	4.54	4.47	4.38	4.35	3.85	0.07
22	4.61	4.53	4.43	4.32	4.26	3.73	0.07
29	4.72	4.52	4.44	4.37	4.32	3.84	0.08

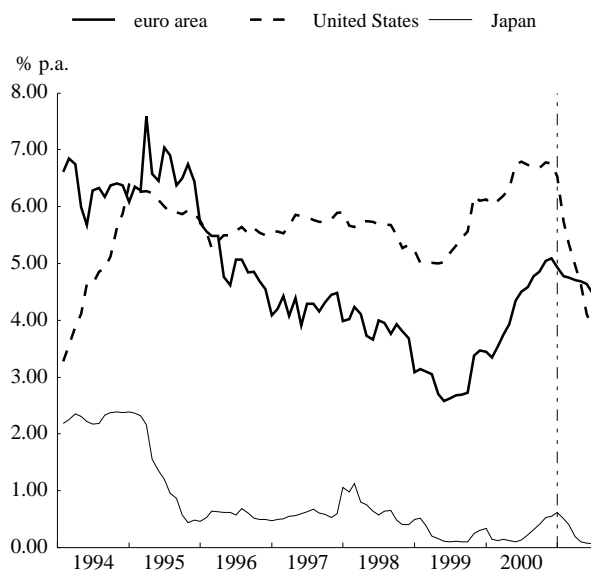
Euro area money market rates

(monthly)



3-month money market rates

(monthly)



Sources: Reuters and ECB.

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

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

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

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

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

6) London interbank offered rates (LIBOR).

Table 3.2

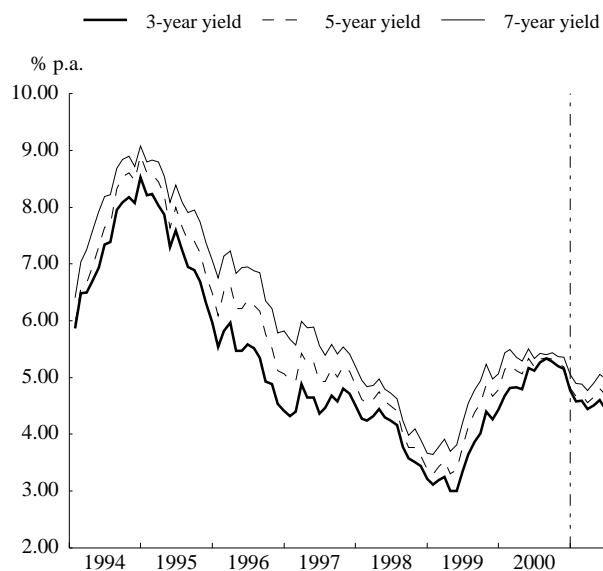
Government bond yields ¹⁾

(percentages per annum)

	Euro area ²⁾					United States	Japan
	2 years ¹	3 years ²	5 years ³	7 years ⁴	10 years ⁵	10 years ⁶	10 years ⁷
1996	4.17	4.41	5.06	5.82	7.23	6.54	3.03
1997	4.33	4.51	4.87	5.20	5.99	6.45	2.15
1998	3.16	3.22	3.38	3.67	4.71	5.33	1.30
1999	3.38	3.63	4.01	4.38	4.66	5.64	1.75
2000	4.90	5.03	5.19	5.37	5.44	6.03	1.76
2000 June	5.02	5.12	5.19	5.33	5.35	6.10	1.69
July	5.19	5.27	5.32	5.43	5.45	6.04	1.72
Aug.	5.28	5.34	5.35	5.40	5.40	5.83	1.77
Sep.	5.22	5.28	5.33	5.44	5.47	5.80	1.88
Oct.	5.17	5.20	5.24	5.37	5.42	5.74	1.83
Nov.	5.12	5.15	5.19	5.35	5.34	5.72	1.75
Dec.	4.74	4.77	4.82	5.05	5.07	5.23	1.62
<i>Euro area enlargement</i>							
2001 Jan.	4.55	4.57	4.67	4.90	5.01	5.14	1.54
Feb.	4.56	4.59	4.69	4.88	5.02	5.10	1.43
Mar.	4.44	4.44	4.56	4.78	4.94	4.89	1.19
Apr.	4.49	4.51	4.66	4.90	5.10	5.13	1.36
May	4.56	4.60	4.80	5.05	5.26	5.37	1.28
June	4.39	4.44	4.70	4.99	5.21	5.26	1.19
2001 1 June	4.44	4.50	4.76	5.03	5.25	5.35	1.25
8	4.44	4.47	4.73	5.03	5.26	5.32	1.25
15	4.41	4.45	4.69	4.98	5.19	5.22	1.19
22	4.33	4.37	4.61	4.91	5.12	5.15	1.18
29	4.41	4.47	4.74	5.06	5.29	5.43	1.19

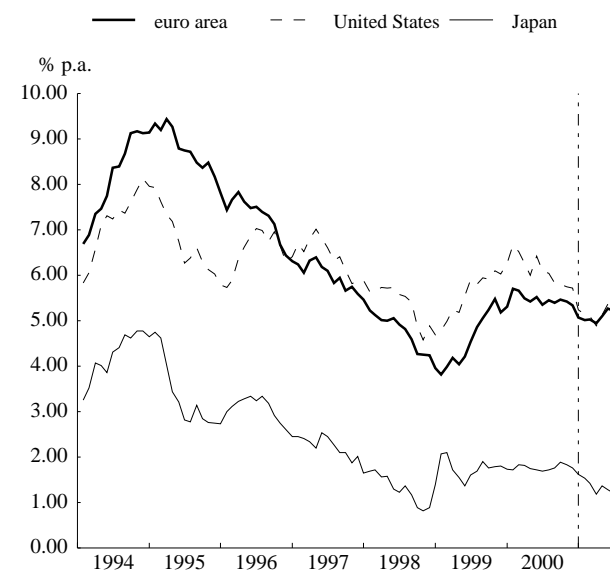
Euro area government bond yields

(monthly)



10-year government bond yields

(monthly)



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

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

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

Table 3.3

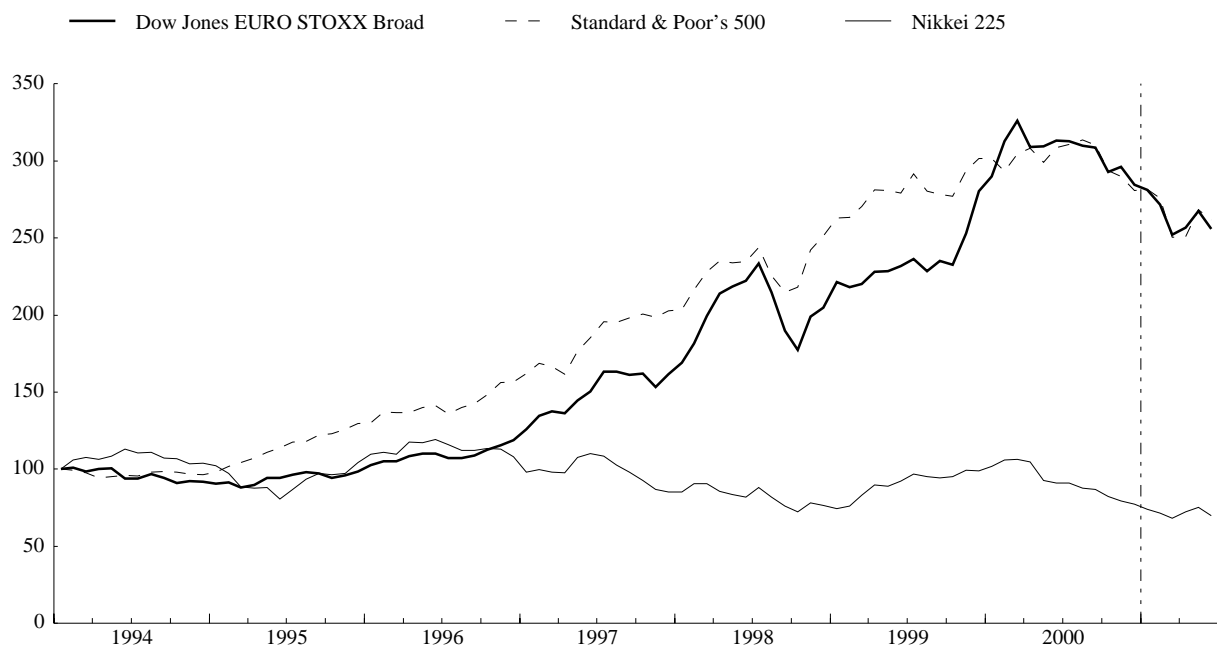
Stock market indices

(index levels, in points)¹⁾

	Dow Jones EURO STOXX indices												United States	Japan
	Benchmark		Main economic sector indices											
	Broad	50	Basic materials	Consumer cyclical	Consumer non-cyclical	Energy	Financial	Industrial	Technology	Utilities	Telecommunications	Health-care			Standard & Poor's 500	Nikkei 225
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1996	151.6	1,657.5	181.1	146.8	180.6	159.5	129.9	134.7	150.0	166.3	202.3	230.1	671.2	21,061.7
1997	207.6	2,319.6	233.4	191.9	231.9	227.3	184.4	168.0	227.7	205.5	324.1	301.7	873.9	18,373.4
1998	280.5	3,076.3	257.9	245.0	295.5	249.3	281.3	218.4	333.6	282.4	488.1	348.9	1,085.3	15,338.4
1999	325.8	3,787.3	279.2	262.9	327.7	286.0	295.7	285.1	470.4	306.2	717.7	392.6	1,327.8	16,829.9
2000	423.9	5,075.5	299.1	292.9	324.3	342.3	350.7	378.0	963.1	341.7	1,072.5	476.0	1,426.7	17,162.7
2000 June	434.7	5,274.2	274.6	294.8	326.1	349.8	350.0	385.4	1,052.1	349.7	1,149.7	456.4	1,462.0	16,969.3
July	433.8	5,227.8	283.1	297.8	328.2	345.7	360.4	384.3	1,044.6	333.9	1,083.0	502.2	1,472.1	16,961.1
Aug.	429.9	5,152.0	290.0	301.3	331.1	363.1	375.9	380.3	982.6	334.1	951.6	545.8	1,485.5	16,329.9
Sep.	428.1	5,132.9	280.3	298.7	329.5	376.4	371.4	371.8	1,015.4	335.1	910.2	553.4	1,470.6	16,170.4
Oct.	406.4	4,893.2	281.2	278.4	331.5	373.7	366.3	349.4	864.6	336.3	824.3	561.2	1,390.1	15,342.7
Nov.	410.8	4,962.5	302.9	274.9	346.0	365.0	379.7	359.6	864.7	339.6	796.2	571.6	1,373.8	14,743.5
Dec.	394.5	4,787.1	319.1	257.4	330.2	337.9	365.9	354.3	865.0	326.7	715.4	554.6	1,329.7	14,409.7
<i>Euro area enlargement</i>														
2001 Jan.	390.2	4,729.7	317.3	261.6	314.4	339.7	371.9	354.0	792.1	318.7	727.8	524.3	1,334.2	13,739.7
Feb.	377.1	4,525.9	320.2	260.4	319.0	349.5	364.5	355.7	656.6	317.8	654.4	549.5	1,305.5	13,274.1
Mar.	349.9	4,199.2	311.0	241.7	305.7	340.6	334.5	334.5	567.8	300.6	602.9	524.7	1,186.8	12,684.9
Apr.	356.3	4,305.2	308.4	242.6	304.8	352.5	339.4	329.9	587.4	311.5	635.0	534.6	1,189.2	13,436.7
May	370.8	4,481.8	316.5	258.9	312.0	371.8	345.9	345.9	662.4	311.0	623.9	553.2	1,270.7	14,014.3
June	355.1	4,289.7	306.4	241.8	316.9	379.2	341.0	328.6	553.5	320.9	538.3	580.1	1,238.7	12,974.9
2001 1 June	365.3	4,414.8	318.4	251.6	316.4	386.6	343.2	342.4	613.5	317.1	571.4	566.9	1,260.7	13,261.8
8	368.4	4,451.0	315.2	253.3	318.3	385.3	347.5	344.1	636.0	321.7	562.9	572.8	1,265.0	13,430.2
15	350.1	4,236.9	301.4	237.4	312.1	384.7	336.9	325.7	515.7	324.2	534.9	573.9	1,214.4	12,790.4
22	347.7	4,195.0	293.7	234.2	317.2	372.6	340.2	321.3	512.7	318.1	512.8	596.9	1,225.4	13,044.6
29	351.0	4,243.9	308.2	238.4	323.8	363.4	341.8	314.4	517.6	324.2	534.0	604.0	1,224.4	12,969.1

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

(base month: January 1994 = 100; monthly)



Source: Reuters.

1) Monthly and yearly values are period averages.

Table 3.4

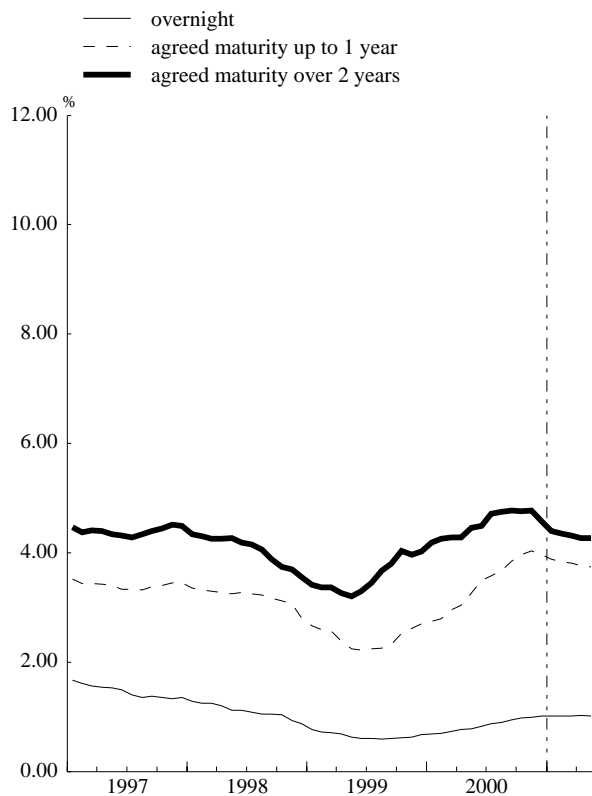
Retail bank interest rates

(percentages per annum; period averages)

	Deposit interest rates						Lending interest rates			
	Overnight 1	With agreed maturity			Redeemable at notice		To enterprises		To households	
		Up to 1 year 2	Up to 2 years 3	Over 2 years 4	Up to 3 months 5	Over 3 months 6	Up to 1 year 7	Over 1 year 8	Consumer lending 9	For house purchase 10
1998	1.10	3.20	3.22	4.06	2.61	3.25	6.73	5.80	10.06	5.87
1999	0.65	2.44	2.45	3.57	2.15	2.76	5.65	5.10	9.39	5.29
2000	0.85	3.45	3.44	4.52	2.25	3.79	6.60	6.23	9.86	6.34
2000 May	0.78	3.26	3.26	4.45	2.13	3.65	6.41	6.16	9.72	6.30
June	0.83	3.49	3.49	4.48	2.16	3.87	6.56	6.23	9.84	6.34
July	0.87	3.58	3.58	4.71	2.33	3.94	6.77	6.37	9.95	6.46
Aug.	0.89	3.67	3.67	4.75	2.36	4.06	6.81	6.44	10.00	6.51
Sep.	0.94	3.85	3.83	4.77	2.38	4.20	6.92	6.44	10.03	6.56
Oct.	0.97	3.96	3.96	4.76	2.40	4.14	7.13	6.60	10.15	6.57
Nov.	0.99	4.04	4.03	4.77	2.47	4.25	7.16	6.63	10.20	6.56
Dec.	1.01	3.96	3.95	4.58	2.49	4.21	7.18	6.45	10.19	6.43
<i>Euro area enlargement</i>										
2001 Jan.	1.01	3.88	3.87	4.39	2.52	4.01	7.19	6.40	10.32	6.29
Feb.	1.01	3.84	3.83	4.35	2.50	3.99	7.11	6.44	10.26	6.24
Mar.	1.02	3.81	3.81	4.32	2.50	3.99	7.04	6.31	10.20	6.18
Apr.	1.02	3.76	3.76	4.26	2.50	3.91	7.07	6.34	10.23	6.14
May	1.01	3.74	3.74	4.27	2.48	3.91	7.03	6.34	10.20	6.17

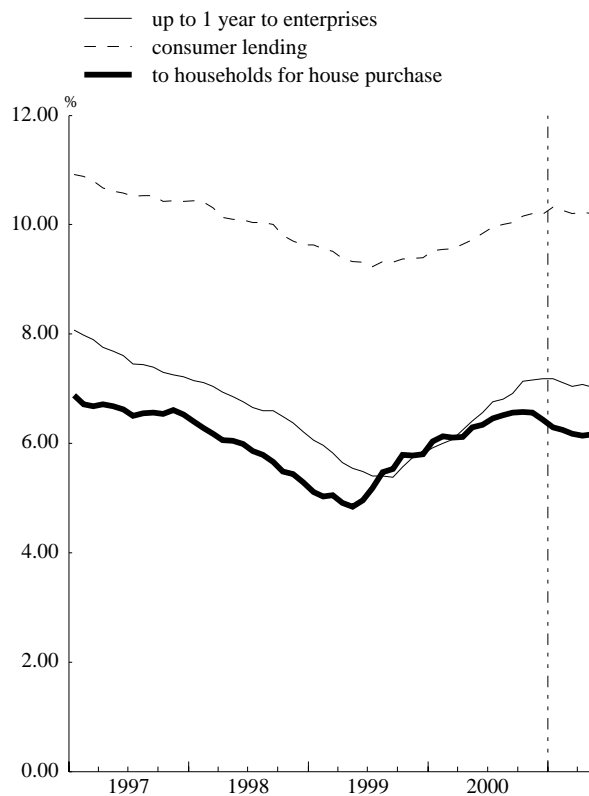
Deposit interest rates

(monthly)



Lending interest rates

(monthly)



Source: ECB.

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

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

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	253.0	251.6	1.3	637.4	240.4	239.8	0.7	591.0	12.5	11.9
May	278.4	261.8	16.6	659.9	267.0	251.3	15.6	613.4	11.5	10.5
June	262.1	260.3	1.9	661.9	245.4	249.4	-4.1	608.7	16.7	10.8
July	287.1	282.6	4.5	669.5	269.7	266.3	3.3	613.4	17.4	16.2
Aug.	276.6	276.2	0.4	672.8	261.0	258.6	2.4	616.2	15.6	17.6
Sep.	311.5	315.2	-3.7	671.5	293.4	298.7	-5.3	611.5	18.1	16.5
Oct.	355.2	342.5	12.7	686.6	338.2	330.3	7.9	618.9	17.0	12.1
Nov.	302.2	302.3	-0.1	687.3	283.8	290.1	-6.3	613.0	18.4	12.2
Dec.	246.0	278.6	-32.6	654.3	229.7	264.4	-34.8	579.0	16.3	14.1
<i>Euro area enlargement</i>										
2001 Jan.	376.3	346.8	29.5	688.3	358.5	326.2	32.3	616.2	17.7	20.6
Feb.	404.7	390.8	14.0	703.5	384.0	373.6	10.4	626.3	20.7	17.2
Mar.	452.6	436.4	16.2	723.6	432.7	417.7	14.9	643.6	20.0	18.7
Apr.	441.9	431.8	10.1	734.6	424.2	412.8	11.4	654.7	17.8	19.0

2. Long-term

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	115.5	75.7	39.9	6,169.9	102.7	66.1	36.7	5,674.6	12.8	9.6
May	127.5	90.4	37.1	6,202.6	115.2	78.6	36.6	5,713.3	12.3	11.8
June	102.2	66.3	35.9	6,236.4	87.9	52.9	35.0	5,750.6	14.3	13.3
July	132.0	80.6	51.5	6,292.9	105.6	71.7	33.9	5,783.7	26.4	8.9
Aug.	107.1	61.3	45.8	6,351.5	83.1	52.6	30.5	5,815.4	24.0	8.7
Sep.	111.9	76.9	35.0	6,391.4	91.3	66.7	24.6	5,840.8	20.7	10.2
Oct.	126.4	88.9	37.5	6,441.9	102.4	77.0	25.4	5,867.4	24.1	11.9
Nov.	106.4	77.5	28.8	6,458.6	92.3	65.5	26.9	5,893.5	14.1	12.1
Dec.	99.9	101.7	-1.8	6,434.5	87.8	86.9	0.9	5,897.1	12.0	14.7
<i>Euro area enlargement</i>										
2001 Jan.	150.3	142.3	8.1	6,533.1	135.3	131.1	4.2	5,992.5	15.1	11.1
Feb.	134.3	81.8	52.4	6,586.4	115.1	69.0	46.1	6,040.7	19.2	12.8
Mar.	150.2	97.5	52.7	6,649.7	126.2	86.4	39.8	6,082.6	24.0	11.0
Apr.	105.6	65.3	40.3	6,688.9	93.7	62.1	31.5	6,113.7	11.9	3.1

3. Total

	By euro area residents									
					In euro ¹⁾				In other	
	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	368.5	327.3	41.2	6,807.3	343.2	305.8	37.3	6,265.5	25.4	21.5
May	405.9	352.2	53.7	6,862.4	382.1	329.9	52.2	6,326.7	23.8	22.3
June	364.4	326.6	37.8	6,898.3	333.3	302.4	30.9	6,359.3	31.1	24.2
July	419.1	363.1	56.0	6,962.3	375.3	338.0	37.2	6,397.0	43.8	25.1
Aug.	383.7	337.6	46.2	7,024.2	344.1	311.3	32.9	6,431.6	39.6	26.3
Sep.	423.4	392.1	31.3	7,063.0	384.7	365.4	19.2	6,452.3	38.8	26.7
Oct.	481.6	431.4	50.2	7,128.5	440.6	407.3	33.2	6,486.3	41.0	24.1
Nov.	408.6	379.8	28.7	7,145.9	376.1	355.5	20.6	6,506.4	32.4	24.3
Dec.	345.8	380.3	-34.4	7,088.9	317.5	351.4	-33.9	6,476.1	28.4	28.9
<i>Euro area enlargement</i>										
2001 Jan.	526.6	489.0	37.6	7,221.4	493.8	457.3	36.5	6,608.8	32.8	31.7
Feb.	539.0	472.6	66.4	7,289.9	499.1	442.6	56.5	6,667.0	39.9	30.0
Mar.	602.8	533.9	68.9	7,373.3	558.9	504.2	54.8	6,726.2	43.9	29.7
Apr.	547.5	497.1	50.5	7,423.4	517.8	474.9	42.9	6,768.5	29.7	22.2

Sources: ECB and BIS (for issues by non-residents of the euro area).
1) Including items expressed in the national denominations of the euro.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
0.7	46.4	.	.	.	.	.	.	.	.	2000 Apr.
1.0	46.5	.	.	.	.	.	.	.	.	May
5.9	53.2	37.5	31.0	6.5	43.2	790.3	771.6	18.7	652.0	June
1.2	56.1	.	.	.	.	.	.	.	.	July
-2.0	56.6	.	.	.	.	.	.	.	.	Aug.
1.6	60.0	38.2	39.5	-1.3	45.2	862.2	863.2	-0.9	656.7	Sep.
4.8	67.7	.	.	.	.	.	.	.	.	Oct.
6.1	74.3	.	.	.	.	.	.	.	.	Nov.
2.2	75.3	43.4	32.9	10.5	53.6	895.0	917.7	-22.7	632.6	Dec.
<i>Euro area enlargement</i>										
-2.8	72.0	.	.	.	.	.	.	.	.	2001 Jan.
3.5	77.3	.	.	.	.	.	.	.	.	Feb.
1.3	80.0	47.8	46.5	1.3	57.3	1,223.0	1,164.1	59.0	700.9	Mar.
-1.3	79.8	.	.	.	.	.	.	.	.	Apr.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
3.2	495.4	.	.	.	.	.	.	.	.	2000 Apr.
0.5	489.3	.	.	.	.	.	.	.	.	May
1.0	485.7	47.0	23.7	23.3	664.6	352.9	221.3	131.5	6,415.3	June
17.5	509.2	.	.	.	.	.	.	.	.	July
15.3	536.0	.	.	.	.	.	.	.	.	Aug.
10.4	550.6	64.7	34.1	30.7	697.5	344.7	225.1	119.6	6,538.3	Sep.
12.1	574.6	.	.	.	.	.	.	.	.	Oct.
2.0	565.2	.	.	.	.	.	.	.	.	Nov.
-2.7	537.4	62.2	20.5	41.7	739.4	344.7	249.9	94.8	6,636.5	Dec.
<i>Euro area enlargement</i>										
3.9	540.6	.	.	.	.	.	.	.	.	2001 Jan.
6.3	545.7	.	.	.	.	.	.	.	.	Feb.
12.9	567.1	93.3	35.7	57.5	784.8	469.9	322.3	147.6	6,867.4	Mar.
8.8	575.1	.	.	.	.	.	.	.	.	Apr.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
Net issues	Amounts outstanding	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	Issues (during quarter)	Redemptions (during quarter)	Net issues (during quarter)	Amounts outstanding (end-quarter)	
11	12	13	14	15	16	17	18	19	20	
3.9	541.7	.	.	.	.	.	.	.	.	2000 Apr.
1.5	535.7	.	.	.	.	.	.	.	.	May
6.9	539.0	84.5	54.7	29.8	707.9	1,143.1	992.9	150.2	7,067.2	June
18.8	565.3	.	.	.	.	.	.	.	.	July
13.3	592.7	.	.	.	.	.	.	.	.	Aug.
12.1	610.7	102.9	73.6	29.3	742.7	1,207.0	1,088.3	118.7	7,195.0	Sep.
17.0	642.2	.	.	.	.	.	.	.	.	Oct.
8.1	639.4	.	.	.	.	.	.	.	.	Nov.
-0.5	612.7	105.6	53.4	52.2	793.0	1,239.8	1,167.6	72.1	7,269.2	Dec.
<i>Euro area enlargement</i>										
1.1	612.6	.	.	.	.	.	.	.	.	2001 Jan.
9.9	622.9	.	.	.	.	.	.	.	.	Feb.
14.2	647.1	141.1	82.3	58.8	842.0	1,693.0	1,486.3	206.6	7,568.2	Mar.
7.5	655.0	.	.	.	.	.	.	.	.	Apr.

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	591.0	245.6	6.3	72.1	264.2	2.8	.	.	.	.
May	613.4	259.5	5.5	76.0	270.2	2.2	.	.	.	.
June	608.7	258.9	4.2	76.1	267.2	2.2	43.2	18.9	11.7	10.9
July	613.4	264.7	4.6	77.3	263.7	2.9	.	.	.	.
Aug.	616.2	263.7	4.3	79.5	266.4	2.3	.	.	.	.
Sep.	611.5	256.4	4.1	81.2	267.1	2.8	45.2	15.0	13.0	15.7
Oct.	618.9	259.7	4.5	86.5	265.6	2.7	.	.	.	.
Nov.	613.0	254.4	4.6	87.2	263.9	3.0	.	.	.	.
Dec.	579.0	244.0	4.5	86.3	241.4	2.9	53.6	20.6	14.7	17.0
<i>Euro area enlargement</i>										
2001 Jan.	616.2	257.1	5.0	89.8	261.5	2.9	.	.	.	.
Feb.	626.3	260.3	4.9	93.4	265.4	2.2	.	.	.	.
Mar.	643.6	265.0	5.1	94.8	276.5	2.2	57.3	20.6	17.8	17.8
Apr.	654.7	269.1	5.4	92.8	285.3	2.2	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	5,674.6	2,084.5	201.7	258.5	3,031.8	98.0	.	.	.	.
May	5,713.3	2,108.5	206.4	259.0	3,040.1	99.3	.	.	.	.
June	5,750.6	2,115.5	213.7	265.9	3,056.5	99.0	664.6	192.4	86.9	136.9
July	5,783.7	2,133.3	224.1	271.9	3,054.2	100.2	.	.	.	.
Aug.	5,815.4	2,147.1	229.2	275.4	3,062.3	101.5	.	.	.	.
Sep.	5,840.8	2,162.5	228.8	275.8	3,072.0	101.8	697.5	199.3	94.8	152.3
Oct.	5,867.4	2,173.3	234.0	280.1	3,076.1	103.9	.	.	.	.
Nov.	5,893.5	2,175.4	238.1	284.7	3,089.7	105.5	.	.	.	.
Dec.	5,897.1	2,175.7	251.3	287.7	3,075.9	106.5	739.4	219.0	102.8	160.6
<i>Euro area enlargement</i>										
2001 Jan.	5,992.5	2,199.7	250.6	284.5	3,150.6	107.1	.	.	.	.
Feb.	6,040.7	2,229.9	256.1	288.5	3,157.4	108.8	.	.	.	.
Mar.	6,082.6	2,240.4	263.6	299.1	3,169.0	110.5	784.8	241.6	108.9	184.5
Apr.	6,113.7	2,246.9	266.5	304.1	3,183.5	112.7	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	6,265.5	2,330.1	208.0	330.6	3,296.0	100.8	.	.	.	.
May	6,326.7	2,368.1	212.0	335.0	3,310.2	101.5	.	.	.	.
June	6,359.3	2,374.4	217.9	342.0	3,323.8	101.2	707.9	211.4	98.6	147.8
July	6,397.0	2,398.0	228.7	349.3	3,317.9	103.1	.	.	.	.
Aug.	6,431.6	2,410.7	233.5	354.8	3,328.6	103.9	.	.	.	.
Sep.	6,452.3	2,418.8	232.9	357.0	3,339.1	104.6	742.7	214.4	107.7	168.0
Oct.	6,486.3	2,433.0	238.4	366.6	3,341.7	106.6	.	.	.	.
Nov.	6,506.4	2,429.8	242.7	371.9	3,353.6	108.5	.	.	.	.
Dec.	6,476.1	2,419.7	255.8	373.9	3,317.3	109.5	793.0	239.6	117.5	177.6
<i>Euro area enlargement</i>										
2001 Jan.	6,608.8	2,456.8	255.6	374.3	3,412.1	110.0	.	.	.	.
Feb.	6,667.0	2,490.2	261.0	382.0	3,422.8	111.0	.	.	.	.
Mar.	6,726.2	2,505.4	268.7	393.9	3,445.5	112.7	842.0	262.2	126.7	202.3
Apr.	6,768.5	2,516.0	271.9	396.9	3,468.8	114.9	.	.	.	.

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

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

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
0.2	0.3	1.2	652.0	277.9	15.9	86.9	267.4	2.6	1.2	May
.	.	.	.	.	.	.	.	.	.	June
0.2	0.5	0.8	656.7	271.4	17.0	96.9	267.3	3.2	0.8	July
.	.	.	.	.	.	.	.	.	.	Aug.
0.1	0.4	0.8	632.6	264.6	19.2	103.3	241.5	3.3	0.8	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
0.2	0.3	0.4	700.9	285.7	22.9	112.6	276.7	2.5	0.4	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
99.2	29.7	119.4	6,415.3	2,307.9	300.6	402.9	3,155.8	128.7	119.4	May
.	.	.	.	.	.	.	.	.	.	June
100.5	33.4	117.3	6,538.3	2,361.8	323.6	428.1	3,172.4	135.2	117.3	July
.	.	.	.	.	.	.	.	.	.	Aug.
101.1	38.8	117.2	6,636.5	2,394.7	354.1	448.2	3,177.0	145.3	117.2	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
89.7	42.5	117.6	6,867.4	2,481.9	372.5	483.6	3,258.8	153.0	117.6	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
99.4	30.1	120.6	7,067.2	2,585.8	316.5	489.8	3,423.2	131.3	120.6	May
.	.	.	.	.	.	.	.	.	.	June
100.7	33.8	118.1	7,195.0	2,633.2	340.6	525.0	3,439.8	138.4	118.1	July
.	.	.	.	.	.	.	.	.	.	Aug.
101.2	39.2	118.0	7,269.2	2,659.3	373.3	551.5	3,418.5	148.6	118.0	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
89.9	42.8	118.0	7,568.2	2,767.6	395.4	596.2	3,535.5	155.5	118.0	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

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

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	240.4	141.5	2.8	51.4	43.4	1.4	.	.	.	.
May	267.0	175.9	2.1	53.0	34.7	1.4	.	.	.	.
June	245.4	159.7	3.2	46.6	34.9	1.0	37.5	16.6	9.3	10.0
July	269.7	167.6	2.6	56.1	41.5	1.8	.	.	.	.
Aug.	261.0	168.2	2.0	51.2	38.1	1.6	.	.	.	.
Sep.	293.4	196.7	2.8	55.6	36.3	2.0	38.2	12.1	10.6	14.5
Oct.	338.2	237.8	2.6	60.3	35.5	1.9	.	.	.	.
Nov.	283.8	189.7	3.0	56.0	33.6	1.5	.	.	.	.
Dec.	229.7	162.1	2.1	45.9	18.0	1.6	43.4	16.2	11.4	14.7
<i>Euro area enlargement</i>										
2001 Jan.	358.5	238.6	3.4	66.9	47.7	1.9	.	.	.	.
Feb.	384.0	275.9	2.2	63.1	41.4	1.5	.	.	.	.
Mar.	432.7	312.8	3.1	67.0	48.1	1.6	47.8	16.8	14.2	15.9
Apr.	424.2	301.6	3.2	69.4	48.5	1.4	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	102.7	45.6	5.6	8.0	41.6	1.9	.	.	.	.
May	115.2	54.2	7.3	4.5	47.6	1.5	.	.	.	.
June	87.9	34.1	10.6	8.5	34.4	0.4	47.0	18.4	5.8	15.3
July	105.6	44.9	14.8	8.7	35.0	2.1	.	.	.	.
Aug.	83.1	38.1	7.7	4.0	31.5	1.8	.	.	.	.
Sep.	91.3	40.8	5.0	3.6	40.8	1.0	64.7	21.1	10.0	22.9
Oct.	102.4	43.3	7.5	5.7	43.3	2.5	.	.	.	.
Nov.	92.3	33.6	8.6	8.1	39.0	3.0	.	.	.	.
Dec.	87.8	38.7	19.3	4.5	23.2	2.0	62.2	27.3	9.2	12.6
<i>Euro area enlargement</i>										
2001 Jan.	135.3	56.2	3.5	0.8	72.0	2.8	.	.	.	.
Feb.	115.1	57.6	8.0	5.0	42.1	2.4	.	.	.	.
Mar.	126.2	45.2	10.5	14.4	53.3	2.8	93.3	33.5	10.0	30.3
Apr.	93.7	40.4	3.4	8.1	39.1	2.6	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFIs (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	343.2	187.1	8.4	59.4	85.0	3.4	.	.	.	.
May	382.1	230.1	9.4	57.5	82.3	2.9	.	.	.	.
June	333.3	193.8	13.7	55.1	69.4	1.4	84.5	35.0	15.1	25.4
July	375.3	212.6	17.4	64.9	76.5	3.9	.	.	.	.
Aug.	344.1	206.2	9.7	55.2	69.6	3.4	.	.	.	.
Sep.	384.7	237.6	7.8	59.2	77.0	3.1	102.9	33.2	20.6	37.5
Oct.	440.6	281.1	10.1	66.0	78.8	4.5	.	.	.	.
Nov.	376.1	223.3	11.6	64.1	72.6	4.5	.	.	.	.
Dec.	317.5	200.8	21.4	50.4	41.2	3.7	105.6	43.5	20.6	27.3
<i>Euro area enlargement</i>										
2001 Jan.	493.8	294.9	6.9	67.7	119.7	4.7	.	.	.	.
Feb.	499.1	333.5	10.2	68.1	83.5	3.9	.	.	.	.
Mar.	558.9	358.0	13.6	81.4	101.5	4.4	141.1	50.2	24.2	46.2
Apr.	517.8	342.0	6.7	77.6	87.6	4.0	.	.	.	.

Sources: ECB and BIS (for issues by non-residents of the euro area).
1) Including items expressed in the national denominations of the euro.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
0.1	0.3	1.1	790.3	493.6	17.4	161.0	113.1	4.1	1.1	May
.	.	.	.	.	.	.	.	.	.	June
0.2	0.4	0.4	862.2	544.7	17.9	177.5	116.0	5.8	0.4	July
.	.	.	.	.	.	.	.	.	.	Aug.
0.1	0.3	0.7	895.0	605.8	19.1	176.9	87.2	5.4	0.7	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
0.2	0.3	0.4	1,223.0	844.2	23.0	212.9	137.4	5.3	0.4	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
4.7	1.5	1.4	352.9	152.3	29.3	36.3	128.4	5.3	1.4	May
.	.	.	.	.	.	.	.	.	.	June
3.5	5.8	1.3	344.7	144.9	37.6	39.3	110.8	10.8	1.3	July
.	.	.	.	.	.	.	.	.	.	Aug.
3.0	6.0	4.0	344.7	143.0	44.6	30.9	108.6	13.6	4.0	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
7.4	7.6	4.6	469.9	192.5	32.0	50.5	174.9	15.5	4.6	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
4.9	1.7	2.5	1,143.1	645.9	46.6	197.3	241.5	9.4	2.5	May
.	.	.	.	.	.	.	.	.	.	June
3.7	6.2	1.7	1,207.0	689.5	55.5	216.8	226.9	16.5	1.7	July
.	.	.	.	.	.	.	.	.	.	Aug.
3.1	6.3	4.7	1,239.8	748.8	63.7	207.8	195.8	19.0	4.7	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
7.6	7.8	5.0	1,693.0	1,036.7	54.9	263.3	312.3	20.8	5.0	2001 Jan.
.	.	.	.	.	.	.	.	.	.	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

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

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	0.7	-4.5	0.0	5.4	-0.4	0.1	.	.	.	.
May	15.6	12.6	-0.7	3.8	0.5	-0.6	.	.	.	.
June	-4.1	-3.2	0.6	0.1	-1.6	0.0	6.5	3.4	-0.2	2.7
July	3.3	4.5	0.4	1.2	-3.5	0.7	.	.	.	.
Aug.	2.4	-1.4	-0.3	2.1	2.6	-0.6	.	.	.	.
Sep.	-5.3	-8.0	-0.3	1.7	0.7	0.4	-1.3	-5.4	0.4	4.0
Oct.	7.9	3.8	0.4	5.2	-1.5	-0.1	.	.	.	.
Nov.	-6.3	-5.6	0.1	0.7	-1.8	0.3	.	.	.	.
Dec.	-34.8	-11.1	-0.1	-1.0	-22.5	0.0	10.5	6.2	2.3	2.0
<i>Euro area enlargement</i>										
2001 Jan.	32.3	13.0	0.6	3.4	14.9	0.5	.	.	.	.
Feb.	10.4	3.6	-0.1	3.6	3.9	-0.7	.	.	.	.
Mar.	14.9	2.7	0.2	1.0	11.1	-0.1	1.3	-0.9	2.5	0.0
Apr.	11.4	4.3	0.3	-2.0	8.8	0.0	.	.	.	.

2. Long-term

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	36.7	21.7	2.7	6.8	4.6	0.9	.	.	.	.
May	36.6	23.0	4.8	0.4	7.2	1.3	.	.	.	.
June	35.0	4.9	7.2	6.7	16.4	-0.3	23.3	10.8	3.5	8.5
July	33.9	19.0	10.4	5.8	-2.4	1.2	.	.	.	.
Aug.	30.5	12.6	4.9	3.5	8.1	1.4	.	.	.	.
Sep.	24.6	11.4	2.9	0.4	9.7	0.3	30.7	5.8	7.7	14.9
Oct.	25.4	9.5	5.3	4.4	4.1	2.1	.	.	.	.
Nov.	26.9	2.8	4.2	4.6	13.6	1.6	.	.	.	.
Dec.	0.9	-2.5	13.3	2.9	-13.8	1.0	41.7	19.6	7.6	8.3
<i>Euro area enlargement</i>										
2001 Jan.	4.2	22.2	-0.7	-3.2	-14.9	0.7	.	.	.	.
Feb.	46.1	28.3	5.5	3.9	6.8	1.7	.	.	.	.
Mar.	39.8	8.9	7.0	10.5	11.7	1.8	57.5	22.3	6.2	25.9
Apr.	31.5	7.2	2.6	5.1	14.5	2.2	.	.	.	.

3. Total

	By euro area residents						By non-residents			
	Total	MFI (including Eurosystem)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations
	1	2	3	4	5	6	7	8	9	10
2000 Apr.	37.3	17.2	2.7	12.2	4.2	1.1	.	.	.	.
May	52.2	35.6	4.1	4.2	7.6	0.7	.	.	.	.
June	30.9	1.7	7.9	6.7	14.8	-0.2	29.8	14.3	3.3	11.2
July	37.2	23.5	10.8	7.0	-5.9	1.9	.	.	.	.
Aug.	32.9	11.2	4.6	5.6	10.8	0.7	.	.	.	.
Sep.	19.2	3.4	2.6	2.1	10.4	0.7	29.3	0.4	8.1	18.9
Oct.	33.2	13.3	5.7	9.6	2.6	2.0	.	.	.	.
Nov.	20.6	-2.8	4.3	5.3	11.9	1.9	.	.	.	.
Dec.	-33.9	-13.6	13.1	1.9	-36.3	1.0	52.2	25.8	9.9	10.4
<i>Euro area enlargement</i>										
2001 Jan.	36.5	35.3	-0.2	0.2	0.0	1.2	.	.	.	.
Feb.	56.5	31.9	5.4	7.4	10.7	1.0	.	.	.	.
Mar.	54.8	11.6	7.1	11.6	22.8	1.7	58.8	21.4	8.7	25.9
Apr.	42.9	11.5	2.9	3.1	23.2	2.2	.	.	.	.

Sources: ECB and BIS (for issues by non-residents of the euro area).
1) Including items expressed in the national denominations of the euro.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
0.0	0.0	0.5	18.7	8.4	-0.3	12.1	-1.6	-0.4	0.5	May
.	.	.	.	.	.	.	.	.	.	June
0.0	0.1	-0.5	-0.9	-10.2	0.3	9.0	-0.1	0.6	-0.5	July
.	.	.	.	.	.	.	.	.	.	Aug.
-0.1	0.0	0.0	-22.7	-6.7	2.7	7.0	-25.8	0.1	0.0	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
0.1	-0.1	-0.4	59.0	18.5	3.2	8.0	30.0	-0.3	-0.4	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
3.3	-0.1	-2.6	131.5	60.4	18.2	22.3	31.5	1.8	-2.6	May
.	.	.	.	.	.	.	.	.	.	June
1.2	3.4	-2.3	119.6	48.7	25.8	24.5	16.6	6.3	-2.3	July
.	.	.	.	.	.	.	.	.	.	Aug.
0.6	5.4	0.1	94.8	29.4	30.4	20.2	4.5	10.1	0.1	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
-0.2	6.0	-2.5	147.6	81.6	18.0	37.1	3.3	10.2	-2.5	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

of the euro area			Total							
Central government	Other general government	International organisations	Total	Banks (including central banks)	Non-monetary financial corporations	Non-financial corporations	Central government	Other general government	International organisations	
11	12	13	14	15	16	17	18	19	20	
.	.	.	.	.	.	.	.	.	.	2000 Apr.
3.3	-0.1	-2.1	150.2	68.8	17.8	34.4	29.9	1.4	-2.1	May
.	.	.	.	.	.	.	.	.	.	June
1.2	3.5	-2.9	118.7	38.5	26.1	33.6	16.5	6.9	-2.9	July
.	.	.	.	.	.	.	.	.	.	Aug.
0.5	5.4	0.2	72.1	22.7	33.1	27.2	-21.3	10.3	0.2	Sep.
.	.	.	.	.	.	.	.	.	.	Oct.
.	.	.	.	.	.	.	.	.	.	Nov.
.	.	.	.	.	.	.	.	.	.	Dec.
<i>Euro area enlargement</i>										
.	.	.	.	.	.	.	.	.	.	2001 Jan.
-0.2	5.9	-2.9	206.6	100.1	21.2	45.1	33.3	9.8	-2.9	Feb.
.	.	.	.	.	.	.	.	.	.	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices ¹⁾

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

1. Total index and goods and services

	Total		Goods		Services		Total (s.a.)		Goods (s.a.)	Services (s.a.)
	Index 1996 = 100		Index 1996 = 100		Index 1996 = 100		Index 1996 = 100	% change on previous period	Index 1996 = 100	Index 1996 = 100
Weight in the total (%) ²⁾	100.0	100.0	61.9	61.9	38.1	38.1	100.0	100.0	61.9	38.1
	1	2	3	4	5	6	7	8	9	10
1998	102.7	1.1	101.8	0.7	104.4	1.9	-	-	-	-
1999	103.8	1.1	102.7	0.9	106.0	1.5	-	-	-	-
2000	106.3	2.3	105.4	2.7	107.8	1.7	-	-	-	-
2000 Q1	105.2	2.0	104.2	2.3	106.9	1.6	105.2	0.6	104.2	107.0
Q2	105.9	2.1	105.1	2.3	107.4	1.7	105.7	0.6	104.9	107.5
Q3	106.6	2.5	105.7	2.9	108.5	1.8	106.6	0.8	105.9	108.0
Q4	107.2	2.7	106.7	3.2	108.2	1.8	107.3	0.7	106.8	108.5
2000 May	105.8	1.9	105.1	2.2	107.3	1.5	105.6	0.1	104.8	107.4
June	106.3	2.4	105.5	2.8	107.7	1.7	106.1	0.4	105.3	107.6
July	106.4	2.3	105.2	2.7	108.5	1.7	106.2	0.1	105.4	107.9
Aug.	106.5	2.3	105.4	2.7	108.6	1.8	106.4	0.2	105.7	108.0
Sep.	107.0	2.8	106.4	3.4	108.2	1.8	107.0	0.6	106.5	108.2
Oct.	107.0	2.7	106.5	3.2	108.1	1.9	107.1	0.1	106.6	108.4
Nov.	107.3	2.9	106.9	3.4	108.2	1.8	107.4	0.3	106.9	108.5
Dec.	107.4	2.6	106.8	3.0	108.4	1.8	107.4	0.0	106.8	108.7
<i>Euro area enlargement</i>										
2001 Q1	107.8	2.5	107.1	2.7	109.3	2.2	107.8	0.5	107.1	109.3
2001 Jan.	107.3	2.4	106.5	2.6	109.0	2.2	107.5	0.1	106.7	109.2
Feb.	107.9	2.6	107.1	2.8	109.5	2.2	107.8	0.3	107.1	109.3
Mar.	108.3	2.6	107.7	2.8	109.5	2.2	108.1	0.3	107.5	109.5
Apr.	108.8	2.9	108.3	3.4	109.9	2.4	108.7	0.5	108.0	110.1
May	109.4	3.4	109.1	3.8	110.0	2.5	109.2	0.5	108.8	110.1

2. Breakdown of goods and services

	Goods						Services					
	Food ³⁾		Unprocessed food	Industrial goods	Non-energy industrial goods	Energy	Housing	Transport	Communi- cation	Recreation and personal	Miscellan- eous	
Weight in the total (%) ²⁾	Processed food ³⁾	20.3										12.3	8.0	41.6	32.1	9.5	10.0	6.2	2.4	13.9	5.6
	11	12	13	14	15	16	17	18	19	20	21	
1998	1.6	1.4	1.9	0.1	0.9	-2.6	2.3	1.7	-1.0	2.2	1.8	
1999	0.6	0.9	0.0	1.0	0.6	2.4	1.8	2.1	-4.4	2.0	1.8	
2000	1.4	1.1	1.7	3.4	0.7	13.3	1.6	2.6	-4.2	2.3	2.4	
2000 Q1	0.4	1.0	-0.4	3.2	0.5	13.7	1.4	2.5	-3.2	2.0	2.5	
Q2	0.9	1.0	0.7	3.1	0.6	12.3	1.5	2.5	-4.9	2.5	2.5	
Q3	1.9	1.1	3.1	3.4	0.6	13.6	1.6	2.6	-4.2	2.5	2.5	
Q4	2.2	1.3	3.5	3.7	1.0	13.7	1.8	2.8	-4.6	2.4	2.1	
2000 May	0.8	1.0	0.5	3.0	0.6	12.0	1.4	2.4	-5.0	2.1	2.5	
June	1.2	1.0	1.5	3.6	0.7	14.5	1.5	2.4	-4.6	2.5	2.6	
July	1.6	1.0	2.6	3.2	0.5	13.4	1.5	2.5	-4.3	2.5	2.6	
Aug.	2.0	1.1	3.3	3.0	0.6	11.9	1.6	2.5	-4.0	2.6	2.6	
Sep.	2.1	1.3	3.3	4.0	0.8	15.5	1.6	2.7	-4.3	2.4	2.3	
Oct.	2.0	1.2	3.2	3.9	1.0	14.6	1.8	2.7	-4.9	2.5	2.2	
Nov.	2.2	1.4	3.5	4.1	1.0	15.2	1.8	2.8	-4.4	2.4	2.0	
Dec.	2.4	1.4	3.9	3.3	1.1	11.3	1.8	2.8	-4.6	2.2	2.1	
<i>Euro area enlargement</i>												
2001 Q1	3.3	1.9	5.3	2.5	1.2	7.2	1.9	3.2	-4.3	3.1	2.3	
2001 Jan.	2.7	1.6	4.5	2.6	1.1	7.8	1.9	3.3	-4.6	3.0	2.3	
Feb.	3.1	2.0	4.7	2.7	1.1	8.2	1.9	3.2	-4.2	3.1	2.3	
Mar.	3.9	2.2	6.7	2.3	1.3	5.6	1.8	3.1	-4.0	3.1	2.4	
Apr.	4.4	2.5	7.3	2.9	1.5	7.8	1.7	3.6	-2.8	3.1	2.4	
May	5.3	2.8	9.2	3.1	1.6	8.6	1.8	3.6	-2.8	3.5	2.5	

Sources: Eurostat and ECB calculations.

1) Extended coverage from January 2000 and January 2001. The change affects annual percentage changes during 2000 and 2001, in particular services (miscellaneous). See the general notes for a brief explanation.

2) Referring to the index period 2001.

3) Including alcoholic beverages and tobacco.

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

	Industrial producer prices								World market prices of raw materials ²⁾		Oil prices ³⁾ (EUR per barrel)	
	Total excluding construction		Manufacturing						Con- struction ¹⁾	Total	Total excluding energy	
	Index, 1995 = 100			Inter- mediate goods	Capital goods	Consumer goods						
						Durable consumer goods	Non- durable consumer goods					
1	2	3	4	5	6	7	8	9	10	11	12	
1996	100.3	0.3	0.9	-0.5	1.3	2.2	2.1	2.2	1.4	6.5	-6.9	16.0
1997	101.4	1.1	0.8	1.4	0.3	1.1	0.4	1.4	1.2	10.0	12.9	17.0
1998	100.6	-0.7	-0.6	-2.6	0.6	0.6	0.3	0.7	0.3	-21.2	-12.5	12.0
1999	100.2	-0.4	0.2	-0.4	0.2	0.1	0.3	0.1	1.1	17.8	-3.1	17.1
2000	105.6	5.4	5.1	11.6	0.7	1.5	1.2	1.6	2.3	51.7	18.1	31.0
2000 Q2	104.8	5.2	5.2	11.6	0.6	1.4	1.1	1.5	2.1	53.7	18.3	28.8
Q3	106.4	5.8	5.4	12.3	0.7	1.7	1.3	1.8	2.0	46.7	18.0	33.7
Q4	107.9	6.1	5.3	12.1	0.8	2.2	1.5	2.4	3.0	37.7	16.4	34.5
2000 June	105.3	5.6	5.6	12.5	0.7	1.4	1.2	1.5	-	55.2	12.9	31.3
July	105.8	5.6	5.3	11.9	0.8	1.6	1.3	1.7	-	42.0	14.3	30.5
Aug.	106.2	5.6	5.1	11.6	0.7	1.7	1.3	1.8	-	47.5	18.3	33.3
Sep.	107.3	6.2	5.8	13.3	0.7	1.8	1.4	1.9	-	50.3	21.4	37.2
Oct.	108.0	6.6	6.0	13.9	0.8	2.0	1.5	2.1	-	56.6	23.1	36.8
Nov.	108.2	6.3	5.6	12.8	0.8	2.2	1.5	2.4	-	45.6	18.2	37.7
Dec.	107.7	5.4	4.5	9.7	0.9	2.4	1.6	2.7	-	13.7	8.6	28.8
<i>Euro area enlargement</i>												
2001 Q1	108.2	4.5	3.2	6.7	0.9	3.0	1.9	3.4	.	4.8	1.4	28.4
Q2	.	.	.	.	.	.	.	.	.	5.6	0.2	31.7
2001 Jan.	107.9	4.8	3.6	7.8	0.9	2.7	1.8	3.0	-	8.4	3.3	27.5
Feb.	108.2	4.5	3.2	6.9	1.0	3.0	1.9	3.3	-	6.5	1.7	29.9
Mar.	108.4	4.2	2.8	5.5	0.9	3.4	2.1	3.8	-	-0.2	-0.8	28.1
Apr.	108.7	4.2	3.0	5.7	1.0	3.4	2.2	3.8	-	11.1	-1.1	29.8
May	108.9	3.6	2.6	4.7	1.0	3.3	2.2	3.7	-	1.9	-4.0	32.7
June	.	.	.	.	.	.	.	.	-	4.5	6.0	32.5

2. Deflators of gross domestic product

	Deflators of GDP ⁴⁾ (s.a.)								
	GDP		Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports ⁵⁾	Imports ⁵⁾	
	Index, 1995 = 100								
	13	14	15	16	17	18	19	20	
1996	102.0	2.0	2.1	2.4	2.2	0.9	0.9	0.8	
1997	103.6	1.5	1.8	2.0	1.7	1.0	1.7	2.5	
1998	105.4	1.7	1.3	1.4	1.6	0.9	-0.1	-1.4	
1999	106.6	1.2	1.3	1.1	2.2	1.0	-0.5	-0.3	
2000	108.0	1.3	2.5	2.2	1.8	2.4	4.6	8.3	
1998 Q4	106.0	1.5	0.8	0.9	1.4	0.5	-1.8	-4.0	
1999 Q1	106.3	1.5	0.9	0.8	1.9	0.5	-2.1	-4.2	
Q2	106.6	1.2	1.1	1.0	2.2	0.7	-1.4	-1.9	
Q3	106.8	1.1	1.5	1.1	2.4	1.1	-0.2	0.8	
Q4	107.0	1.0	1.8	1.5	2.4	1.5	1.8	4.2	
2000 Q1	107.5	1.1	2.4	2.1	1.9	2.1	3.7	7.8	
Q2	107.8	1.2	2.4	2.0	1.6	2.4	4.6	8.2	
Q3	108.3	1.4	2.5	2.4	1.8	2.5	5.0	8.5	
Q4	108.7	1.5	2.7	2.4	1.8	2.7	5.2	8.6	

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

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

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

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

4) Data to end-1998 are based on national data expressed in domestic currency.

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

5 Real economy indicators in the euro area

Table 5.1

National accounts ¹⁾

GDP and expenditure components

1. Current prices

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

	GDP						External balance ³⁾		
	1	Domestic demand		Private consumption 3	Government consumption 4	Gross fixed capital formation 5	Changes in inventories ²⁾ 6	Exports ³⁾ 8	Imports ³⁾ 9
1996		5,534.0	5,408.4							3,142.9	1,142.4	1,121.7	1.4	125.7	1,658.0	1,532.3
1997	5,650.1	5,501.1	3,199.6	1,150.8	1,138.0	12.7	149.0	1,828.5	1,679.6
1998	5,884.1	5,742.6	3,331.3	1,176.8	1,201.4	33.1	141.5	1,946.0	1,804.6
1999	6,142.3	6,034.9	3,488.5	1,228.5	1,282.4	35.5	107.3	2,042.2	1,934.8
2000	6,431.8	6,359.0	3,658.0	1,274.9	1,371.5	54.6	72.8	2,391.4	2,318.6
1999 Q4	1,562.0	1,537.4	887.0	311.4	328.3	10.7	24.6	540.5	515.9
2000 Q1	1,583.6	1,562.1	899.8	314.8	336.2	11.2	21.5	563.5	542.0
Q2	1,600.1	1,582.4	911.4	317.3	340.6	13.1	17.7	584.0	566.3
Q3	1,616.6	1,598.9	919.6	319.8	345.6	13.9	17.7	609.2	591.4
Q4	1,631.5	1,615.6	927.2	322.9	349.1	16.4	15.9	634.7	618.8
<i>Euro area enlargement</i>									
2001 Q1									

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP						External balance ³⁾		
	10	Domestic demand		Private consumption 12	Government consumption 13	Gross fixed capital formation 14	Changes in inventories ²⁾ 15	Exports ³⁾ 17	Imports ³⁾ 18
1996		5,383.3	5,262.9							3,045.0	1,112.0	1,106.0	-0.1	120.5	1,637.7	1,517.2
1997	5,506.9	5,352.7	3,092.7	1,121.4	1,131.4	7.3	154.2	1,807.2	1,653.0
1998	5,664.6	5,540.0	3,189.3	1,132.3	1,188.8	29.5	124.6	1,935.6	1,811.0
1999	5,807.0	5,713.9	3,284.3	1,149.5	1,249.6	30.5	93.0	2,028.5	1,935.5
2000	6,002.2	5,874.3	3,369.1	1,172.1	1,305.0	28.2	128.0	2,270.2	2,142.3
1999 Q4	1,471.7	1,444.9	829.6	289.3	317.9	8.2	26.8	530.2	503.4
2000 Q1	1,485.6	1,456.0	835.4	291.7	323.0	6.0	29.5	545.2	515.7
Q2	1,496.6	1,467.3	842.7	292.7	324.9	7.0	29.4	558.4	529.0
Q3	1,505.5	1,472.2	844.5	293.0	328.0	6.7	33.3	574.8	541.5
Q4	1,514.5	1,478.7	846.5	294.7	329.1	8.4	35.8	591.9	556.1
<i>Euro area enlargement</i>									
2001 Q1	1,549.7	1,507.5	868.5	299.6	332.6	6.8	42.2	598.6	556.4
<i>(annual percentage changes)</i>									
1996	1.4	1.0	1.6	1.7	1.2	-	-	4.3	3.1
1997	2.3	1.7	1.6	0.8	2.3	-	-	10.4	9.0
1998	2.9	3.5	3.1	1.0	5.1	-	-	7.1	9.6
1999	2.5	3.1	3.0	1.5	5.1	-	-	4.8	6.9
2000	3.4	2.8	2.6	2.0	4.4	-	-	11.9	10.7
1999 Q4	3.4	3.2	2.9	1.7	5.5	-	-	10.1	9.8
2000 Q1	3.5	2.8	2.6	2.0	5.5	-	-	12.4	10.5
Q2	3.7	3.3	3.2	2.2	4.8	-	-	11.9	11.0
Q3	3.3	2.8	2.5	1.8	3.9	-	-	11.7	10.7
Q4	2.9	2.3	2.0	1.9	3.5	-	-	11.6	10.5
<i>Euro area enlargement</i>									
2001 Q1	2.5	1.5	1.7	1.4	1.0	-	-	8.7	6.2

Source: Eurostat.

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

2) Including acquisitions less disposals of valuables.

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

Value added by activity

3. Current prices

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

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	1	2	3	4	5	6	7	8	9
1996	5,172.4	139.7	1,207.0	300.7	1,059.5	1,333.2	1,132.4	200.6	562.2
1997	5,266.5	138.1	1,227.7	292.1	1,086.6	1,377.7	1,144.3	199.6	583.1
1998	5,468.2	137.9	1,274.2	295.3	1,137.3	1,443.9	1,179.7	200.0	615.8
1999	5,681.7	135.5	1,297.2	309.0	1,175.9	1,539.8	1,224.4	203.1	663.7
2000	5,949.5	137.2	1,368.7	321.1	1,224.4	1,632.3	1,265.8	210.3	692.7
1999 Q4	1,443.2	33.9	329.0	78.7	298.1	394.0	309.7	51.8	170.5
2000 Q1	1,464.8	33.8	336.6	80.2	301.3	400.0	313.0	52.4	171.2
Q2	1,479.6	33.8	341.3	80.0	304.6	404.8	315.1	52.9	173.4
Q3	1,496.2	34.7	344.9	79.9	307.4	411.6	317.9	52.6	173.0
Q4	1,508.8	34.9	346.0	81.1	311.2	416.0	319.7	52.4	175.1
<i>Euro area enlargement</i>									
2001 Q1									

4. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	Gross value added							Intermediate consumption of FISIM ¹⁾	Taxes less subsidies on products
	Total	Agriculture, hunting, forestry and fishing activities	Manufacturing, energy and mining	Construction	Trade, repairs, hotels and restaurants, transport and communication	Financial, real estate, renting and business activities	Public administration, education, health and other services		
	10	11	12	13	14	15	16	17	18
1996	5,040.2	139.5	1,178.0	295.5	1,039.5	1,288.2	1,099.4	200.1	543.2
1997	5,158.4	140.2	1,216.1	290.4	1,071.7	1,330.1	1,109.8	207.5	556.0
1998	5,308.3	142.3	1,252.3	291.8	1,111.8	1,384.7	1,125.4	214.1	570.3
1999	5,437.4	145.8	1,268.7	296.9	1,146.7	1,442.5	1,136.9	221.8	591.3
2000	5,628.9	146.1	1,323.2	300.0	1,191.8	1,513.2	1,154.6	231.7	605.0
1999 Q4	1,376.4	36.8	321.1	74.9	290.5	367.2	285.9	56.6	151.8
2000 Q1	1,392.8	36.4	327.1	75.7	294.2	372.3	287.2	56.8	149.6
Q2	1,402.0	36.2	329.9	74.9	296.9	375.9	288.2	57.6	152.2
Q3	1,412.2	36.8	332.2	74.6	298.7	380.8	289.1	58.3	151.6
Q4	1,421.9	36.7	334.0	74.8	302.1	384.3	290.1	59.0	151.6
<i>Euro area enlargement</i>									
2001 Q1	1,456.1	38.9	342.8	75.7	311.9	391.9	295.1	59.7	153.2
<i>(annual percentage changes)</i>									
1996	1.4	5.5	-0.3	-1.8	0.9	3.6	1.7	2.5	1.4
1997	2.3	0.4	3.2	-1.7	3.1	3.3	0.9	3.7	2.3
1998	2.9	1.5	3.0	0.5	3.7	4.1	1.4	3.2	2.6
1999	2.4	2.4	1.3	1.7	3.1	4.2	1.0	3.6	3.7
2000	3.5	0.2	4.3	1.1	3.9	4.9	1.6	4.4	2.3
1999 Q4	3.2	2.9	3.0	2.6	3.8	4.7	1.0	3.4	5.4
2000 Q1	3.6	0.7	4.3	3.0	3.7	5.1	1.5	4.6	2.7
Q2	3.7	-0.2	4.6	1.3	4.2	4.8	1.8	4.8	4.7
Q3	3.5	0.6	4.3	0.2	3.8	5.0	1.6	4.0	2.1
Q4	3.3	-0.4	4.0	-0.2	4.0	4.7	1.5	4.2	-0.1
<i>Euro area enlargement</i>									
2001 Q1	2.8	0.9	3.6	-2.5	3.7	3.9	1.2	3.7	0.4

Source: Eurostat.

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

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			Non-durable consumer goods		
	1	2	3	4			8	9	10			
1997	103.8	3.7	104.7	4.2	4.8	5.3	4.6	2.4	2.8	2.3	0.0	
1998	107.8	3.8	109.2	4.3	4.8	4.1	7.0	2.5	5.5	1.9	0.3	
1999	110.1	2.1	111.4	2.0	2.0	2.4	1.8	1.5	2.8	1.3	2.7	
2000	115.9	5.3	117.6	5.6	6.0	5.7	9.2	2.5	7.0	1.5	2.0	
2000 Q1	113.6	5.0	114.9	4.9	5.1	5.8	7.7	0.8	6.9	-0.5	4.9	
Q2	115.4	5.7	117.4	6.1	6.5	6.6	8.7	3.8	8.4	2.7	1.9	
Q3	116.7	5.2	118.2	5.8	6.2	5.6	9.9	2.8	6.9	2.0	0.6	
Q4	117.9	5.1	119.9	5.5	6.2	5.0	10.3	2.6	5.9	1.8	1.3	
2000 May	116.6	7.6	118.1	7.8	8.1	8.5	11.0	4.4	10.4	3.1	4.9	
June	114.5	4.1	116.9	4.6	4.9	4.9	7.0	2.7	6.1	2.0	-0.4	
July	115.8	5.1	117.7	5.6	5.9	5.4	8.4	2.6	7.2	1.6	0.3	
Aug.	117.9	6.2	118.3	6.9	7.5	7.2	12.3	2.8	8.1	1.9	1.9	
Sep.	116.3	4.6	118.7	5.2	5.6	4.5	9.6	3.1	5.9	2.5	-0.4	
Oct.	115.9	3.5	118.5	3.9	4.2	4.1	7.2	1.0	2.4	0.7	-0.7	
Nov.	117.3	4.1	119.6	4.5	5.1	4.2	8.6	1.5	4.1	0.9	0.3	
Dec.	120.5	7.9	121.7	8.3	9.6	6.9	15.1	5.5	12.2	4.2	4.8	
<i>Euro area enlargement</i>												
2001 Q1	118.0	3.8	119.9	4.3	5.0	3.3	8.6	3.0	3.9	2.8	-2.6	
2001 Jan.	117.8	5.3	119.5	5.6	6.6	4.7	10.4	3.8	7.5	3.0	0.9	
Feb.	118.9	4.1	120.2	4.3	4.9	3.5	8.7	2.9	2.3	3.0	-1.9	
Mar.	117.5	2.3	119.9	3.1	3.6	1.8	6.9	2.5	2.5	2.5	-6.2	
Apr.	115.9	0.7	119.3	1.7	1.8	1.2	3.5	1.0	-1.8	1.6	-7.0	
May	.	.	.	.	.	.	.	.	.	.	.

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

	Retail sales (s.a.)									New passenger car registrations	
	Current prices				Constant prices					Thousands ²⁾ (s.a.)	
	Total		Total		Food, beverages, tobacco	Non-food	Textiles, clothing, footwear	Household equipment			
	Index 1995 = 100		Index 1995 = 100								
12	13	14	15	16	17	18	19	20	21		
1997	104.1	2.2	101.6	1.2	1.1	1.3	0.7	1.4	861	4.2	
1998	107.9	3.6	104.6	2.9	2.2	3.6	2.1	4.5	923	7.2	
1999	111.6	3.4	107.3	2.6	3.1	2.5	1.4	3.0	973	5.4	
2000	116.2	4.1	109.8	2.4	1.9	2.3	1.6	4.7	953	-2.2	
2000 Q1	114.0	3.5	108.9	2.4	2.4	2.0	1.4	5.9	984	1.3	
Q2	115.9	4.9	109.9	3.3	2.9	3.3	1.7	5.4	977	0.8	
Q3	116.8	4.4	110.0	2.2	1.4	2.3	2.9	4.0	923	-7.8	
Q4	118.0	3.7	110.5	1.6	1.2	1.4	0.4	3.7	927	-3.2	
2000 May	117.2	6.7	110.6	4.6	4.9	4.8	4.3	6.6	971	2.6	
June	115.0	2.8	109.2	1.4	0.1	1.4	-0.5	3.2	988	1.2	
July	116.1	3.5	109.7	1.8	0.8	1.2	0.8	5.2	885	-14.4	
Aug.	116.7	3.9	109.9	1.8	1.4	2.2	1.3	2.4	937	-4.3	
Sep.	117.5	5.7	110.4	3.0	1.9	3.5	6.9	4.5	948	-1.5	
Oct.	117.8	3.8	110.5	1.6	1.3	1.0	0.7	2.8	914	-7.0	
Nov.	118.2	3.5	110.5	1.4	0.8	1.6	0.1	4.6	930	-3.3	
Dec.	117.9	3.7	110.7	1.9	1.4	1.5	0.6	3.6	937	2.1	
<i>Euro area enlargement</i>											
2001 Q1	119.4	4.4	111.3	2.2	2.0	2.4	2.4	0.9	952	-5.0	
2001 Jan.	119.4	5.0	111.3	2.6	2.1	3.2	5.2	2.4	943	-5.7	
Feb.	119.3	3.2	111.3	1.5	1.8	1.2	0.1	0.3	955	-6.1	
Mar.	119.6	4.8	111.2	2.4	2.0	2.7	2.1	0.0	957	-3.6	
Apr.	120.5	3.9	111.8	1.5	1.6	1.1	1.2	0.1	973	-1.8	
May	.	.	.	.	.	.	.	.	993	-0.1

Sources: Eurostat, except columns 20 and 21 (ECB calculation based on data from the ACEA/A.A.A., European Automobile Manufacturers' Association).

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

2) Monthly averages.

Table 5.3

Business and consumer surveys

(percentage balances, seasonally adjusted, unless otherwise indicated)

	Manufacturing industry				Construction confidence indicator	Retail trade confidence indicator	Consumer confidence indicator
	Confidence indicator	Production expectations	Assessment of order books	Capacity utilisation ¹⁾ (percentages)			
	1	2	3	4	5	6	7
1997	-4	11	-15	81.0	-33	-9	-15
1998	-1	11	-5	83.0	-19	-3	-5
1999	-7	7	-17	81.8	-7	-5	-3
2000	5	17	3	83.8	1	-1	-1
2000 Q2	6	17	5	83.7	2	3	0
Q3	6	18	5	83.9	2	-2	-1
Q4	5	18	4	84.7	0	-3	-2
2000 June	8	19	8	-	3	7	-1
July	7	19	5	-	2	-3	0
Aug.	6	18	4	-	5	-3	1
Sep.	6	18	5	-	-1	-1	-3
Oct.	6	19	5	-	2	-1	-3
Nov.	5	17	4	-	-1	-3	-3
Dec.	5	18	4	-	-2	-4	-1
<i>Euro area enlargement</i>							
2001 Q1	1	12	-1	84.4	-1	-2	-2
Q2	-5	5	-9	83.7	-3	-6	-4
2001 Jan.	3	14	0	-	1	0	-1
Feb.	1	12	0	-	-2	0	-2
Mar.	-1	9	-3	-	-2	-6	-2
Apr.	-4	6	-6	-	-2	-4	-2
May	-5	6	-9	-	-2	-7	-4
June	-7	3	-11	-	-5	-7	-5

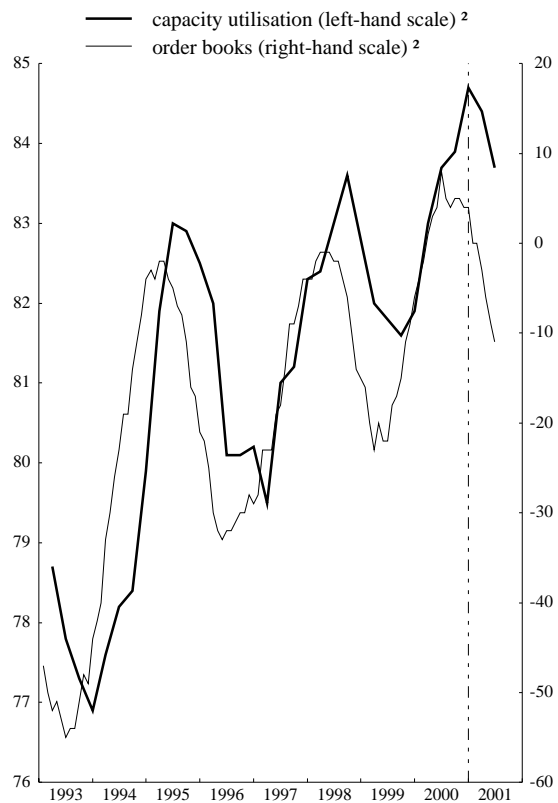
Consumer and industrial confidence indicators

(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 1	2	Employees 3	Self- employed 4			5	6	Millions 7	% of labour force 8	% of labour force 9	% of labour force 10
1996	100.5	0.5	0.5	0.5	-1.0	1.6	14.728	11.5	9.8	23.9
1997	101.4	0.8	0.9	0.1	-0.3	1.4	14.817	11.5	9.9	23.2
1998	103.0	1.6	1.8	0.6	1.2	2.1	14.064	10.8	9.4	21.2
1999	104.7	1.6	2.1	-0.4	0.3	2.5	12.966	9.9	8.6	19.1
2000	106.8	2.0	2.3	0.4	0.8	2.7	11.665	8.9	7.7	17.1
2000 Q1	106.0	1.9	2.3	-0.3	0.2	2.5	12.161	9.2	8.1	17.8
Q2	106.5	2.1	2.5	0.1	0.8	2.9	11.786	8.9	7.8	17.3
Q3	107.1	2.0	2.3	0.5	1.0	2.7	11.497	8.7	7.6	16.9
Q4	107.7	2.2	2.3	1.4	1.1	2.8	11.215	8.5	7.4	16.4
2000 May	-	-	-	-	-	-	11.776	8.9	7.8	17.3
June	-	-	-	-	-	-	11.676	8.9	7.7	17.1
July	-	-	-	-	-	-	11.588	8.8	7.7	17.0
Aug.	-	-	-	-	-	-	11.510	8.7	7.6	16.9
Sep.	-	-	-	-	-	-	11.393	8.6	7.5	16.7
Oct.	-	-	-	-	-	-	11.287	8.5	7.5	16.5
Nov.	-	-	-	-	-	-	11.212	8.5	7.4	16.3
Dec.	-	-	-	-	-	-	11.147	8.4	7.4	16.2
<i>Euro area enlargement</i>										
2001 Q1	.	.	.	.	.	.	11.475	8.4	7.3	16.5
2001 Jan.	-	-	-	-	-	-	11.557	8.5	7.4	16.6
Feb.	-	-	-	-	-	-	11.465	8.4	7.3	16.5
Mar.	-	-	-	-	-	-	11.403	8.4	7.3	16.4
Apr.	-	-	-	-	-	-	11.348	8.3	7.2	16.4
May	-	-	-	-	-	-	11.311	8.3	7.2	16.4

2. Labour costs and productivity
(annual percentage changes)

	Unit labour cost in the whole economy, and components (s.a.)			Labour cost indices ³⁾ and components					Earnings per employee in manufacturing
	Unit labour cost	Compensation per employee	Labour productivity	Total	Wages and salaries	Other	Industry excluding construction	Services	
							Total 17	Total 18	
11	12	13	14	15	16	17	18	19	
1996	1.9	3.0	1.1	3.4	3.0	4.4	3.7	4.0	3.7
1997	0.7	2.2	1.6	2.6	2.6	2.7	2.3	2.7	2.4
1998	0.1	1.4	1.3	1.7	2.2	0.9	1.5	1.4	2.1
1999	1.3	2.2	0.9	2.3	2.7	1.8	2.7	1.9	2.7
2000	1.0	2.3	1.2	3.9	4.3	3.0	3.6	3.1	2.6
1998 Q4	0.9	1.3	0.4	1.7	2.1	0.9	2.0	1.4	2.6
1999 Q1	1.7	1.7	0.1	2.0	2.4	1.2	2.5	1.4	2.7
Q2	1.7	2.3	0.7	2.2	2.5	1.5	2.5	1.9	2.9
Q3	1.2	2.1	0.9	2.5	2.7	2.1	2.9	2.1	2.9
Q4	0.4	2.0	1.7	2.7	3.0	2.4	3.0	1.9	2.5
2000 Q1	0.6	2.6	2.0	4.1	4.5	3.0	4.1	3.0	2.9
Q2	0.6	2.1	1.5	4.0	4.3	3.1	3.7	3.0	2.9
Q3	1.3	2.4	1.0	3.8	4.2	3.0	3.5	3.1	2.5
Q4	1.7	2.1	0.5	3.6	4.0	2.7	3.1	3.2	2.3

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

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

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

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

6 Saving, investment and financing in the euro area

Table 6.1

Financial investment and financing of non-financial sectors ¹⁾

(EUR billions (ECU billions to end-1998); not seasonally adjusted)

Levels at the end of the period

1. Main financial assets ²⁾

	Currency and deposits									Memo: deposits of euro area non-banks with banks outside the euro area ³⁾
	Total	Currency	Deposits of non-financial sectors other than central government with euro area MFIs					Deposits of central government with euro area MFIs	Deposits with non-MFIs ⁴⁾	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
1	2	3	4	5	6	7	8	9	10	
1997 Q4	4,696.2	320.5	4,083.2	1,159.0	1,469.5	1,329.1	125.5	153.9	138.7	215.8
1998 Q1	4,651.8	311.7	4,060.4	1,134.2	1,459.9	1,348.2	118.2	139.4	140.2	247.2
Q2	4,707.0	315.4	4,108.1	1,205.3	1,455.0	1,346.7	101.1	147.4	136.1	239.7
Q3	4,683.5	311.7	4,080.0	1,184.2	1,452.5	1,345.6	97.7	156.4	135.3	237.6
Q4	4,831.9	323.3	4,216.8	1,282.1	1,466.2	1,389.7	78.9	149.8	141.9	213.0
1999 Q1	4,677.9	317.7	4,077.8	1,239.1	1,466.3	1,306.5	66.0	133.4	148.9	243.9
Q2	4,704.1	323.9	4,116.3	1,321.8	1,420.2	1,315.9	58.4	125.0	138.9	242.7
Q3	4,715.4	327.3	4,115.1	1,324.5	1,418.6	1,313.3	58.7	133.3	139.7	238.6
Q4	4,861.8	349.9	4,217.6	1,370.5	1,460.7	1,323.4	63.0	142.0	152.3	229.7
2000 Q1	4,840.3	334.6	4,225.0	1,379.6	1,465.5	1,303.2	76.8	130.2	150.4	260.6
Q2	4,896.9	341.2	4,259.4	1,409.6	1,488.5	1,282.5	78.9	146.0	150.3	247.2
Q3	4,916.7	338.9	4,268.6	1,396.8	1,526.4	1,263.5	81.9	159.3	149.9	254.1
Q4	.	347.5	4,364.3	1,464.4	1,545.0	1,269.3	85.6	164.6	.	231.6
2001 Q1	.	335.3	4,499.7	1,446.0	1,622.3	1,314.4	117.0	150.5	.	.

	Securities other than shares			Shares ⁵⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1997 Q4	1,582.4	204.6	1,377.8	2,683.1	1,520.7	1,162.5	184.9	2,375.0	2,112.6	262.5
1998 Q1	1,599.0	194.6	1,404.4	3,188.4	1,864.9	1,323.5	186.5	2,454.2	2,182.2	272.0
Q2	1,547.2	170.3	1,377.0	3,403.9	1,974.8	1,429.1	186.7	2,513.1	2,239.0	274.1
Q3	1,542.1	159.3	1,382.9	3,110.0	1,666.5	1,443.5	187.9	2,559.1	2,282.3	276.7
Q4	1,532.0	155.6	1,376.4	3,425.7	1,899.8	1,525.9	172.9	2,623.9	2,347.2	276.7
1999 Q1	1,564.1	144.8	1,419.2	3,616.4	1,975.5	1,641.0	195.0	2,699.0	2,412.6	286.5
Q2	1,502.2	136.5	1,365.8	3,877.9	2,127.7	1,750.2	211.7	2,769.2	2,480.6	288.7
Q3	1,503.1	124.0	1,379.1	3,960.8	2,198.8	1,762.0	209.1	2,835.4	2,543.8	291.6
Q4	1,529.8	152.8	1,377.0	4,515.0	2,662.0	1,853.0	199.4	2,955.9	2,660.7	295.2
2000 Q1	1,532.9	154.3	1,378.7	4,866.5	2,907.5	1,959.0	208.6	3,084.0	2,774.3	309.7
Q2	1,595.1	158.9	1,436.2	4,800.6	2,853.6	1,946.9	197.4	3,133.9	2,820.6	313.3
Q3	1,653.1	178.6	1,474.5	4,881.1	2,913.6	1,967.5	201.8	3,192.4	2,875.6	316.9
Q4	.	.	.	.	.	.	.	.	.	.
2001 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.

3) BIS international banking statistics. The BIS definition of banks is close to that of MFIs in the euro area.

4) Covering deposits of non-financial sectors with central government (S.1311) in the euro area, other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).

5) Excluding unquoted shares.

Table 6.1 (cont'd)
Financial investment and financing of non-financial sectors ¹⁾
(EUR billions (ECU billions to end-1998); not seasonally adjusted)
Levels at the end of the period
2. Main liabilities ²⁾

	Loans taken from euro area MFIs and other financial corporations by											Memo: loans taken from banks outside the euro area by euro area non-banks ³⁾
	Total	taken from euro area MFIs	General government			Non-financial corporations			Households ⁴⁾			
			Total	Short-term	Long-term ⁵⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
1997 Q4	5,839.7	5,320.1	922.3	54.2	868.1	2,406.4	837.7	1,568.7	2,511.0	225.0	2,286.0	141.6
1998 Q1	5,894.4	5,358.7	905.1	35.5	869.7	2,450.1	853.6	1,596.5	2,539.2	224.0	2,315.2	146.9
Q2	6,004.5	5,453.7	902.6	31.7	870.8	2,502.1	877.0	1,625.1	2,599.8	233.3	2,366.5	151.3
Q3	6,077.8	5,524.3	903.6	33.2	870.5	2,525.7	864.0	1,661.7	2,648.4	233.8	2,414.6	147.4
Q4	6,220.0	5,660.3	911.2	35.9	875.4	2,596.9	901.7	1,695.2	2,711.8	240.3	2,471.6	150.7
1999 Q1	6,249.1	5,673.9	903.3	36.1	867.2	2,584.7	917.7	1,667.0	2,761.0	251.2	2,509.8	156.8
Q2	6,417.6	5,814.2	901.2	38.7	862.5	2,683.2	960.0	1,723.2	2,833.2	255.2	2,578.0	183.3
Q3	6,482.8	5,882.6	886.9	37.7	849.2	2,697.7	939.1	1,758.6	2,898.2	255.0	2,643.2	191.4
Q4	6,664.5	6,040.0	902.0	42.0	860.0	2,795.8	980.0	1,815.8	2,966.7	264.0	2,702.7	201.4
2000 Q1	6,804.9	6,155.5	891.8	41.0	850.8	2,893.6	1,038.3	1,855.3	3,019.4	265.3	2,754.1	221.1
Q2	6,951.6	6,261.4	885.4	41.8	843.6	2,993.8	1,088.8	1,905.1	3,072.3	273.8	2,798.6	219.6
Q3	7,105.3	6,378.0	864.8	39.7	825.1	3,101.1	1,143.4	1,957.7	3,139.4	275.5	2,863.9	251.7
Q4	.	6,500.4	.	.	.	.	.	.	.	.	.	246.6
2001 Q1	.	6,667.5	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by								Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations						
		Total	Short-term	Long-term	Total	Short-term	Long-term				
13	14	15	16	17	18	19	20	21	22		
1997 Q4	3,630.6	3,327.7	499.0	2,828.7	302.9	45.8	257.1	1,975.7	135.2	236.2	
1998 Q1	3,754.4	3,435.2	492.5	2,942.7	319.2	55.8	263.4	2,434.3	136.3	239.1	
Q2	3,818.7	3,497.5	491.7	3,005.8	321.2	54.1	267.1	2,648.6	134.2	242.1	
Q3	3,911.9	3,580.4	494.5	3,085.9	331.6	55.7	275.9	2,282.9	133.8	245.1	
Q4	3,919.4	3,587.0	466.5	3,120.4	332.4	55.1	277.3	2,606.8	140.3	248.2	
1999 Q1	3,968.8	3,622.9	462.3	3,160.6	345.9	66.0	279.8	2,722.1	146.9	251.2	
Q2	3,950.7	3,598.0	451.8	3,146.2	352.7	67.0	285.7	2,964.9	136.6	254.3	
Q3	3,934.1	3,567.7	444.9	3,122.8	366.4	75.0	291.4	3,037.1	137.6	257.4	
Q4	3,896.4	3,519.4	420.0	3,099.5	377.0	78.2	298.9	3,916.9	149.8	260.8	
2000 Q1	3,950.6	3,574.8	425.1	3,149.7	375.8	78.8	297.0	4,357.8	147.6	263.6	
Q2	3,990.1	3,595.7	425.3	3,170.4	394.5	88.6	305.8	4,118.9	147.6	266.6	
Q3	4,044.9	3,624.9	421.8	3,203.1	420.0	95.6	324.4	4,008.5	147.2	269.0	
Q4	.	.	.	.	.	.	.	.	.	.
2001 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

1) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).

2) Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.

3) BIS international banking statistics. The BIS definition of banks is close to that of MFIs in the euro area.

4) Including non-profit institutions serving households.

5) Including all loans taken by central government from MFIs in the euro area.

Transactions

1. Main financial assets ¹⁾

	Currency and deposits									Memo: deposits of euro area non-banks with banks outside the euro area ²⁾
	Total	Currency	Deposits of non-financial sectors ³⁾ other than central government with euro area MFIs ⁴⁾					Deposits of central government with euro area MFIs	Deposits with non-MFIs ⁵⁾	
			Total	Overnight	With agreed maturity	Redeemable at notice	Repurchase agreements			
	1	2	3	4	5	6	7	8	9	10
1997 Q4	147.7	9.3	128.9	76.3	14.9	39.1	-1.4	3.2	6.2	-13.3
1998 Q1	-19.9	-8.8	2.0	-19.1	-3.0	20.1	4.0	-14.5	1.3	28.1
Q2	77.6	3.6	70.0	74.4	-0.4	0.3	-4.3	8.0	-4.0	-4.8
Q3	-6.1	-3.7	-11.0	-19.8	5.0	-0.9	4.7	9.0	-0.4	4.0
Q4	162.6	11.6	151.1	103.9	19.5	44.0	-16.3	-6.6	6.5	-24.7
1999 Q1	7.0	-5.2	9.3	5.6	-10.4	11.3	2.9	-4.2	7.0	21.5
Q2	57.7	6.2	70.1	82.4	-17.0	9.5	-4.8	-8.4	-10.2	-4.2
Q3	8.7	3.4	-3.7	-12.0	11.8	-2.0	-1.5	8.3	0.7	-1.8
Q4	144.6	22.3	101.1	56.9	42.3	9.3	-7.4	8.7	12.5	-13.1
2000 Q1	-4.0	-15.3	25.1	25.1	4.8	-19.4	14.6	-11.9	-1.9	22.3
Q2	46.3	6.7	23.9	30.9	18.1	-21.7	-3.4	15.8	-0.1	-10.9
Q3	-1.5	-2.2	-12.1	-21.0	25.5	-18.4	1.8	13.3	-0.5	-1.6
Q4	.	8.6	101.2	64.4	30.4	6.2	0.2	5.3	.	-13.4
2001 Q1	.	-20.0	4.1	-33.6	27.5	-6.1	16.2	-15.8	.	.

	Securities other than shares			Shares ⁶⁾				Insurance technical reserves		
	Total	Short-term	Long-term	Total	Quoted shares	Mutual fund shares	Money market fund shares	Total	Net equity of households in life insurance reserves and pension fund reserves	Prepayments of insurance premiums and reserves for outstanding claims
1997 Q4	1.1	-7.6	8.7	67.8	51.9	15.9	-12.1	54.8	52.5	2.2
1998 Q1	-26.4	-10.3	-16.1	84.5	-15.6	100.2	7.4	67.3	54.8	12.5
Q2	-71.9	-25.1	-46.8	117.0	23.8	93.2	-0.8	48.5	46.3	2.1
Q3	-5.4	-11.0	5.5	115.7	34.9	80.8	1.5	44.8	42.1	2.7
Q4	-13.2	-1.6	-11.5	80.3	60.7	19.7	-15.8	51.6	49.5	2.1
1999 Q1	29.4	-10.4	39.7	121.1	17.6	103.5	1.6	67.2	54.6	12.6
Q2	-26.9	-11.6	-15.3	142.2	58.2	84.0	15.0	51.4	48.6	2.8
Q3	-4.7	-9.9	5.2	90.6	51.4	39.2	-4.2	53.7	50.4	3.3
Q4	50.2	23.5	26.7	2.4	33.6	-31.2	-15.0	71.3	68.8	2.5
2000 Q1	-15.0	3.0	-18.0	9.3	-34.3	43.6	9.0	80.5	67.4	13.2
Q2	53.9	2.7	51.2	116.1	90.3	25.8	-8.8	52.9	49.8	3.0
Q3	60.2	21.1	39.1	186.0	166.2	19.8	4.8	52.4	48.9	3.6
Q4	.	.	.	.	.	.	.	.	.	.
2001 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

- Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.
- BIS international banking statistics. The BIS definition of banks is close to that of MFIs in the euro area.
- Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).
- Transaction amounts are derived from the corresponding quarterly levels outstanding.
- Covering deposits of non-financial sectors with central government (S.1311) in the euro area, other financial intermediaries (S.123) and insurance corporations and pension funds (S.125).
- Excluding unquoted shares.

Table 6.1 (cont'd)
Financial investment and financing of non-financial sectors ¹⁾
(EUR billions (ECU billions to end-1998); not seasonally adjusted)
Transactions
2. Main liabilities ²⁾

	Loans taken from euro area MFIs ³⁾ and other financial corporations by											Memo: loans taken from banks outside the euro area by euro area non-banks ⁴⁾
	Total	taken from euro area MFIs	General government			Non-financial corporations			Households ⁵⁾			
			Total	Short-term	Long-term ⁶⁾	Total	Short-term	Long-term	Total	Short-term	Long-term	
1	2	3	4	5	6	7	8	9	10	11	12	
1997 Q4	151.4	146.1	19.9	0.8	19.1	62.5	21.8	40.7	69.0	6.9	62.2	-16.4
1998 Q1	96.8	55.7	-15.9	-0.4	-15.5	74.1	50.5	23.6	38.6	3.4	35.2	3.8
Q2	118.8	110.6	-4.6	-1.3	-3.4	61.8	27.4	34.3	61.7	5.6	56.1	6.3
Q3	74.8	89.1	2.8	0.0	2.8	24.4	-3.8	28.2	47.6	4.0	43.6	-0.4
Q4	158.5	151.8	8.8	0.4	8.4	69.9	21.9	48.0	79.8	6.9	72.9	3.9
1999 Q1	115.9	103.7	-6.9	-0.1	-6.8	62.6	30.2	32.5	60.2	5.5	54.7	1.0
Q2	169.6	140.0	-4.3	-0.1	-4.3	94.8	50.0	44.8	79.1	7.3	71.9	22.2
Q3	49.3	61.3	-14.7	-0.3	-14.4	19.9	1.2	18.7	44.1	3.4	40.7	7.9
Q4	168.0	149.6	14.7	0.8	13.9	82.3	41.1	41.2	71.0	6.9	64.1	-6.3
2000 Q1	163.8	127.2	-8.9	-0.2	-8.7	96.6	52.4	44.2	76.1	6.6	69.5	13.0
Q2	191.4	128.5	-6.9	-0.3	-6.6	125.2	79.5	45.7	73.1	6.6	66.5	-0.8
Q3	99.4	89.1	-16.9	-0.7	-16.2	56.4	34.0	22.5	59.9	5.2	54.7	17.6
Q4	.	141.3	.	.	.	.	.	.	.	.	.	2.5
2001 Q1	.	97.1	.	.	.	.	.	.	.	.	.	.

	Securities other than shares issued by								Quoted shares issued by non-financial corporations	Deposit liabilities of central government	Pension fund reserves of non- financial corporations
	Total	General government			Non-financial corporations						
		Total	Short-term	Long-term	Total	Short-term	Long-term				
13	14	15	16	17	18	19	20	21	22		
1997 Q4	-9.6	-5.4	-33.5	28.1	-4.2	-7.5	3.3	44.6	6.9	2.3	
1998 Q1	70.3	59.8	-4.9	64.6	10.5	9.7	0.8	11.4	1.1	2.4	
Q2	53.9	51.0	-0.6	51.6	2.9	-1.8	4.7	36.8	-2.1	2.4	
Q3	62.0	54.8	3.1	51.6	7.3	1.4	5.9	10.9	-0.4	2.4	
Q4	-10.1	-15.6	-30.4	14.9	5.4	0.8	4.6	41.0	6.4	2.2	
1999 Q1	79.3	56.9	0.7	56.2	22.4	18.3	4.1	10.8	6.6	2.5	
Q2	41.6	32.8	-8.4	41.2	8.8	0.9	8.0	34.7	-10.3	2.5	
Q3	53.2	33.7	-8.6	42.3	19.5	8.1	11.4	31.3	1.0	2.5	
Q4	-8.6	-15.5	-28.1	12.5	6.9	3.1	3.7	42.0	12.1	2.6	
2000 Q1	61.6	62.4	11.0	51.4	-0.8	0.4	-1.2	23.3	-2.2	2.4	
Q2	45.0	23.6	-1.3	24.9	21.4	10.0	11.4	33.4	0.0	2.4	
Q3	51.8	26.0	-2.2	28.2	25.8	7.7	18.1	73.0	-0.4	2.4	
Q4	.	.	.	.	.	.	.	.	.	.
2001 Q1	.	.	.	.	.	.	.	.	.	.

Source: ECB.

- 1) Non-financial sectors comprise general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15).
- 2) Most of the financial asset and liability categories defined in the ESA 95 are covered. These are currency and deposits, securities other than shares, loans (except those granted by general government and non-financial corporations), quoted shares, mutual fund shares and insurance technical reserves. Other financial instruments (financial derivatives, unquoted shares, other (than share) equity and other receivables and payables) are not included.
- 3) Transaction amounts are derived from the corresponding quarterly levels outstanding.
- 4) BIS international banking statistics. The BIS definition of banks is close to that of MFIs in the euro area.
- 5) Including non-profit institutions serving households.
- 6) Including all loans taken by central government from MFIs in the euro area.

Table 6.2

Saving, investment and financing

(as a percentage of GDP, unless otherwise indicated)

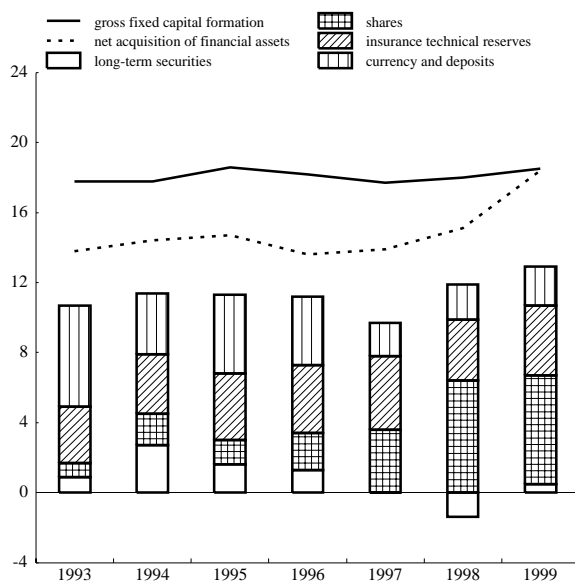
	Euro area saving and investment ¹⁾			Investment of private non-financial sectors ¹⁾²⁾							
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other than shares	Long-term securities	Shares	Insurance technical reserves
1992	21.7	22.7	-0.9	18.9	12.3	14.0	4.2	1.7	0.4	1.5	3.0
1993	21.3	21.5	0.6	17.8	11.1	13.8	5.8	0.5	0.9	0.8	3.2
1994	21.8	21.2	0.3	17.8	10.9	14.4	3.5	2.5	2.7	1.8	3.4
1995	23.4	22.0	0.5	18.6	11.6	14.7	4.5	1.9	1.6	1.4	3.8
1996	22.9	21.5	1.0	18.2	11.4	13.6	3.9	0.2	1.3	2.1	3.9
1997	22.9	20.9	1.6	17.7	11.1	13.9	1.9	-0.6	0.0	3.6	4.2
1998	23.0	21.1	1.2	18.0	11.4	15.1	2.0	-2.3	-1.4	6.4	3.5
1999	22.6	21.6	0.2	18.5	11.8	18.4	2.2	0.2	0.5	6.2	4.0

	Financing of private non-financial sectors ¹⁾²⁾									Net financial investment ³⁾	Financial investment as a % of gross investment ⁴⁾	Net incurrence of liabilities as a % of financing ⁵⁾
	Gross saving	Households	Net incurrence of liabilities	Securities other than shares	Long-term securities	Shares	Loans	Long-term loans				
									12				13	14	15	16	17	18	19
1992	21.4	13.1	10.6	0.7	0.6	1.4	7.0	4.9	3.4	42.6	33.1	
1993	22.0	13.5	8.2	1.3	1.4	1.6	3.9	4.8	5.6	43.7	27.2	
1994	21.8	12.5	10.1	1.0	1.2	1.8	3.9	4.0	4.3	44.7	31.7	
1995	23.2	12.9	7.8	-1.9	-1.8	1.5	5.1	3.8	6.9	44.1	25.2	
1996	22.6	12.6	9.2	0.2	0.0	1.8	6.0	5.1	4.4	42.8	28.9	
1997	21.3	11.8	9.8	0.1	0.1	1.4	6.1	4.9	4.1	44.0	31.5	
1998	20.5	10.9	12.1	0.3	0.2	2.6	7.2	5.7	3.0	45.6	37.1	
1999	19.2	10.3	15.6	0.7	0.4	2.5	9.3	7.4	2.8	49.9	44.8	

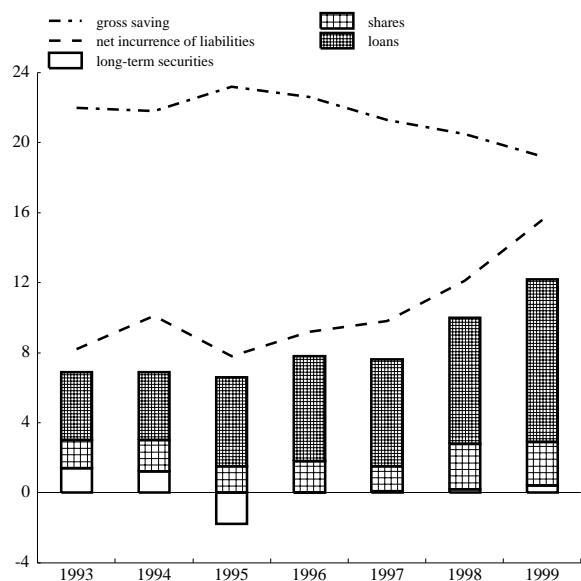
Investment and financing of private non-financial sectors ¹⁾²⁾

(as a percentage of GDP)

Investment



Financing



Source: ECB.

1) Selected items of investment and financing.

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

3) Column 6 - column 14.

4) Column 6 ÷ (column 4 + column 6).

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

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

Table 7.1

Revenue, expenditure and deficit / surplus ¹⁾

(as a percentage of GDP)

1. Euro area – revenue

	Total	Current revenue	Direct taxes			Indirect taxes	Received by EU institutions	Social contributions			Sales	Capital revenue	Capital taxes	Memo: fiscal burden ²⁾
			Households	Corporations				Employers	Employees					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	46.3	46.0	11.8	9.5	2.2	13.0	0.9	16.7	8.5	5.1	2.3	0.3	0.2	41.7
1992	47.4	46.7	11.9	9.8	2.0	13.0	0.9	17.1	8.6	5.2	2.4	0.7	0.6	42.5
1993	48.0	47.5	12.1	10.0	2.1	13.2	0.8	17.4	8.6	5.3	2.5	0.5	0.3	43.0
1994	47.5	47.1	11.6	9.5	2.0	13.5	0.8	17.5	8.5	5.4	2.5	0.4	0.2	42.7
1995	47.2	46.6	11.6	9.5	2.0	13.3	0.9	17.3	8.4	5.4	2.5	0.5	0.3	42.6
1996	48.0	47.5	12.0	9.6	2.3	13.4	0.8	17.6	8.7	5.4	2.5	0.5	0.3	43.3
1997	48.2	47.6	12.2	9.6	2.6	13.6	0.7	17.6	8.7	5.3	2.5	0.7	0.4	43.7
1998	47.7	47.2	12.4	9.9	2.5	14.1	0.7	16.5	8.5	4.8	2.5	0.5	0.3	43.3
1999	48.3	47.7	12.8	10.1	2.7	14.4	0.6	16.4	8.5	4.8	2.4	0.6	0.3	43.9
2000	47.9	47.4	13.0	10.1	2.7	14.2	0.6	16.3	8.5	4.7	2.4	0.5	0.3	43.7

2. Euro area – expenditure

	Total	Current expenditure								Capital expenditure	Investment	Capital transfers	Paid by EU institutions	Memo: primary expenditure ⁴⁾
		Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments ³⁾	Subsidies	Paid by EU institutions					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	51.0	46.2	11.2	4.9	5.3	24.8	21.0	2.4	0.6	4.9	3.2	1.6	0.0	45.8
1992	52.2	47.5	11.4	5.0	5.7	25.5	21.9	2.3	0.5	4.7	3.2	1.5	0.0	46.5
1993	53.7	49.1	11.6	5.2	5.9	26.5	22.8	2.4	0.6	4.6	3.1	1.6	0.1	47.8
1994	52.6	48.2	11.3	5.0	5.5	26.5	22.9	2.3	0.5	4.3	2.9	1.5	0.1	47.1
1995	52.2	47.7	11.2	4.8	5.7	26.1	22.8	2.2	0.6	4.5	2.7	1.8	0.1	46.5
1996	52.2	48.3	11.2	4.8	5.7	26.6	23.2	2.2	0.6	4.0	2.6	1.4	0.0	46.6
1997	50.8	47.1	11.0	4.7	5.1	26.2	23.1	2.1	0.5	3.7	2.4	1.3	0.1	45.7
1998	49.8	46.0	10.7	4.6	4.7	25.9	22.6	2.0	0.5	3.9	2.4	1.5	0.1	45.2
1999	49.5	45.4	10.7	4.7	4.2	25.8	22.6	2.0	0.5	4.1	2.5	1.6	0.1	45.3
2000	48.6	44.7	10.5	4.7	4.0	25.5	22.2	1.9	0.5	3.9	2.5	1.4	0.1	43.5

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

	Deficit (-) / surplus (+)					Primary deficit (-) / surplus (+)	Government consumption ⁵⁾							
	Total	Central government	State government	Local government	Social security funds		Total	Compensation of employees	Intermediate consumption	Transfers in kind via market producers	Consumption of fixed capital	Sales (minus)	Government collective consumption	Government individual consumption
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	-4.7	-4.6	-0.3	-0.1	0.3	0.6	20.3	11.2	4.9	4.7	1.8	-2.3	.	.
1992	-4.8	-4.2	-0.3	-0.2	0.0	0.8	20.8	11.4	5.0	4.9	1.8	-2.4	8.8	12.0
1993	-5.7	-4.9	-0.5	-0.2	-0.1	0.2	21.2	11.6	5.2	5.0	1.8	-2.5	8.9	12.2
1994	-5.0	-4.3	-0.5	-0.2	0.0	0.5	20.8	11.3	5.0	5.0	1.8	-2.5	8.6	12.1
1995	-5.0	-4.2	-0.5	-0.1	-0.3	0.7	20.5	11.2	4.8	5.1	1.8	-2.5	8.5	12.0
1996	-4.3	-3.6	-0.4	-0.1	-0.2	1.4	20.6	11.2	4.8	5.2	1.8	-2.5	8.5	12.1
1997	-2.6	-2.2	-0.4	0.1	0.0	2.5	20.3	11.0	4.7	5.1	1.8	-2.5	8.4	12.0
1998	-2.1	-2.1	-0.3	0.2	0.1	2.5	20.0	10.7	4.6	5.1	1.7	-2.5	8.1	11.8
1999	-1.2	-1.6	-0.1	0.1	0.4	3.0	20.0	10.7	4.7	5.1	1.7	-2.4	8.1	11.8
2000	-0.7	-1.2	-0.1	0.2	0.5	3.3	19.8	10.5	4.7	5.1	1.7	-2.4	8.0	11.8

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

	BE 1	DE 2	GR 3	ES 4	FR 5	IE 6	IT 7	LU 8	NL 9	AT 10	PT 11	FI 12
1997	-1.9	-2.7	-4.6	-3.2	-3.0	0.7	-2.7	3.6	-1.1	-1.7	-2.7	-1.5
1998	-0.9	-2.1	-3.2	-2.6	-2.7	2.1	-2.8	3.2	-0.7	-2.3	-2.2	1.3
1999	-0.7	-1.4	-1.8	-1.2	-1.6	2.1	-1.8	4.7	1.0	-2.1	-2.0	1.8
2000	0.0	1.3	-0.9	-0.3	-1.3	4.5	-0.3	5.3	2.0	-1.1	-1.4	6.7

Sources: ECB for euro area aggregated data; European Commission for data relating to countries' deficit / surplus (including proceeds from sales of UMTS licences).

- 1) Revenue, expenditure and deficit / surplus based on the ESA 95, but the figures exclude proceeds from sales of UMTS licences in 2000 (the euro area deficit / surplus including those proceeds is equal to 0.4). Data before 1995 are partially estimated. Transactions between countries and EU institutions are included and consolidated. Transactions among governments are not consolidated.
- 2) The fiscal burden comprises taxes and social contributions.
- 3) Comprises social benefits, social transfers in kind via market producers and transfers to non-profit institutions serving households.
- 4) Comprises total expenditure minus interest expenditure.
- 5) Corresponds to final consumption expenditure (P.3) of the general government in the ESA 95.

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

	Total	Financial instrument				Holder				
		Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ²⁾				Other creditors ³⁾
						Total	MFI	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1991	57.4	2.6	16.0	9.6	29.1	48.1	24.6	7.0	16.4	9.3
1992	60.9	2.6	16.7	10.1	31.5	50.2	26.4	7.3	16.5	10.7
1993	67.2	2.7	17.6	9.9	37.0	52.5	27.6	8.4	16.4	14.7
1994	70.0	2.9	16.7	10.3	40.0	56.1	29.8	9.7	16.6	13.8
1995	74.2	2.9	18.2	9.8	43.1	58.6	30.5	10.9	17.1	15.6
1996	75.4	2.9	17.8	9.9	44.8	59.2	30.3	13.2	15.8	16.2
1997	74.8	2.9	17.0	8.9	46.1	57.1	29.1	14.4	13.7	17.7
1998	73.0	2.8	15.8	7.9	46.6	53.5	27.0	16.2	10.4	19.6
1999	72.0	2.9	14.8	6.8	47.4	50.1	25.3	15.0	9.8	21.9
2000	69.6	2.7	13.7	6.2	46.9	46.6	23.5	13.6	9.5	23.0

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

	Total	Issued by ⁴⁾				Original maturity			Residual maturity			Currency		
		Central government	State government	Local government	Social security funds	Up to 1 year	Over 1 year	Variable interest rate	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currency ⁵⁾	Non-domestic currency	Other currencies
1991	57.4	46.3	4.5	6.3	0.3	11.8	45.6	4.8	17.6	18.5	21.3	56.2	1.7	1.1
1992	60.9	49.4	4.7	6.3	0.4	12.2	48.7	6.3	17.8	21.1	22.0	59.6	2.1	1.3
1993	67.2	54.9	5.2	6.6	0.6	11.9	55.3	6.7	18.5	24.4	24.3	65.5	2.7	1.7
1994	70.0	57.5	5.4	6.4	0.7	11.2	58.8	7.4	16.6	26.6	26.8	68.0	2.7	2.0
1995	74.2	61.3	5.7	6.3	0.8	10.6	63.5	6.9	17.6	26.2	30.3	72.1	2.7	2.0
1996	75.4	62.6	6.1	6.2	0.5	10.2	65.2	6.3	19.2	25.3	30.9	73.3	2.5	2.0
1997	74.8	62.0	6.3	5.9	0.6	8.8	66.0	6.0	18.6	25.2	31.0	72.7	2.5	2.1
1998	73.0	60.7	6.3	5.7	0.4	7.7	65.4	5.5	16.3	25.9	30.8	71.2	2.8	1.8
1999	72.0	59.8	6.2	5.6	0.3	6.9	65.1	5.0	14.4	26.7	30.8	70.1	-	1.8
2000	69.6	57.8	6.1	5.3	0.3	5.5	64.1	4.5	.	.	.	67.8	-	1.8

3. Euro area countries – government debt

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1997	125.3	60.9	108.3	66.7	59.3	65.1	120.1	6.0	70.0	64.7	59.1	54.1
1998	119.8	60.7	105.5	64.7	59.7	55.0	116.2	6.4	66.8	63.9	55.3	48.8
1999	116.4	61.1	104.6	63.4	58.7	50.1	114.5	6.0	63.2	64.7	55.0	46.9
2000	110.9	60.2	103.9	60.6	58.0	39.1	110.2	5.3	56.3	62.8	53.8	44.0

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

1) Data are partially estimated. General government gross consolidated debt at nominal value at the end of the year. Holdings by other governments are not consolidated.

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

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

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

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

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

	Total	Source of change				Financial instrument				Holder			
		Borrowing requirement ²⁾	Valuation effects ³⁾	Other changes in volume ⁴⁾	Aggregation effect ⁵⁾	Coins and deposits	Loans	Short-term securities	Long-term securities	Domestic creditors ⁶⁾	MFLs	Other financial corporations	Other creditors ⁷⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1991	5.2	5.1	0.0	0.2	-0.1	0.2	1.2	0.0	3.9	.	.	.	.
1992	6.8	5.6	0.3	0.7	0.1	0.1	1.6	1.0	4.0	4.9	3.1	0.7	1.9
1993	8.0	7.5	0.3	0.1	0.1	0.2	1.3	0.1	6.4	3.7	2.0	1.3	4.4
1994	6.1	5.2	0.2	0.7	0.0	0.4	0.0	0.9	4.8	6.3	3.6	1.7	-0.2
1995	7.7	5.5	0.2	2.2	-0.2	0.2	2.3	0.0	5.2	5.3	2.2	1.7	2.5
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.2	0.4	3.2	2.7	0.8	2.6	1.1
1997	2.3	2.4	0.2	-0.2	0.0	0.0	-0.1	-0.6	3.0	0.2	-0.1	1.8	2.1
1998	1.6	1.9	-0.2	0.0	0.0	0.1	-0.4	-0.6	2.6	-1.1	-0.8	2.4	2.7
1999	1.6	1.3	0.3	0.0	0.0	0.2	-0.4	-0.8	2.6	-1.4	-0.6	-0.6	3.0
2000	0.8	0.8	0.1	0.0	0.0	-0.1	-0.4	-0.3	1.6	-1.2	-0.7	-0.7	2.1

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) ⁸⁾	Deficit-debt adjustment ⁹⁾											
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	Other ¹¹⁾
				Total	Currency and deposits	Securities ¹⁰⁾	Loans	Shares and other equity	Privatisations	Equity injections				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1991	5.2	-4.7	0.5	1.0	0.3	0.1	0.4	0.2	-0.1	0.2	0.0	0.1	0.2	-0.8
1992	6.8	-4.8	1.9	0.8	0.2	0.1	0.3	0.1	-0.1	0.2	0.3	0.3	0.7	0.1
1993	8.0	-5.7	2.4	1.4	1.0	0.2	0.4	-0.2	-0.3	0.2	0.3	0.3	0.1	0.6
1994	6.1	-5.0	1.1	0.2	0.0	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	0.0
1995	7.7	-5.0	2.7	0.6	0.0	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.4	-0.1	-0.1	0.0	0.0	0.0	-0.3	0.2	-0.2	-0.1	0.1	-0.3
1997	2.3	-2.6	-0.2	-0.5	0.1	-0.1	-0.1	-0.4	-0.8	0.3	0.2	0.2	-0.2	0.2
1998	1.6	-2.1	-0.5	-0.6	0.2	0.0	-0.2	-0.5	-0.9	0.2	-0.2	0.0	0.0	0.3
1999	1.6	-1.2	0.4	0.2	0.5	0.1	0.1	-0.5	-0.8	0.2	0.3	0.2	0.0	-0.1
2000	0.8	0.4	1.2	1.0	0.7	0.2	0.1	-0.1	-0.4	0.2	0.1	0.0	0.0	0.2

Source: ECB.

1) Data are partially estimated. Annual change in gross nominal consolidated debt expressed as a percentage of GDP [$debt(t) - debt(t-1) \div GDP(t)$].

2) The borrowing requirement is by definition equal to transactions in government debt.

3) Includes, in addition to the impact of foreign exchange movements, effects arising from measurement at nominal value (e.g. premia or discounts on securities issued).

4) Comprises, in particular, the impact of the reclassification of units and certain types of debt assumption.

5) The difference between the changes in the aggregated debt, resulting from the aggregation of countries' debt, and the aggregation of countries' change in debt, due to variations in the exchange rates used for aggregation before 1999.

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

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

8) Including proceeds from sales of UMTS licences.

9) The difference between the annual change in gross nominal consolidated debt and the deficit as a percentage of GDP.

10) Excluding financial derivatives.

11) Comprises mainly transactions in other assets and liabilities (trade credit, other receivables/payables and financial derivatives).

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

Table 8.1

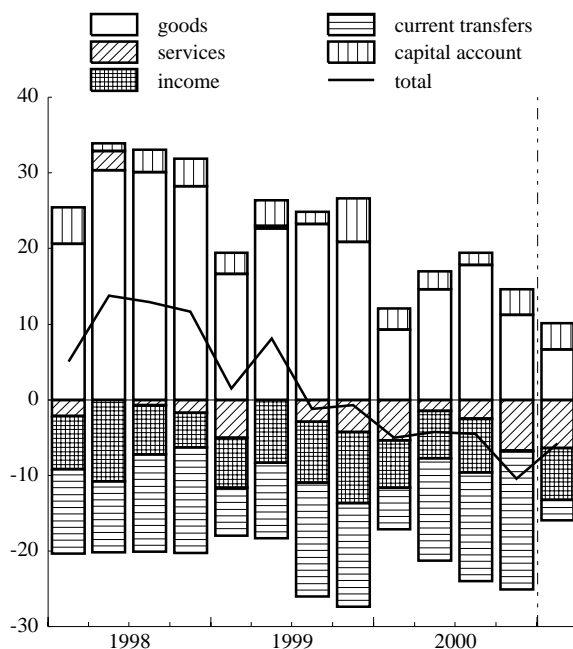
Summary balance of payments ^{1) 2)}

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

	Current account					Capital account	Financial account						Errors and omissions
	Total	Goods	Services	Income	Current transfers		Total	Direct investment	Portfolio investment	Financial derivatives	Other investment	Reserve assets	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1997	61.5	115.7	3.1	-15.2	-42.2	13.0	.	-44.5	-24.3	.	.	.	.
1998	31.1	109.3	-2.0	-28.8	-47.4	12.4	-61.2	-83.2	-99.7	-7.5	120.9	8.2	17.8
1999	-5.8	83.4	-11.8	-32.4	-45.0	13.5	19.1	-120.6	-41.7	8.1	163.1	10.2	-26.8
2000	-34.4	53.0	-15.9	-19.7	-51.8	10.2	1.3	-21.5	-136.4	-2.0	143.5	17.5	22.9
2000 Q1	-7.9	9.3	-5.3	-6.3	-5.5	2.8	47.8	148.0	-192.6	2.5	91.3	-1.4	-42.7
Q2	-6.6	14.7	-1.4	-6.3	-13.5	2.4	-2.9	-18.2	51.9	4.8	-45.3	3.8	7.2
Q3	-6.1	17.9	-2.5	-7.1	-14.4	1.6	-14.0	-94.3	3.5	0.4	71.9	4.5	18.5
Q4	-13.8	11.2	-6.7	-0.1	-18.3	3.4	-29.5	-57.0	0.9	-9.7	25.6	10.7	40.0
2000 Feb.	0.0	4.2	-2.1	-1.0	-1.2	0.1	-1.9	146.0	-152.9	1.9	2.8	0.3	1.8
Mar.	1.2	5.6	-1.1	-0.3	-3.0	1.3	30.5	1.1	-34.4	1.4	61.8	0.5	-32.9
Apr.	-5.9	4.3	-1.3	-3.8	-5.1	1.5	2.7	1.1	-5.9	2.1	5.1	0.2	1.6
May	-0.1	4.4	-0.3	-1.0	-3.1	0.6	10.5	-8.7	1.9	0.3	15.7	1.3	-11.0
June	-0.6	5.9	0.2	-1.5	-5.3	0.2	-16.2	-10.6	55.8	2.3	-66.1	2.3	16.5
July	-2.2	8.1	0.0	-4.6	-5.8	0.5	-12.0	-24.6	-12.9	-0.4	26.3	-0.4	13.8
Aug.	-3.9	4.1	-0.6	-1.6	-5.8	0.2	0.6	-41.1	13.6	-0.9	27.8	1.2	3.1
Sep.	0.1	5.7	-1.9	-0.9	-2.9	0.9	-2.5	-28.6	2.8	1.8	17.8	3.7	1.6
Oct.	-2.2	6.0	-1.8	0.1	-6.5	0.2	-9.9	-16.4	-4.4	-2.3	12.4	0.7	11.8
Nov.	-2.9	3.9	-1.0	-0.1	-5.7	1.5	-11.6	-10.0	-3.9	-3.2	-2.1	7.7	13.0
Dec.	-8.8	1.4	-3.9	-0.1	-6.1	1.7	-8.1	-30.7	9.2	-4.2	15.3	2.3	15.2
						<i>Euro area enlargement</i>							
2001 Q1	-9.2	6.7	-6.3	-6.9	-2.7	3.5	18.0	-47.5	-38.5	-2.2	95.1	11.1	-12.2
2001 Jan.	-8.5	-1.9	-2.5	-6.7	2.5	1.4	-4.7	-4.5	-45.5	-5.1	47.9	2.4	11.9
Feb.	2.1	3.3	-1.1	0.5	-0.6	1.6	2.1	-0.8	0.9	-1.0	-3.2	6.1	-5.7
Mar.	-2.8	5.3	-2.8	-0.7	-4.6	0.5	20.6	-42.3	6.1	3.9	50.3	2.6	-18.3
Apr.	-3.3	5.3	0.3	-4.7	-4.2	2.2	11.8	0.1	-20.9	1.1	24.6	7.0	-10.7

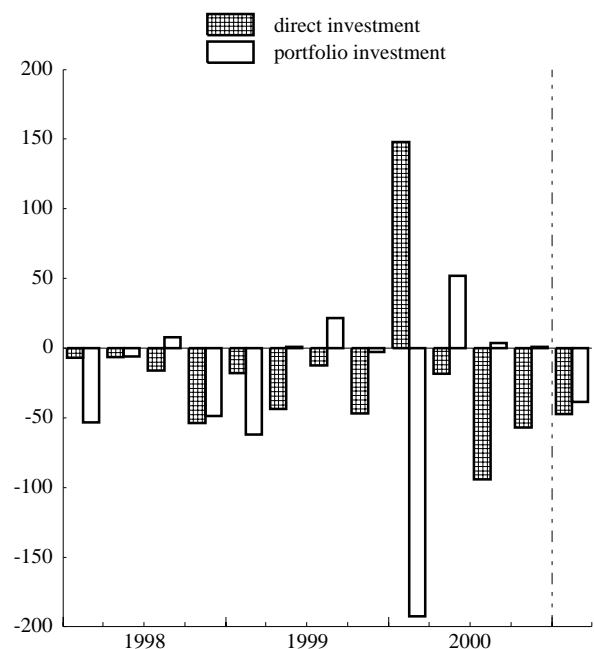
Current and capital accounts

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



Direct and portfolio investment

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



Source: ECB.

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

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

Table 8.2**Balance of payments: current and capital accounts ¹⁾***(EUR billions (ECU billions to end-1998); gross flows)*

	Current account										Capital account	
	Total		Goods		Services		Income		Current transfers		Credit 11	Debit 12
	Credit 1	Debit 2	Credit 3	Debit 4	Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10		
1997	1,212.9	1,151.4	749.1	633.4	214.2	211.0	189.5	204.7	60.1	102.3	18.9	5.9
1998	1,270.2	1,239.2	779.2	669.9	229.8	231.9	198.5	227.3	62.7	110.0	17.7	5.3
1999	1,335.6	1,341.4	814.5	731.1	241.5	253.3	213.2	245.6	66.4	111.5	19.7	6.2
2000	1,573.9	1,608.4	978.1	925.1	269.4	285.4	259.9	279.6	66.5	118.3	19.1	8.9
2000 Q1	359.5	367.4	221.2	211.9	58.5	63.8	54.7	61.0	25.2	30.7	4.3	1.4
Q2	387.7	394.3	239.0	224.3	66.8	68.3	66.9	73.2	14.9	28.4	4.7	2.4
Q3	391.5	397.6	244.6	226.7	70.7	73.2	64.2	71.3	11.9	26.4	4.3	2.7
Q4	435.2	449.1	273.4	262.1	73.4	80.1	74.0	74.1	14.5	32.8	5.8	2.3
2000 Feb.	115.8	115.8	72.9	68.7	18.6	20.7	17.4	18.4	6.8	8.0	0.5	0.4
Mar.	131.8	130.6	83.8	78.2	21.7	22.8	20.9	21.1	5.5	8.5	1.8	0.5
Apr.	116.1	121.9	72.2	67.9	20.4	21.7	18.9	22.7	4.5	9.6	2.1	0.5
May	137.7	137.8	84.8	80.4	23.0	23.3	23.9	24.9	6.1	9.2	1.7	1.1
June	133.9	134.5	82.0	76.1	23.5	23.2	24.2	25.6	4.3	9.6	1.0	0.8
July	131.6	133.8	82.4	74.4	24.3	24.3	20.9	25.5	3.9	9.7	1.1	0.6
Aug.	123.8	127.8	77.0	73.0	23.8	24.4	19.4	21.0	3.6	9.4	1.5	1.3
Sep.	136.1	136.0	85.2	79.4	22.6	24.5	23.9	24.8	4.4	7.3	1.7	0.8
Oct.	145.0	147.2	93.2	87.2	24.7	26.6	23.5	23.4	3.6	10.0	0.8	0.6
Nov.	144.8	147.7	93.3	89.4	23.7	24.7	23.0	23.1	4.8	10.5	2.1	0.6
Dec.	145.4	154.2	86.9	85.6	24.9	28.8	27.5	27.6	6.1	12.2	2.8	1.1
	<i>Euro area enlargement</i>											
2001 Q1	413.9	423.2	252.6	245.9	63.7	70.1	69.5	76.4	28.1	30.8	4.9	1.4
2001 Jan.	138.2	146.8	79.4	81.3	21.2	23.7	22.5	29.2	15.0	12.6	1.9	0.5
Feb.	133.0	130.9	81.5	78.3	20.9	22.0	23.0	22.5	7.5	8.1	2.0	0.4
Mar.	142.8	145.5	91.6	86.3	21.6	24.4	24.0	24.7	5.6	10.1	1.0	0.5
Apr.	138.1	141.4	84.0	78.7	24.3	24.0	24.2	28.9	5.6	9.8	2.6	0.4

Source: ECB.

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

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

	Total		Compensation of employees		Investment income							
	Credit 1	Debit 2	Credit 3	Debit 4	Total		Direct investment		Portfolio investment		Other investment	
					Credit 5	Debit 6	Credit 7	Debit 8	Credit 9	Debit 10	Credit 11	Debit 12
1999	213.2	245.6	12.4	5.0	200.8	240.6	44.1	45.4	64.1	105.9	92.6	89.4
2000	259.9	279.6	12.6	5.2	247.2	274.4	65.8	57.5	67.4	103.1	114.0	113.7
1999 Q4	52.5	61.9	3.3	1.4	49.1	60.5	11.7	13.0	15.1	23.8	22.4	23.7
2000 Q1	54.7	61.0	3.1	1.1	51.5	59.9	13.3	13.5	13.5	21.7	24.8	24.7
Q2	66.9	73.2	3.0	1.4	64.0	71.9	19.2	13.8	17.2	30.8	27.6	27.3
Q3	64.2	71.3	3.1	1.4	61.1	69.9	15.4	15.1	17.7	26.6	28.1	28.3
Q4	74.0	74.1	3.4	1.3	70.6	72.7	18.0	15.2	19.1	24.1	33.5	33.4

	Income on direct investment				Income on portfolio investment							
	Equity		Debt		Equity		Debt instruments					
	Credit 13	Debit 14	Credit 15	Debit 16	Credit 17	Debit 18	Total		Bonds and notes		Money market instruments	
							Credit 19	Debit 20	Credit 21	Debit 22	Credit 23	Debit 24
1999	37.7	41.5	6.4	3.8	9.6	32.5	54.5	73.4	51.7	71.7	2.9	1.7
2000	56.0	50.2	9.8	7.4	11.6	37.7	55.9	65.4	.	.	.	.
1999 Q4	9.7	11.9	2.0	1.1	2.3	5.9	12.8	17.9	12.1	17.9	0.7	0.0
2000 Q1	11.0	12.0	2.3	1.5	1.9	5.8	11.6	15.9	.	.	.	.
Q2	16.9	12.2	2.3	1.6	3.5	17.2	13.7	13.5	.	.	.	.
Q3	13.2	13.1	2.2	2.0	3.1	7.9	14.6	18.7	.	.	.	.
Q4	14.9	12.9	3.0	2.3	3.1	6.8	16.0	17.3	.	.	.	.

Source: ECB.

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

	Abroad			In the euro area			
	Total 1	Equity capital and reinvested earnings 2	Other capital, mostly intercompany loans 3	Total 4	Equity capital and reinvested earnings 5	Other capital, mostly intercompany loans 6	
1997	-93.1	.	.	48.6	.	.	
1998	-175.0	.	.	91.8	.	.	
1999	-286.8	-212.2	-74.6	166.2	126.8	39.5	
2000	-335.8	-266.8	-69.0	314.3	192.6	121.7	
2000 Q1	-63.3	-33.2	-30.1	211.3	191.3	20.0	
Q2	-71.9	-44.8	-27.1	53.7	19.3	34.5	
Q3	-117.9	-111.7	-6.2	23.7	15.5	8.2	
Q4	-82.7	-77.2	-5.5	25.6	-33.3	59.0	
2000 Feb.	-20.1	-13.6	-6.5	166.1	159.1	7.1	
Mar.	-36.2	-13.1	-23.1	37.3	24.8	12.6	
Apr.	-16.0	-7.4	-8.6	17.1	5.1	12.0	
May	-33.8	-15.2	-18.6	25.1	11.4	13.7	
June	-22.1	-22.2	0.2	11.5	2.7	8.8	
July	-19.8	-27.9	8.1	-4.7	5.4	-10.2	
Aug.	-54.0	-56.1	2.1	13.0	3.6	9.3	
Sep.	-44.1	-27.7	-16.4	15.4	6.4	9.1	
Oct.	-33.0	-31.9	-1.2	16.7	10.1	6.6	
Nov.	-30.3	-26.1	-4.3	20.3	8.2	12.1	
Dec.	-19.3	-19.3	0.0	-11.4	-51.7	40.3	
		<i>Euro area enlargement</i>					
2001 Q1	-59.6	-28.0	-31.6	12.1	26.7	-14.5	
2001 Jan.	-13.0	-9.0	-4.0	8.5	6.2	2.3	
Feb.	-17.1	-7.7	-9.5	16.4	13.9	2.5	
Mar.	-29.5	-11.3	-18.1	-12.8	6.6	-19.4	
Apr.	-6.6	-10.3	3.8	6.7	2.5	4.2	

Source: ECB.

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

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

	Total		Equity		Debt instruments							
	Assets	Liabilities	Assets	Liabilities	Assets			Liabilities				
					Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments		
	1	2	3	4	5	6	7	8	9	10		
1998	-327.6	227.9	-105.5	105.9	-222.1	-203.8	-18.2	122.0	108.3	13.7		
1999	-309.6	267.8	-155.4	106.0	-154.1	-153.6	-0.5	161.8	109.0	52.8		
2000	-403.9	267.5	-285.1	4.9	-118.8	-111.6	-7.2	262.7	227.8	34.9		
2000 Q1	-153.9	-38.8	-116.9	-105.7	-37.0	-38.6	1.6	67.0	46.8	20.2		
Q2	-85.2	137.0	-54.3	52.4	-30.9	-24.6	-6.3	84.6	50.7	33.9		
Q3	-91.8	95.3	-56.1	29.7	-35.7	-30.8	-4.9	65.6	73.6	-8.1		
Q4	-73.1	74.0	-57.8	28.5	-15.3	-17.6	2.3	45.5	56.6	-11.1		
2000 Feb.	-87.2	-65.7	-68.7	-92.5	-18.6	-15.7	-2.8	26.9	12.8	14.1		
Mar.	-43.2	8.7	-26.5	-20.4	-16.7	-14.1	-2.6	29.1	22.2	6.9		
Apr.	-28.0	22.2	-17.5	-2.9	-10.5	-9.1	-1.4	25.1	13.0	12.1		
May	-28.1	29.9	-18.6	8.4	-9.5	-6.1	-3.4	21.5	18.4	3.1		
June	-29.1	84.9	-18.2	47.0	-10.9	-9.4	-1.5	38.0	19.3	18.7		
July	-36.9	24.0	-26.2	5.7	-10.7	-8.3	-2.4	18.3	25.3	-7.0		
Aug.	-23.9	37.5	-20.4	18.2	-3.5	-1.5	-2.0	19.4	18.0	1.4		
Sep.	-30.9	33.7	-9.5	5.8	-21.5	-21.0	-0.4	27.9	30.4	-2.5		
Oct.	-17.9	13.5	-9.2	-2.4	-8.7	-10.9	2.2	15.9	23.1	-7.2		
Nov.	-28.7	24.8	-16.0	6.0	-12.8	-11.7	-1.1	18.8	23.9	-5.1		
Dec.	-26.5	35.7	-32.7	24.9	6.2	5.0	1.2	10.8	9.6	1.2		
				<i>Euro area enlargement</i>								
2001 Q1	-78.4	39.9	-23.1	16.6	-55.3	-38.8	-16.5	23.3	24.3	-1.0		
2001 Jan.	-34.3	-11.2	-17.8	-2.1	-16.5	-6.6	-10.0	-9.1	-9.6	0.5		
Feb.	-29.3	30.2	-11.0	13.5	-18.3	-16.7	-1.6	16.8	17.3	-0.5		
Mar.	-14.8	20.8	5.7	5.2	-20.5	-15.5	-4.9	15.6	16.7	-1.1		
Apr.	-8.1	-12.8	-11.3	8.5	3.2	-3.4	6.6	-21.3	-11.3	-10.1		

2. Assets by instrument and sector of holder

	Equity				Debt instruments							
	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Bonds and notes				Money market instruments			
					Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors	Euro-system	General government	MFIs (excl. the Euro-system)	Other sectors
1	2	3	4	5	6	7	8	9	10	11	12	
1999	0.1	-2.1	-1.7	-151.8	0.1	-1.7	-15.2	-136.8	0.9	-0.1	-7.5	6.2
2000	-0.1	-2.4	-4.6	-278.0	-1.9	-1.2	-45.9	-62.6	2.1	-0.3	3.3	-12.3
1999 Q4	0.0	-0.9	-1.0	-53.5	-0.4	-0.3	-4.3	-10.4	-0.4	0.1	-4.7	-10.6
2000 Q1	0.0	-0.7	1.7	-117.9	-1.2	-0.1	-15.5	-21.7	1.2	0.1	3.2	-2.8
Q2	0.0	-0.7	1.5	-55.1	0.6	-0.7	-7.7	-16.8	0.0	0.0	1.3	-7.5
Q3	-0.1	-0.4	-2.8	-52.8	-2.3	-0.4	-19.4	-8.8	0.5	-1.3	-1.0	-3.1
Q4	0.0	-0.6	-5.0	-52.2	0.9	0.0	-3.2	-15.3	0.6	0.9	-0.2	1.1

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

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

	Total		Eurosysteem		General government		MFIs (excluding the Eurosysteem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-82.3	203.2	-0.7	3.5	-1.0	-7.6	-22.6	192.5	-37.6	40.5	15.0	152.0	-58.0	14.9
1999	-20.9	184.0	0.0	4.6	2.8	-12.5	18.2	159.6	-46.4	54.4	64.6	105.2	-41.9	32.3
2000	-184.9	328.4	0.0	-1.8	-4.0	2.5	-128.6	276.3	-47.3	46.6	-81.3	229.7	-52.3	51.4
2000 Q1	-78.9	170.2	0.0	-5.1	-6.0	-2.7	-30.0	163.1	-11.2	20.0	-18.8	143.1	-42.8	14.9
Q2	-29.3	-16.0	0.0	3.1	1.0	-0.3	-21.1	-20.7	-4.9	7.6	-16.2	-28.3	-9.3	2.0
Q3	-29.2	101.1	0.0	-1.7	-4.0	1.4	-14.3	72.3	-9.6	8.9	-4.7	63.4	-11.0	29.0
Q4	-47.5	73.1	0.0	2.0	5.0	4.1	-63.3	61.6	-21.7	10.0	-41.6	51.5	10.7	5.5
2000 Feb.	-30.1	33.0	0.0	-1.8	-2.7	-0.3	-17.4	26.4	-4.9	7.7	-12.5	18.7	-10.0	8.6
Mar.	-27.6	89.4	0.0	-3.5	-0.4	-1.4	-10.0	93.3	-2.3	6.1	-7.7	87.2	-17.2	1.0
Apr.	-34.9	40.1	0.0	3.1	0.4	-0.5	-30.8	37.1	-5.4	5.7	-25.5	31.4	-4.5	0.4
May	-14.0	29.7	0.0	-2.4	0.5	0.6	-9.1	27.8	-0.5	-0.8	-8.5	28.7	-5.4	3.6
June	19.6	-85.7	0.0	2.3	0.2	-0.4	18.8	-85.7	1.0	2.6	17.8	-88.3	0.6	-2.0
July	5.4	20.9	0.0	-1.6	3.5	1.2	9.3	16.6	-7.0	7.6	16.3	8.9	-7.4	4.7
Aug.	-26.2	54.0	0.0	-1.8	-1.5	1.0	-19.3	24.8	-0.7	-1.1	-18.6	25.9	-5.3	30.0
Sep.	-8.5	26.2	0.0	1.7	-6.0	-0.7	-4.2	31.0	-1.9	2.4	-2.3	28.6	1.7	-5.7
Oct.	-8.5	20.9	0.0	0.3	8.2	1.6	-16.5	18.5	-3.1	6.4	-13.4	12.1	-0.1	0.5
Nov.	-49.4	47.2	0.0	0.7	-3.2	0.9	-48.5	49.1	-6.5	7.5	-42.0	41.6	2.4	-3.5
Dec.	10.3	5.0	0.0	1.0	0.1	1.6	1.8	-6.0	-12.1	-3.8	13.8	-2.2	8.5	8.4
<i>Euro area enlargement</i>														
2001 Q1	-145.0	240.1	1.2	-2.1	2.9	-8.8	-136.9	255.1	-10.0	2.6	-126.9	252.4	-12.1	-4.1
2001 Jan.	-50.4	98.3	0.6	1.4	3.7	-6.1	-53.7	103.1	-4.2	-1.1	-49.5	104.2	-1.0	-0.1
Feb.	-6.9	3.7	0.4	-2.1	0.3	-4.2	-0.8	9.8	-3.5	4.7	2.7	5.1	-6.7	0.2
Mar.	-87.8	138.1	0.2	-1.4	-1.1	1.5	-82.5	142.2	-2.3	-0.9	-80.1	143.1	-4.4	-4.2
Apr.	9.1	15.5	-0.3	-1.6	-0.5	-1.0	14.3	17.4	-1.0	4.5	15.4	12.9	-4.5	0.7

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

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999	0.0	5.5	5.5	0.0	-0.9	-0.9
2000	0.0	-1.8	-1.8	0.0	0.0	0.0
1999 Q4	0.0	2.4	2.4	0.0	0.0	0.0
2000 Q1	0.0	-5.1	-5.1	0.0	0.0	0.0
Q2	0.0	3.0	3.0	0.0	0.0	0.0
Q3	0.0	-1.8	-1.8	0.0	0.0	0.0
Q4	0.0	2.0	2.0	0.0	0.0	0.0

Source: ECB.

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

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

2.2. General government

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 7	Liabilities 8	Balance 9	Assets 10	Liabilities 11	Balance 12	Assets 13	Liabilities 14	Balance 15
1999	0.0	0.0	0.0	3.9	-12.6	-8.7	-1.2	0.2	-1.0
2000	0.0	0.0	0.1	-3.7	-1.8	-5.4	-0.3	4.3	3.9
1999 Q4	0.0	0.0	0.0	0.0	-3.9	-3.9	0.4	0.0	0.4
2000 Q1	0.0	0.0	0.0	-5.9	-2.3	-8.2	-0.1	-0.4	-0.5
Q2	0.0	0.0	0.0	1.2	-0.5	0.7	-0.2	0.2	0.0
Q3	0.0	0.0	0.0	-4.0	0.6	-3.4	0.0	0.8	0.8
Q4	0.1	0.0	0.1	5.0	0.4	5.5	-0.1	3.7	3.6

2.3. MFIs (excluding the Eurosystem)

	Loans/currency and deposits			Other assets/liabilities		
	Assets 16	Liabilities 17	Balance 18	Assets 19	Liabilities 20	Balance 21
1999	17.7	158.9	176.6	0.5	0.7	1.2
2000	-123.9	267.7	143.7	-4.7	8.6	4.0
1999 Q4	0.5	37.5	37.9	-0.7	1.5	0.8
2000 Q1	-27.7	163.0	135.3	-2.2	0.1	-2.1
Q2	-22.3	-21.5	-43.8	1.2	0.8	2.0
Q3	-12.8	72.2	59.4	-1.4	0.1	-1.3
Q4	-61.1	53.9	-7.2	-2.2	7.7	5.5

2.4. Other sectors

	Trade credits			Loans/currency and deposits			Other assets/liabilities		
	Assets 22	Liabilities 23	Balance 24	Assets 25	Liabilities 26	Balance 27	Assets 28	Liabilities 29	Balance 30
1999	-6.4	3.4	-3.0	-13.2	17.5	4.3	-22.4	11.4	-11.0
2000	-13.6	6.5	-7.1	-34.5	53.5	19.0	-4.2	-8.6	-12.8
1999 Q4	-1.3	2.1	0.8	16.6	0.2	16.8	-4.0	1.7	-2.3
2000 Q1	-4.3	2.9	-1.4	-38.1	18.4	-19.8	-0.4	-6.4	-6.8
Q2	-3.9	0.3	-3.6	-5.3	2.8	-2.5	-0.1	-1.0	-1.1
Q3	-2.1	2.1	0.0	-8.0	27.1	19.1	-0.9	-0.2	-1.1
Q4	-3.3	1.2	-2.1	16.9	5.2	22.1	-2.9	-1.0	-3.8

3. Reserve assets ¹⁾

	Total 1	Monetary gold 2	Special drawing rights 3	Reserve position in the IMF 4	Foreign exchange							Other claims 12
					Total 5	Currency and deposits		Securities			Financial derivatives 11	
						With monetary authorities and the BIS 6	With banks 7	Equity 8	Bonds and notes 9	Money market instruments 10		
1999	10.2	0.3	1.0	2.0	7.1	2.3	-1.0	0.2	3.6	2.1	-0.1	0.0
2000	17.5	1.0	0.3	2.9	12.8	4.0	4.2	0.0	-5.7	10.4	-0.2	0.5
1999 Q4	-0.5	0.3	-0.7	0.2	-0.3	1.0	3.0	0.0	-1.9	-2.3	-0.1	-0.1
2000 Q1	-1.4	0.7	0.2	0.2	-2.8	2.3	-4.5	0.0	2.6	-3.1	0.0	0.2
Q2	3.8	0.0	-0.1	3.3	0.7	-0.9	0.2	0.0	-3.7	5.3	-0.2	-0.1
Q3	4.5	0.3	-0.1	0.0	4.3	1.5	4.8	0.0	-5.4	3.5	-0.1	0.0
Q4	10.7	0.0	0.3	-0.6	10.5	1.1	3.8	0.0	0.9	4.7	0.0	0.5

Source: ECB.

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

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

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

Source: ECB.

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

2. Reserves and related assets of the Eurosystem and of the European Central Bank 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 denom- inated in foreign currency	
						Total	Currency and deposits		Securities			Financial deriva- tives			
							With monetary authorities and the BIS	With banks	Total	Equities	Bonds and notes				Money market instru- ments
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Eurosystem ²⁾															
1998 Dec. ³⁾	329.2	99.6	404.131	5.2	23.2	199.9	12.6	18.3	169.0	0.0	116.6	52.4	0.0	1.3	7.6
1999 Dec.	372.3	116.4	402.762	4.5	24.3	225.1	12.8	21.7	190.5	0.0	134.0	56.5	0.0	2.1	14.4
2000 Jan. ⁴⁾	378.0	116.2	401.639	4.3	24.4	230.9	14.4	28.0	188.4	-	-	-	0.2	2.3	14.7
Feb. ⁴⁾	383.2	121.1	400.503	4.4	23.9	231.4	12.0	25.8	193.4	-	-	-	0.2	2.4	16.1
Mar.	385.3	116.0	400.503	4.4	24.8	238.8	12.7	25.9	200.1	-	-	-	0.2	1.3	17.0
Apr.	399.7	121.3	400.503	4.3	22.7	249.6	18.2	28.3	202.9	-	-	-	0.2	1.9	18.1
May	388.8	117.2	400.503	4.5	21.1	244.4	16.2	28.8	199.2	-	-	-	0.2	1.6	19.1
June	385.8	120.8	400.503	4.5	20.5	238.3	14.3	24.4	199.4	-	-	-	0.1	1.8	18.3
July ⁴⁾	391.3	119.6	399.539	4.5	20.9	244.4	10.5	27.1	206.6	-	-	-	0.2	1.9	17.5
Aug.	402.6	124.3	399.539	4.8	20.9	251.5	10.9	25.2	215.3	-	-	-	0.2	1.2	17.3
Sep.	408.0	124.7	399.539	4.9	21.3	255.9	11.2	24.3	220.1	-	-	-	0.3	1.2	16.6
Oct. ⁴⁾	416.2	125.6	399.538	4.7	21.5	263.1	10.3	24.3	228.2	-	-	-	0.3	1.4	16.3
Nov. ⁴⁾	400.1	123.8	399.537	4.8	20.8	249.8	9.0	22.6	217.8	-	-	-	0.3	0.9	16.7
Dec.	377.7	117.8	399.537	4.3	20.8	234.1	9.7	19.5	204.4	-	-	-	0.5	0.6	15.8
Euro area enlargement															
2001 1 Jan.	390.9	119.2	404.119	4.4	21.2	245.5	16.8	19.8	208.4	-	-	-	0.5	0.7	16.3
2001 Jan.	386.0	115.0	404.119	4.5	22.3	243.4	11.8	19.9	211.2	-	-	-	0.5	0.8	18.0
Feb.	384.3	116.5	404.119	4.8	21.3	241.0	10.4	21.7	208.4	-	-	-	0.5	0.6	18.3
Mar. ⁴⁾	393.4	117.6	403.153	4.9	21.4	247.5	9.8	27.3	210.0	-	-	-	0.5	2.0	18.6
Apr.	386.7	119.5	403.153	4.9	21.1	240.7	11.5	23.7	205.1	-	-	-	0.4	0.6	20.5
May	408.9	127.2	403.153	5.6	22.3	252.0	10.6	25.7	215.5	-	-	-	0.2	1.8	20.0
European Central Bank ⁵⁾															
1999 Dec.	49.3	7.0	24.030	0.0	0.0	40.9	0.3	6.4	34.3	0.0	28.0	6.3	0.0	1.4	2.6
2000 Jan.	49.9	7.0	24.030	0.0	0.0	41.2	0.4	7.2	33.6	-	-	-	0.0	1.7	3.2
Feb.	48.0	7.3	24.030	0.0	0.0	39.0	0.4	6.1	32.5	-	-	-	0.0	1.7	4.2
Mar.	49.7	7.0	24.030	0.0	0.0	41.9	0.4	7.4	34.1	-	-	-	0.0	0.9	4.3
Apr.	52.7	7.3	24.030	0.0	0.0	44.1	1.1	7.9	35.1	-	-	-	0.0	1.4	4.3
May	50.0	7.0	24.030	0.0	0.0	42.0	1.7	6.0	34.2	-	-	-	0.0	1.0	4.5
June	50.5	7.2	24.030	0.0	0.0	42.1	0.9	6.3	34.9	-	-	-	0.0	1.2	3.7
July	51.0	7.2	24.030	0.0	0.0	42.8	0.5	5.5	36.8	-	-	-	0.0	1.0	4.1
Aug.	55.0	7.5	24.030	0.0	0.0	46.4	0.6	7.5	38.3	-	-	-	0.0	1.2	4.1
Sep.	52.4	7.5	24.030	0.0	0.0	43.7	0.7	6.1	36.9	-	-	-	0.0	1.2	3.7
Oct.	53.8	7.6	24.030	0.0	0.0	44.9	0.7	6.4	37.7	-	-	-	0.0	1.4	4.0
Nov.	47.2	7.4	24.030	0.0	0.0	38.8	0.7	5.0	33.1	-	-	-	0.0	0.9	3.0
Dec.	45.1	7.1	24.030	0.0	0.0	37.3	0.6	6.1	30.6	-	-	-	0.0	0.6	3.8
Euro area enlargement															
2001 Jan.	45.9	7.0	24.656	0.0	0.0	38.2	0.7	2.6	34.9	-	-	-	0.0	0.7	3.5
Feb.	46.7	7.1	24.656	0.0	0.0	38.9	0.6	3.9	34.4	-	-	-	0.0	0.6	3.0
Mar.	46.7	7.2	24.656	0.0	0.0	37.5	0.7	5.2	31.6	-	-	-	0.0	2.0	3.9
Apr.	45.3	7.3	24.656	0.0	0.0	37.5	0.8	5.2	31.5	-	-	-	0.0	0.5	3.6
May	50.1	7.8	24.656	0.0	0.0	40.5	0.8	5.2	34.5	-	-	-	0.0	1.8	2.7

Source: ECB.

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

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

3) Position as at 1 January 1999.

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

5) Part of the Eurosystem's reserves.

9 External trade in goods of the euro area

Table 9

1. Exports ¹⁾

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

	Total	Food, drink, tobacco	Raw materials	Energy	Chemicals	Other manufactured articles	Machinery, transport equipment	Other	Export trade indices ²⁾ 1995 = 100		
									Value ³⁾	Volume ³⁾	Unit value
	1	2	3	4	5	6	7	8	9	10	11
1997	762.8	57.0	16.5	14.4	99.6	217.6	343.8	13.8	122.5	115.9	105.7
1998	797.1	56.2	15.8	12.6	104.4	222.1	371.3	14.7	128.1	120.1	106.6
1999	831.8	55.7	16.4	13.6	114.1	225.9	384.9	21.1	133.6	122.6	109.0
2000	1,005.7	61.4	19.5	23.3	136.2	267.0	469.2	29.2	161.6	136.9	118.0
1998 Q1	194.8	13.9	4.2	3.4	26.7	54.9	88.1	3.7	125.2	116.1	107.8
Q2	204.6	14.6	3.9	3.3	26.9	56.6	95.5	3.7	131.5	123.1	106.8
Q3	196.0	13.4	3.9	3.0	25.8	55.4	90.9	3.6	125.9	118.2	106.5
Q4	201.7	14.2	3.8	2.9	25.0	55.2	96.8	3.7	129.6	123.0	105.4
1999 Q1	187.8	12.4	3.8	2.6	25.9	51.5	86.9	4.7	120.7	112.6	107.2
Q2	203.2	13.5	4.0	3.1	27.9	55.1	94.4	5.2	130.6	119.9	108.9
Q3	209.5	14.0	4.1	3.9	29.6	56.9	95.4	5.7	134.6	123.0	109.5
Q4	231.3	15.8	4.5	4.1	30.7	62.4	108.3	5.5	148.6	135.0	110.1
2000 Q1	229.9	13.8	4.7	5.1	32.0	62.1	105.2	7.0	147.7	129.2	114.4
Q2	247.5	15.1	5.0	5.4	33.2	64.9	116.6	7.3	159.0	136.7	116.3
Q3	250.2	15.2	4.7	6.1	34.9	66.9	115.2	7.2	160.8	134.6	119.5
Q4	278.1	17.4	5.0	6.8	36.1	73.0	132.2	7.7	178.7	147.6	121.1
1998 Jan.	58.8	4.3	1.3	1.2	8.5	16.4	26.1	1.2	113.4	105.3	107.7
Feb.	63.8	4.6	1.4	1.0	8.6	18.2	28.9	1.2	123.0	114.1	107.8
Mar.	72.2	5.0	1.5	1.2	9.6	20.3	33.1	1.3	139.2	128.8	108.0
Apr.	68.2	4.9	1.3	1.1	9.2	19.0	31.3	1.3	131.4	123.0	106.9
May	65.9	4.8	1.3	1.1	8.7	18.2	30.7	1.2	127.0	118.8	106.9
June	70.5	4.9	1.3	1.1	9.1	19.3	33.5	1.2	136.0	127.4	106.7
July	73.0	4.8	1.3	1.1	9.3	21.2	34.2	1.2	140.8	131.7	106.9
Aug.	56.6	4.2	1.2	1.0	7.7	15.6	25.8	1.1	109.1	103.1	105.9
Sep.	66.3	4.5	1.3	0.9	8.8	18.6	30.9	1.3	127.9	120.0	106.6
Oct.	69.1	4.8	1.3	1.0	8.7	19.6	32.5	1.2	133.2	125.9	105.8
Nov.	67.2	4.8	1.3	1.0	8.1	18.2	32.6	1.3	129.6	123.6	104.8
Dec.	65.4	4.6	1.2	0.9	8.2	17.4	31.7	1.2	126.0	119.5	105.5
1999 Jan.	54.3	3.7	1.1	0.8	7.8	14.8	25.0	1.1	104.8	98.1	106.8
Feb.	60.2	4.0	1.2	0.8	8.3	16.6	27.5	1.7	116.1	108.6	106.9
Mar.	73.2	4.7	1.5	1.0	9.8	20.1	34.4	1.8	141.2	130.9	107.9
Apr.	65.9	4.4	1.3	1.0	9.2	17.8	30.7	1.5	127.0	116.6	108.9
May	63.7	4.5	1.3	1.0	9.0	17.4	29.0	1.7	122.8	113.2	108.5
June	73.6	4.7	1.3	1.1	9.8	19.9	34.7	2.0	141.9	129.8	109.3
July	76.2	4.6	1.4	1.2	10.3	20.9	35.6	2.2	146.8	132.8	110.6
Aug.	61.1	4.3	1.3	1.2	9.2	16.1	27.4	1.7	117.7	107.0	110.0
Sep.	72.3	5.1	1.4	1.5	10.1	19.8	32.4	1.9	139.4	129.0	108.0
Oct.	77.5	5.3	1.5	1.4	10.2	21.0	36.3	1.9	149.5	136.0	109.9
Nov.	77.6	5.4	1.5	1.2	10.7	21.0	36.0	1.7	149.6	137.3	108.9
Dec.	76.2	5.1	1.6	1.5	9.8	20.4	36.0	1.8	146.9	131.8	111.4
2000 Jan.	66.1	4.1	1.4	1.5	9.3	17.6	30.0	2.2	127.4	112.1	113.6
Feb.	75.4	4.5	1.6	1.7	10.6	20.8	33.9	2.2	145.3	126.3	115.0
Mar.	88.5	5.2	1.8	1.8	12.1	23.7	41.3	2.6	170.5	149.0	114.5
Apr.	73.4	4.5	1.6	1.6	10.0	19.5	34.1	2.1	141.5	122.0	116.0
May	89.2	5.5	1.8	1.9	11.8	23.2	42.3	2.6	171.9	147.7	116.4
June	84.9	5.1	1.6	1.8	11.4	22.3	40.1	2.6	163.7	140.3	116.7
July	84.9	4.9	1.5	2.0	11.4	23.3	39.5	2.4	163.7	137.5	119.0
Aug.	78.0	5.0	1.6	2.0	11.3	20.6	35.3	2.4	150.4	126.5	118.9
Sep.	87.3	5.3	1.7	2.2	12.3	23.0	40.4	2.4	168.3	139.6	120.6
Oct.	96.4	6.0	1.8	2.4	13.0	25.6	45.1	2.7	185.9	153.5	121.1
Nov.	95.4	6.1	1.7	2.3	12.5	25.1	45.2	2.6	183.9	152.4	120.7
Dec.	86.3	5.3	1.6	2.1	10.6	22.3	41.9	2.4	166.3	136.9	121.5
<i>Euro area enlargement</i>											
2001 Q1	257.9	14.3	4.8	5.3	35.4	67.0	123.3	7.8	167.8	137.0	122.5
2001 Jan.	80.7	4.6	1.5	2.0	11.3	20.6	38.4	2.4	157.6	129.3	121.9
Feb.	83.3	4.6	1.5	1.6	11.5	21.8	39.5	2.8	162.6	133.6	121.7
Mar.	93.8	5.2	1.8	1.8	12.6	24.5	45.4	2.6	183.1	147.9	123.8
Apr.	80.4	.	.	.	.	.	.	.	157.0	.	.

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

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

2) For 2001, unit value indices, which are also used for the estimation of volumes, refer to the euro area excluding Greece.

3) ECB calculations based on Eurostat data.

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

	Total 1	Food, drink, tobacco 2	Raw materials 3	Energy 4	Chemicals 5	Other manu- factured articles 6	Machinery, transport equipment 7	Other 8	Import trade indices ³⁾ 1995 = 100		
									Value ³⁾ 9	Volume ³⁾ 10	Unit value 11
1997	674.2	55.5	41.5	81.3	62.5	189.3	230.0	14.0	119.8	110.3	108.6
1998	711.4	55.1	41.3	58.5	68.0	202.1	270.2	16.1	126.4	123.1	102.7
1999	780.7	52.5	39.4	77.8	71.4	211.4	307.8	20.4	138.7	130.5	106.3
2000	998.0	55.2	48.1	143.6	84.8	253.7	378.5	34.0	177.3	136.8	129.6
1998 Q1	180.1	13.7	10.9	16.4	17.7	51.7	65.4	4.3	128.0	119.3	107.3
Q2	179.2	13.7	11.1	15.1	17.3	50.4	67.3	4.3	127.4	121.7	104.7
Q3	171.0	13.4	9.7	13.8	16.4	50.7	63.4	3.6	121.6	119.4	101.8
Q4	181.0	14.3	9.6	13.2	16.5	49.3	74.2	3.9	128.7	132.1	97.4
1999 Q1	179.2	12.4	9.3	13.8	17.0	50.4	71.7	4.7	127.4	128.8	98.9
Q2	189.5	12.9	10.2	16.8	17.7	50.8	76.1	5.0	134.7	129.8	103.8
Q3	193.9	12.9	9.5	21.3	17.3	54.3	73.6	5.1	137.9	126.0	109.4
Q4	218.0	14.3	10.5	26.0	19.4	55.8	86.4	5.6	154.9	137.7	112.5
2000 Q1	231.9	12.7	11.3	31.6	20.1	60.7	87.8	7.7	164.8	136.1	121.1
Q2	243.6	14.0	12.4	32.1	21.3	62.3	93.5	8.0	173.2	137.3	126.1
Q3	245.5	13.3	11.8	37.6	21.1	64.5	89.2	8.1	174.5	132.9	131.3
Q4	277.0	15.1	12.6	42.4	22.4	66.3	108.0	10.2	196.9	141.2	139.4
1998 Jan.	57.9	4.5	3.5	5.7	5.6	16.7	20.4	1.4	123.4	114.7	107.6
Feb.	57.9	4.3	3.5	5.4	5.6	16.7	20.8	1.6	123.4	114.4	107.9
Mar.	64.3	4.9	3.8	5.3	6.5	18.3	24.2	1.3	137.2	128.7	106.6
Apr.	60.1	4.7	3.7	5.2	5.8	16.8	22.6	1.3	128.2	121.5	105.5
May	56.9	4.4	3.5	5.2	5.6	15.8	21.2	1.2	121.4	115.8	104.9
June	62.2	4.6	3.9	4.7	6.0	17.8	23.4	1.8	132.6	127.9	103.7
July	59.2	4.7	3.6	4.7	6.0	17.8	21.2	1.3	126.3	123.5	102.2
Aug.	50.1	4.1	2.8	4.4	4.7	15.0	18.1	1.0	106.8	105.6	101.1
Sep.	61.8	4.6	3.3	4.7	5.8	17.9	24.1	1.4	131.7	129.3	101.9
Oct.	62.5	4.8	3.3	4.7	5.8	17.4	25.1	1.4	133.3	133.9	99.5
Nov.	59.8	4.6	3.2	4.2	5.4	16.2	24.9	1.3	127.6	132.1	96.6
Dec.	58.7	5.0	3.1	4.3	5.3	15.7	24.2	1.2	125.1	130.4	96.0
1999 Jan.	55.0	3.9	3.0	4.6	5.2	15.5	21.5	1.4	117.4	119.5	98.2
Feb.	56.4	3.9	2.9	4.2	5.4	16.2	22.2	1.6	120.3	122.1	98.5
Mar.	67.8	4.7	3.3	5.0	6.4	18.7	28.0	1.7	144.6	144.7	99.9
Apr.	61.6	4.2	3.3	5.6	5.8	16.0	25.0	1.7	131.4	128.3	102.4
May	62.4	4.3	3.3	5.7	5.8	16.5	25.2	1.6	133.1	127.2	104.6
June	65.5	4.4	3.5	5.4	6.2	18.2	26.0	1.7	139.7	133.5	104.6
July	64.5	4.4	3.4	6.7	5.7	18.4	24.3	1.6	137.4	127.3	108.0
Aug.	58.5	4.1	2.7	7.0	5.2	16.3	21.8	1.6	124.8	113.5	110.0
Sep.	70.9	4.4	3.5	7.6	6.4	19.6	27.6	1.9	151.3	137.3	110.2
Oct.	70.6	4.5	3.4	7.9	6.5	18.9	27.4	2.1	150.5	135.2	111.3
Nov.	74.4	4.8	3.6	8.5	6.8	18.8	30.0	1.9	158.6	143.1	110.8
Dec.	73.0	4.9	3.5	9.6	6.2	18.1	29.1	1.7	155.7	134.9	115.4
2000 Jan.	71.3	4.1	3.5	10.4	5.8	18.5	26.6	2.5	152.1	128.1	118.7
Feb.	75.7	4.0	3.6	10.2	6.8	20.2	28.4	2.5	161.4	133.4	121.0
Mar.	84.9	4.6	4.2	11.0	7.5	22.0	32.8	2.7	181.0	146.9	123.2
Apr.	73.2	4.2	3.7	9.6	6.5	18.4	28.4	2.4	156.1	127.3	122.7
May	88.1	5.1	4.7	11.3	7.5	22.8	34.0	2.9	187.9	148.1	126.9
June	82.3	4.6	4.1	11.3	7.3	21.1	31.1	2.7	175.4	136.6	128.4
July	79.3	4.5	4.0	11.9	6.7	21.0	28.4	2.9	169.2	131.9	128.3
Aug.	78.7	4.4	3.6	12.5	6.8	20.6	28.5	2.4	167.8	128.4	130.7
Sep.	87.5	4.5	4.2	13.2	7.6	22.9	32.3	2.8	186.6	138.5	134.7
Oct.	94.4	5.2	4.3	14.0	7.8	23.2	36.5	3.4	201.3	144.2	139.6
Nov.	95.8	5.1	4.4	14.7	7.9	22.9	37.0	3.8	204.3	146.2	139.7
Dec.	86.8	4.8	3.9	13.7	6.7	20.2	34.5	3.0	185.0	133.3	138.8
<i>Euro area enlargement</i>											
2001 Q1	260.5	13.5	12.2	35.0	23.2	66.8	99.8	9.9	184.0	138.7	132.6
2001 Jan.	87.0	4.5	4.2	12.4	7.6	22.6	32.6	3.2	184.4	139.4	132.3
Feb.	82.8	4.2	3.8	11.0	7.5	21.2	31.3	3.7	175.5	131.8	133.1
Mar.	90.6	4.8	4.2	11.6	8.1	23.0	35.9	2.9	192.0	145.0	132.4
Apr.	83.4	.	.	.	.	.	.	.	176.7	.	.

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

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

2) For 2001, unit value indices, which are also used for the estimation of volumes, refer to the euro area excluding Greece.

3) 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
1997	88.6	1.5	-25.1	-66.8	37.1	28.3	113.8	-0.1
1998	85.7	1.0	-25.5	-45.9	36.4	20.0	101.1	-1.4
1999	51.1	3.2	-23.0	-64.1	42.7	14.5	77.1	0.7
2000	7.8	6.3	-28.6	-120.3	51.4	13.2	90.6	-4.8
1998 Q1	14.7	0.2	-6.7	-13.0	9.0	3.3	22.7	-0.7
Q2	25.4	0.9	-7.2	-11.7	9.6	6.1	28.3	-0.6
Q3	24.9	0.1	-5.8	-10.8	9.3	4.6	27.5	0.0
Q4	20.7	-0.1	-5.8	-10.3	8.5	5.9	22.6	-0.1
1999 Q1	8.5	0.0	-5.5	-11.2	8.8	1.2	15.2	0.0
Q2	13.7	0.6	-6.2	-13.7	10.2	4.3	18.2	0.2
Q3	15.6	1.1	-5.4	-17.4	12.4	2.5	21.7	0.7
Q4	13.3	1.5	-5.9	-21.9	11.3	6.5	21.9	-0.1
2000 Q1	-2.0	1.1	-6.5	-26.5	11.9	1.4	17.4	-0.7
Q2	3.9	1.1	-7.4	-26.8	11.9	2.6	23.1	-0.7
Q3	4.7	1.9	-7.1	-31.4	13.9	2.4	26.0	-0.9
Q4	1.1	2.2	-7.6	-35.6	13.7	6.7	24.2	-2.5
1998 Jan.	0.9	-0.2	-2.3	-4.6	2.8	-0.2	5.6	-0.2
Feb.	5.9	0.3	-2.2	-4.3	3.1	1.4	8.1	-0.4
Mar.	7.9	0.1	-2.3	-4.1	3.1	2.1	9.0	0.0
Apr.	8.1	0.1	-2.4	-4.0	3.4	2.3	8.7	0.0
May	9.0	0.4	-2.3	-4.1	3.1	2.4	9.5	-0.1
June	8.3	0.3	-2.6	-3.5	3.1	1.5	10.1	-0.5
July	13.8	0.1	-2.2	-3.6	3.3	3.3	13.0	0.0
Aug.	6.5	0.1	-1.6	-3.5	3.0	0.6	7.7	0.1
Sep.	4.6	-0.1	-2.0	-3.8	3.0	0.7	6.8	-0.1
Oct.	6.6	0.0	-2.0	-3.7	2.8	2.2	7.4	-0.2
Nov.	7.4	0.2	-1.9	-3.3	2.7	2.0	7.6	0.0
Dec.	6.7	-0.3	-1.9	-3.3	2.9	1.7	7.6	0.1
1999 Jan.	-0.7	-0.1	-1.9	-3.8	2.6	-0.7	3.5	-0.3
Feb.	3.8	0.1	-1.7	-3.3	2.9	0.5	5.3	0.1
Mar.	5.4	0.0	-1.9	-4.0	3.4	1.4	6.4	0.1
Apr.	4.2	0.2	-2.0	-4.6	3.4	1.8	5.7	-0.2
May	1.3	0.2	-2.1	-4.8	3.2	0.9	3.8	0.1
June	8.1	0.2	-2.2	-4.3	3.6	1.6	8.8	0.3
July	11.7	0.2	-2.0	-5.5	4.6	2.5	11.3	0.5
Aug.	2.5	0.2	-1.4	-5.8	4.0	-0.2	5.6	0.1
Sep.	1.3	0.6	-2.1	-6.1	3.7	0.2	4.9	0.0
Oct.	7.0	0.8	-1.9	-6.5	3.7	2.1	8.9	-0.1
Nov.	3.2	0.6	-2.1	-7.3	4.0	2.1	6.1	-0.2
Dec.	3.2	0.2	-1.9	-8.1	3.6	2.3	7.0	0.2
2000 Jan.	-5.2	0.0	-2.2	-8.8	3.5	-0.9	3.5	-0.3
Feb.	-0.3	0.4	-2.0	-8.5	3.9	0.7	5.5	-0.3
Mar.	3.6	0.6	-2.3	-9.2	4.6	1.7	8.4	-0.1
Apr.	0.2	0.2	-2.1	-7.9	3.5	1.1	5.7	-0.3
May	1.1	0.4	-2.8	-9.4	4.3	0.4	8.4	-0.2
June	2.7	0.5	-2.5	-9.5	4.1	1.1	9.0	-0.1
July	5.5	0.4	-2.5	-9.9	4.7	2.3	11.1	-0.6
Aug.	-0.7	0.6	-2.0	-10.5	4.5	0.0	6.8	0.1
Sep.	-0.2	0.9	-2.5	-11.0	4.7	0.1	8.1	-0.4
Oct.	2.0	0.8	-2.5	-11.6	5.1	2.4	8.6	-0.8
Nov.	-0.4	1.0	-2.7	-12.4	4.6	2.2	8.2	-1.2
Dec.	-0.5	0.5	-2.4	-11.6	3.9	2.2	7.4	-0.5
<i>Euro area enlargement</i>								
2001 Q1	-2.6	0.8	-7.4	-29.6	12.2	0.2	23.4	-2.1
2001 Jan.	-6.3	0.1	-2.6	-10.4	3.7	-1.9	5.7	-0.8
Feb.	0.5	0.4	-2.3	-9.4	4.0	0.6	8.2	-0.9
Mar.	3.2	0.3	-2.5	-9.8	4.5	1.5	9.5	-0.4
Apr.	-3.0	.	.	.	.	.	.	.

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

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



10 Exchange rates

Table 10
Exchange rates

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

	Effective exchange rate of the euro ¹⁾						Bilateral ECU or euro exchange rates ²⁾			
	Narrow group				Broad group		US dollar	Japanese yen	Swiss franc	Pound sterling
	Nominal	Real CPI	Real PPI	Real ULCM	Nominal	Real CPI				
1	2	3	4	5	6	7	8	9	10	
1996	107.9	108.8	107.4	111.4	95.4	105.9	1.270	138.1	1.568	0.814
1997	99.1	99.4	99.2	100.5	90.4	96.6	1.134	137.1	1.644	0.692
1998	101.5	101.3	101.5	99.5	96.6	99.1	1.121	146.4	1.622	0.676
1999	95.7	95.7	95.7	96.4	96.6	95.8	1.066	121.3	1.600	0.659
2000	85.7	86.5	86.9	87.2	88.2	86.3	0.924	99.5	1.558	0.609
1999 Q1	100.0	100.0	100.0	100.0	100.0	100.0	1.122	130.7	1.599	0.687
Q2	96.1	96.0	96.0	96.9	96.5	96.0	1.057	127.7	1.600	0.658
Q3	94.6	94.7	94.5	95.1	95.5	94.6	1.049	118.7	1.602	0.655
Q4	92.2	92.2	92.2	93.8	94.2	92.6	1.038	108.4	1.600	0.636
2000 Q1	89.0	89.6	89.7	90.2	91.1	89.5	0.986	105.5	1.607	0.614
Q2	86.0	86.6	87.0	87.5	88.4	86.6	0.933	99.6	1.563	0.610
Q3	84.7	85.7	86.2	86.6	87.3	85.3	0.905	97.4	1.544	0.612
Q4	83.0	84.0	84.8	84.6	85.9	83.6	0.868	95.3	1.516	0.600
1999 Jan.	102.0	101.8	101.8	-	101.4	101.4	1.161	131.3	1.605	0.703
Feb.	99.9	99.9	99.8	-	100.0	100.0	1.121	130.8	1.598	0.689
Mar.	98.3	98.3	98.4	-	98.7	98.6	1.088	130.2	1.595	0.671
Apr.	97.1	96.9	97.0	-	97.5	97.2	1.070	128.2	1.602	0.665
May	96.6	96.5	96.4	-	96.9	96.4	1.063	129.7	1.603	0.658
June	94.7	94.7	94.7	-	95.1	94.4	1.038	125.3	1.595	0.650
July	94.8	95.2	94.9	-	95.0	94.5	1.035	123.7	1.604	0.658
Aug.	95.4	95.6	95.4	-	96.3	95.5	1.060	120.1	1.600	0.660
Sep.	93.6	93.4	93.4	-	95.2	93.8	1.050	112.4	1.602	0.647
Oct.	94.4	94.2	94.3	-	96.3	94.7	1.071	113.5	1.594	0.646
Nov.	92.0	92.0	92.1	-	94.0	92.4	1.034	108.2	1.605	0.637
Dec.	90.1	90.4	90.3	-	92.2	90.7	1.011	103.7	1.601	0.627
2000 Jan.	90.2	90.8	90.9	-	92.4	90.8	1.014	106.5	1.610	0.618
Feb.	89.2	89.8	89.9	-	91.2	89.5	0.983	107.6	1.607	0.615
Mar.	87.7	88.3	88.4	-	89.7	88.1	0.964	102.6	1.604	0.611
Apr.	86.1	86.6	87.0	-	88.4	86.7	0.947	99.9	1.574	0.598
May	84.5	85.0	85.7	-	86.9	85.1	0.906	98.1	1.556	0.602
June	87.4	88.1	88.4	-	89.9	88.1	0.949	100.7	1.561	0.629
July	86.9	87.9	88.1	-	89.4	87.5	0.940	101.4	1.551	0.623
Aug.	84.6	85.5	86.0	-	87.0	85.2	0.904	97.8	1.551	0.607
Sep.	82.8	83.6	84.6	-	85.3	83.3	0.872	93.1	1.531	0.608
Oct.	81.6	82.3	83.4	-	84.4	82.2	0.855	92.7	1.513	0.589
Nov.	82.3	83.2	84.1	-	85.1	82.8	0.856	93.3	1.522	0.600
Dec.	85.4	86.4	87.0	-	88.1	85.8	0.897	100.6	1.514	0.613
<i>Euro area enlargement</i>										
2001 Q1	88.6	90.0	90.4	88.8	91.4	88.8	0.923	109.1	1.533	0.633
Q2	86.0	87.7	87.9	86.3	89.5	86.7	0.873	106.9	1.528	0.614
2001 Jan.	89.2	90.3	90.7	-	91.7	89.0	0.938	109.6	1.529	0.635
Feb.	88.3	89.7	90.1	-	91.0	88.5	0.922	107.1	1.536	0.634
Mar.	88.4	90.0	90.3	-	91.4	88.9	0.910	110.3	1.535	0.629
Apr.	87.6	89.2	89.5	-	91.0	88.4	0.892	110.4	1.529	0.622
May	85.9	87.5	87.7	-	89.3	86.5	0.874	106.5	1.533	0.613
June	84.7	86.3	86.4	-	88.1	85.2	0.853	104.3	1.522	0.609
% ch. vs. ⁴⁾ prev. month										
2001 June	-1.5	-1.3	-1.4	-	-1.4	-1.5	-2.4	-2.1	-0.7	-0.7
% ch. vs. ⁴⁾ prev. year										
2001 June	-	-	-	-	-	-	-10.1	3.6	-2.5	-3.2

Source: ECB.

1) More details of the calculation are given in the general notes.

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

3) Indicative rates for these currencies are shown up to September 2000, as the ECB did not provide official reference rates for these currencies before that.

4) The table shows the percentage change in the latest monthly observation vis-à-vis the previous month, and vis-à-vis the same month of the previous year.

A positive change denotes an appreciation of the euro. Due to the change in the weighting scheme, effective exchange rate data as from January 2001 are not fully comparable with earlier observations.

Bilateral ECU or euro exchange rates ²⁾								
Swedish krona	Danish krone	Norwegian krone	Canadian dollar	Australian dollar	Hong Kong dollar ³⁾	Korean won ³⁾	Singapore dollar ³⁾	
11	12	13	14	15	16	17	18	
8.51	7.36	8.20	1.731	1.623	9.68	1,007.9	1.765	1996
8.65	7.48	8.02	1.569	1.528	8.75	1,069.8	1.678	1997
8.92	7.50	8.47	1.665	1.787	8.69	1,568.9	1.876	1998
8.81	7.44	8.31	1.584	1.652	8.27	1,267.3	1.806	1999
8.45	7.45	8.11	1.371	1.589	7.20	1,043.5	1.592	2000
8.98	7.44	8.60	1.696	1.770	8.69	1,342.6	1.911	1999 Q1
8.90	7.43	8.24	1.557	1.618	8.19	1,258.8	1.810	Q2
8.71	7.44	8.22	1.558	1.613	8.14	1,252.8	1.772	Q3
8.65	7.44	8.19	1.528	1.613	8.07	1,217.4	1.737	Q4
8.50	7.45	8.11	1.434	1.564	7.68	1,109.8	1.674	2000 Q1
8.28	7.46	8.20	1.381	1.585	7.27	1,042.0	1.608	Q2
8.40	7.46	8.10	1.341	1.576	7.06	1,009.5	1.569	Q3
8.60	7.45	8.04	1.325	1.632	6.77	1,011.6	1.516	Q4
9.08	7.44	8.65	1.765	1.839	8.99	1,362.4	1.950	1999 Jan.
8.91	7.44	8.65	1.679	1.751	8.68	1,330.2	1.905	Feb.
8.94	7.43	8.51	1.651	1.726	8.43	1,336.2	1.881	Mar.
8.91	7.43	8.32	1.594	1.668	8.30	1,292.2	1.834	Apr.
8.97	7.43	8.23	1.553	1.605	8.24	1,272.1	1.820	May
8.83	7.43	8.17	1.524	1.580	8.05	1,212.6	1.775	June
8.74	7.44	8.18	1.540	1.576	8.03	1,229.4	1.756	July
8.75	7.44	8.26	1.583	1.645	8.23	1,269.1	1.779	Aug.
8.63	7.43	8.23	1.552	1.619	8.15	1,260.1	1.781	Sep.
8.73	7.43	8.29	1.581	1.641	8.32	1,289.9	1.793	Oct.
8.63	7.44	8.19	1.516	1.618	8.04	1,215.9	1.727	Nov.
8.59	7.44	8.10	1.491	1.580	7.86	1,149.6	1.694	Dec.
8.60	7.44	8.12	1.469	1.542	7.89	1,145.9	1.697	2000 Jan.
8.51	7.45	8.10	1.427	1.564	7.65	1,110.8	1.674	Feb.
8.39	7.45	8.11	1.408	1.583	7.51	1,076.1	1.654	Mar.
8.27	7.45	8.15	1.389	1.588	7.38	1,051.4	1.620	Apr.
8.24	7.46	8.20	1.355	1.570	7.06	1,015.3	1.566	May
8.32	7.46	8.25	1.402	1.597	7.40	1,061.1	1.641	June
8.41	7.46	8.18	1.389	1.598	7.33	1,047.9	1.636	July
8.39	7.46	8.10	1.341	1.557	7.05	1,007.6	1.556	Aug.
8.41	7.46	8.03	1.295	1.575	6.80	973.2	1.517	Sep.
8.52	7.45	8.00	1.292	1.618	6.67	965.1	1.498	Oct.
8.63	7.46	8.00	1.320	1.639	6.68	990.6	1.497	Nov.
8.66	7.46	8.13	1.368	1.642	7.00	1,089.6	1.558	Dec.
<i>Euro area enlargement</i>								
9.00	7.46	8.20	1.410	1.741	7.20	1,174.7	1.616	2001 Q1
9.13	7.46	8.01	1.345	1.701	6.81	1,138.9	1.583	Q2
8.91	7.46	8.24	1.410	1.689	7.32	1,194.9	1.630	2001 Jan.
8.98	7.46	8.21	1.403	1.724	7.19	1,153.8	1.607	Feb.
9.13	7.46	8.16	1.417	1.807	7.09	1,173.4	1.611	Mar.
9.11	7.46	8.11	1.390	1.785	6.96	1,183.5	1.617	Apr.
9.06	7.46	7.99	1.347	1.681	6.82	1,133.7	1.586	May
9.21	7.45	7.94	1.302	1.647	6.65	1,104.1	1.550	June
1.7	-0.1	-0.7	-3.4	-2.0	-2.4	-2.6	-2.3	% ch. vs. ⁴⁾ prev. month 2001 June
10.7	-0.1	-3.8	-7.2	3.1	-10.1	4.1	-5.5	% ch. vs. ⁴⁾ prev. year 2001 June

II Economic and financial developments in the other EU Member States

Table 11

Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	HICP	General government deficit (-)/ surplus (+) as a % of GDP	General government gross debt as a % of GDP	Long-term government bond yield ¹⁾ as a % per annum	Exchange rate ²⁾ as national currency per ECU or euro	Current and new capital account as a % of GDP	Unit labour costs ³⁾	Real GDP	Industrial production index ⁴⁾	Standardised unemployment rate as a % of labour force (s.a.)	Broad money ⁵⁾	3-month interest rate ¹⁾ as a % per annum
	1	2	3	4	5	6	7	8	9	10	11	12
Denmark												
1997	1.9	0.3	61.2	6.25	7.48	0.6	1.9	3.0	5.3	5.6	4.7	3.73
1998	1.3	1.1	55.6	4.94	7.50	-0.9	2.3	2.8	2.2	5.2	4.6	4.27
1999	2.1	3.1	52.0	4.91	7.44	1.8	3.0	2.1	1.8	5.2	4.2	3.44
2000	2.7	2.5	46.5	5.64	7.45	2.1	1.4	3.2	6.2	4.7	1.9	5.00
2000 Q1	2.8	-	-	5.79	7.45	1.3	1.8	2.7	3.1	4.7	2.2	3.95
Q2	2.9	-	-	5.67	7.46	1.7	2.1	3.7	7.8	4.7	1.3	4.73
Q3	2.6	-	-	5.69	7.46	3.8	0.4	3.5	8.0	4.7	2.3	5.84
Q4	2.6	-	-	5.42	7.45	1.4	1.1	2.9	6.1	4.8	1.8	5.48
2001 Q1	2.3	-	-	5.03	7.46	3.6	3.4	1.0	5.3	4.7	.	5.26
Q2	.	-	-	5.25	7.46	.	.	.	.	.	.	5.06
2001 Jan.	2.3	-	-	5.09	7.46	-	-	-	3.4	4.6	.	5.34
Feb.	2.3	-	-	5.06	7.46	-	-	-	4.0	4.7	.	5.27
Mar.	2.2	-	-	4.95	7.46	-	-	-	8.2	4.6	.	5.16
Apr.	2.6	-	-	5.10	7.46	-	-	-	1.1	4.6	.	5.11
May	2.8	-	-	5.31	7.46	-	-	-	.	4.6	.	5.11
June	.	-	-	5.33	7.45	-	-	-	.	.	.	4.96
Sweden												
1997	1.8	-1.5	74.5	6.62	8.65	-	0.6	2.1	7.0	9.9	4.2	4.43
1998	1.0	1.9	71.8	4.99	8.92	3.7	0.9	3.6	3.8	8.3	3.5	4.36
1999	0.6	1.8	65.2	4.98	8.81	2.8	-0.4	4.1	2.0	7.2	6.8	3.32
2000	1.3	4.1	55.6	5.37	8.45	3.1	5.6	3.6	8.5	5.9	6.2	4.07
2000 Q1	1.2	-	-	5.79	8.50	3.6	5.7	4.2	5.9	6.5	8.7	3.99
Q2	1.2	-	-	5.30	8.28	1.9	4.5	4.1	10.2	6.1	8.9	4.09
Q3	1.3	-	-	5.30	8.40	2.5	5.3	3.7	9.1	5.7	5.1	4.14
Q4	1.5	-	-	5.09	8.60	4.3	6.7	2.3	8.8	5.4	2.2	4.06
2001 Q1	1.6	-	-	4.83	9.00	3.1	3.5	2.2	6.3	5.3	0.2	4.10
Q2	.	-	-	5.20	9.13	.	.	.	.	.	.	4.15
2001 Jan.	1.6	-	-	4.89	8.91	-	-	-	8.2	5.4	0.4	4.14
Feb.	1.5	-	-	4.86	8.98	-	-	-	5.6	5.2	-1.2	4.10
Mar.	1.7	-	-	4.75	9.13	-	-	-	5.5	5.2	1.4	4.06
Apr.	3.0	-	-	4.93	9.11	-	-	-	-1.4	5.0	-0.3	4.04
May	3.1	-	-	5.27	9.06	-	-	-	.	5.0	-1.4	4.09
June	.	-	-	5.38	9.21	-	-	-	.	.	.	4.32
United Kingdom												
1997	1.8	-2.0	51.1	7.13	0.692	0.9	2.9	3.5	1.3	7.0	11.2	6.92
1998	1.6	0.4	48.1	5.60	0.676	0.0	3.1	2.6	0.8	6.3	9.7	7.42
1999	1.3	1.3	45.7	5.01	0.659	-1.0	3.4	2.3	0.6	6.1	5.3	5.54
2000	0.8	1.9	42.9	5.33	0.609	-1.5	1.9	3.1	1.5	5.5	6.6	6.19
2000 Q1	0.8	6.3	43.7	5.60	0.614	-1.5	3.0	3.2	1.9	5.8	3.8	6.20
Q2	0.6	-0.4	43.7	5.31	0.610	-1.4	1.4	3.4	2.6	5.6	5.8	6.28
Q3	0.8	2.1	42.3	5.31	0.612	-1.8	1.6	3.0	0.7	5.4	8.4	6.21
Q4	0.9	-0.1	42.5	5.09	0.600	-1.4	1.7	2.6	0.9	5.3	8.5	6.07
2001 Q1	0.9	5.3	40.2	4.90	0.633	0.0	2.1	2.7	0.5	5.2	9.1	5.72
Q2	.	.	.	5.09	0.614	.	.	.	.	.	.	5.30
2001 Jan.	0.9	13.8	41.2	4.94	0.635	-	-	-	1.9	5.2	9.7	5.84
Feb.	0.8	4.1	40.4	4.95	0.634	-	-	-	0.5	5.1	9.2	5.76
Mar.	1.0	-1.9	40.2	4.82	0.629	-	-	-	-0.7	5.1	8.3	5.55
Apr.	1.1	0.6	39.8	5.03	0.622	-	-	-	-0.9	.	7.7	5.40
May	1.7	-2.0	39.9	4.95	0.613	-	-	-	.	.	.	5.25
June	.	.	.	5.30	0.609	-	-	-	.	.	.	5.26

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

1) Average-of-period values.

2) For more information, see Table 10.

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

4) Total excluding construction; adjusted for working days.

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

12 Economic and financial developments outside the EU

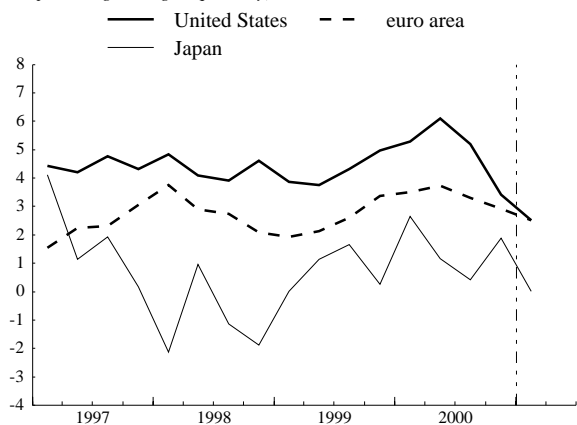
Table 12.1
Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	Consumer price index	Unit labour costs ¹⁾	Real GDP	Industrial production index ¹⁾	Unemployment rate as a % of labour force (s.a.)	M2 ²⁾	3-month interbank deposit rate ³⁾ as a % per annum	10-year government bond yield ³⁾ as a % per annum	Exchange rate ⁴⁾ as national currency per ECU or euro	Fiscal deficit (-)/surplus (+) ⁵⁾ as a % of GDP	Gross public debt ⁶⁾ as a % of GDP
	1	2	3	4	5	6	7	8	9	10	11
United States											
1997	2.3	0.0	4.4	7.6	5.0	4.9	5.76	6.45	1.134	-0.9	56.4
1998	1.6	0.7	4.4	5.5	4.5	7.3	5.57	5.33	1.121	0.3	53.4
1999	2.2	-1.7	4.2	4.8	4.2	7.6	5.42	5.64	1.066	1.0	50.3
2000	3.4	-3.8	5.0	6.0	4.0	6.1	6.53	6.03	0.924	2.2	44.5
2000 Q1	3.2	-3.7	5.3	6.3	4.0	6.1	6.11	6.48	0.986	2.0	49.3
Q2	3.3	-4.4	6.1	7.0	4.0	6.2	6.63	6.18	0.933	2.1	46.5
Q3	3.5	-5.4	5.2	6.4	4.0	6.1	6.70	5.89	0.905	2.3	45.2
Q4	3.4	-1.5	3.4	4.3	4.0	6.2	6.69	5.56	0.868	2.4	44.5
2001 Q1	3.4	1.8	2.5	0.4	4.2	7.5	5.35	5.04	0.923	2.3	44.6
Q2	.	.	.	.	.	.	4.19	5.25	0.873	.	.
2001 Jan.	3.7	.	.	1.4	4.2	6.8	5.73	5.14	0.938	.	.
Feb.	3.5	.	.	0.5	4.2	7.5	5.35	5.10	0.922	.	.
Mar.	2.9	.	.	-0.8	4.3	8.1	4.96	4.89	0.910	.	.
Apr.	3.3	.	.	-2.0	4.5	8.1	4.63	5.13	0.892	.	.
May	3.6	.	.	-3.3	4.4	8.4	4.11	5.37	0.874	.	.
June	.	.	.	.	.	.	3.83	5.26	0.853	.	.
Japan											
1997	1.7	-2.2	1.8	3.6	3.4	3.1	0.62	2.15	137.1	-2.7	.
1998	0.6	6.3	-1.1	-7.1	4.1	4.4	0.66	1.30	146.4	-10.3	.
1999	-0.3	-2.5	0.8	0.8	4.7	3.7	0.22	1.75	121.3	-10.4	.
2000	-0.6	-6.5	1.5	5.9	4.7	2.1	0.28	1.76	99.5	.	.
2000 Q1	-0.7	-7.0	2.6	6.3	4.8	2.2	0.14	1.79	105.5	.	.
Q2	-0.7	-7.3	1.2	7.1	4.7	2.3	0.12	1.72	99.6	.	.
Q3	-0.7	-6.1	0.4	5.5	4.6	1.9	0.32	1.79	97.4	.	.
Q4	-0.5	-5.3	1.9	4.9	4.8	2.1	0.56	1.73	95.3	.	.
2001 Q1	-0.1	-0.2	0.0	-1.1	4.8	2.6	0.37	1.38	109.1	.	.
Q2	.	.	.	.	.	.	0.08	1.28	106.9	.	.
2001 Jan.	0.1	-2.8	.	2.0	4.9	2.4	0.50	1.54	109.6	.	.
Feb.	-0.1	1.2	.	-2.0	4.7	2.7	0.41	1.43	107.1	.	.
Mar.	-0.4	1.5	.	-2.9	4.7	2.6	0.19	1.19	110.3	.	.
Apr.	-0.4	.	.	-4.2	4.8	2.5	0.10	1.36	110.4	.	.
May	-0.5	.	.	-3.9	4.9	2.9	0.07	1.28	106.5	.	.
June	.	.	.	.	.	.	0.07	1.19	104.3	.	.

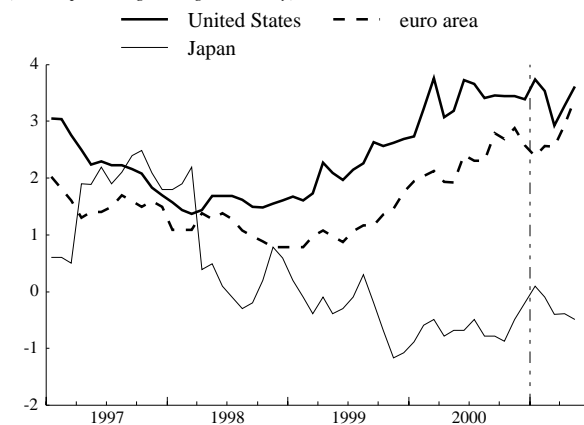
Real gross domestic product

(annual percentage changes; quarterly)



Consumer price indices

(annual percentage changes; monthly)



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

1) Manufacturing.

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

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

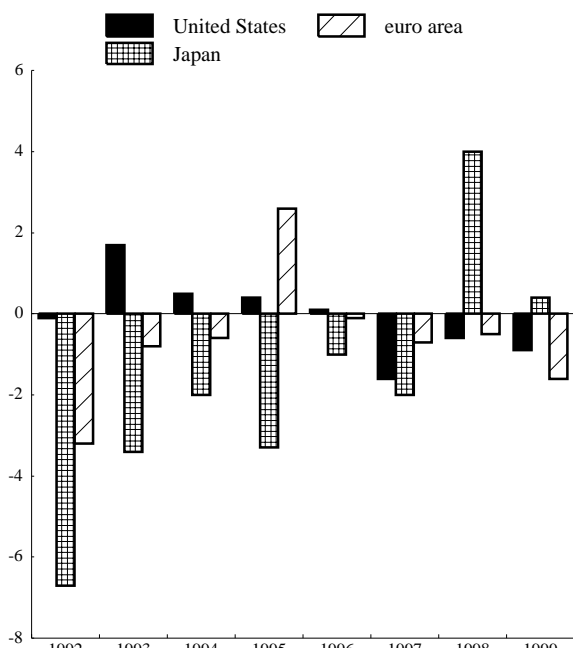
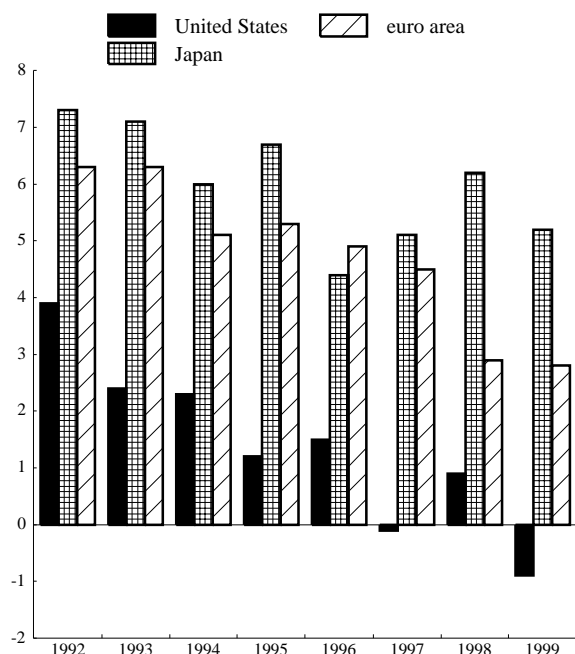
4) For more information, see Table 10.

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

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

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

	National saving and investment			Investment and financing of non-financial corporations						Investment and financing of households ¹⁾			
	Gross saving	Gross capital formation	Net lending to the rest of the world	Gross capital formation	Gross fixed capital formation	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities	Securities and shares	Capital expenditure	Net acquisition of financial assets	Gross saving	Net incurrence of liabilities
	1	2	3	4	5	6	7	8	9	10	11	12	13
United States													
1997	18.1	19.9	-1.5	9.4	8.6	1.8	8.7	3.4	1.8	11.8	4.5	12.1	4.6
1998	18.8	20.8	-2.3	9.7	8.8	6.5	8.5	7.1	1.4	12.3	6.6	12.3	5.7
1999	18.5	21.1	-3.4	10.1	9.6	6.9	8.7	7.8	3.3	12.6	5.7	11.0	6.6
2000	18.3	21.8	-4.3	10.6	10.1	6.1	8.9	7.4	2.7	12.5	2.9	9.4	5.8
1999 Q2	18.4	20.8	-3.2	10.0	9.9	6.4	8.7	7.4	0.0	12.7	5.6	11.2	6.6
Q3	18.4	21.1	-3.6	10.1	9.7	7.3	8.6	8.5	3.5	12.6	4.8	10.8	6.3
Q4	18.3	21.4	-3.9	10.4	9.6	5.9	8.7	7.0	3.8	12.6	7.1	10.5	7.1
2000 Q1	18.2	21.4	-4.0	10.3	10.0	8.7	8.8	9.8	5.6	12.8	4.2	9.8	7.6
Q2	18.5	22.0	-4.1	10.7	10.0	6.9	9.0	8.0	3.4	12.5	4.2	9.7	5.9
Q3	18.5	21.9	-4.5	10.9	10.3	5.7	9.1	7.3	1.9	12.5	2.5	9.3	5.7
Q4	18.0	21.7	-4.5	10.6	10.1	3.5	8.8	4.7	0.1	12.3	0.6	8.8	4.2
2001 Q1	17.5	20.9	-3.9	9.9	10.1	2.9	8.6	3.7	1.9	12.5	2.9	8.9	4.0
Japan													
1997	30.2	28.7	2.2	16.6	16.1	3.2	13.8	1.2	0.1	6.0	6.9	11.3	0.7
1998	29.1	26.9	2.6	15.6	15.6	-6.4	13.3	-9.1	-1.4	5.3	5.4	11.7	-0.5
1999	27.8	26.0	2.2	14.5	14.7	2.5	13.7	-2.8	1.2	5.3	6.6	11.3	-0.5
2000	.	26.0	.	.	.	1.4	.	-1.2	0.0	.	4.7	.	0.8
1999 Q2	.	24.2	.	.	.	-16.9	.	-17.1	1.7	.	14.6	.	-7.2
Q3	.	26.4	.	.	.	9.7	.	-1.3	1.3	.	4.4	.	1.3
Q4	.	26.9	.	.	.	15.3	.	19.9	3.9	.	11.6	.	-2.2
2000 Q1	.	26.3	.	.	.	7.7	.	-3.4	-3.4	.	3.9	.	9.7
Q2	.	24.8	.	.	.	-26.9	.	-19.6	0.4	.	5.2	.	-9.2
Q3	.	27.1	.	.	.	18.6	.	5.0	-0.6	.	-0.7	.	2.3
Q4	.	27.1	.	.	.	5.0	.	11.5	1.2	.	10.1	.	0.5
2001 Q1	.	27.5	.	.	.	9.6	.	2.4	-0.3	.	-2.6	.	5.1

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 and Social Research Institute.

1) Households including non-profit institutions serving households.

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

A. Main monetary and financial markets statistics

A.1 Monetary aggregates and counterparts

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

	M1		M2		M3 ²⁾		Credit ³⁾		MFI loans to residents of the euro area plus Greece excluding MFIs and general government	
	Amount 1	% change 2	Amount 3	% change 4	Amount 5	% change 6	Amount 7	% change 8	Amount 9	% change 10
1999 Jan.	1,818.0	.	4,046.4	.	4,608.2	.	7,856.9	.	5,169.0	.
Feb.	1,787.3	.	4,005.1	.	4,592.7	.	7,877.0	.	5,171.3	.
Mar.	1,809.4	.	4,023.7	.	4,610.8	.	7,952.1	.	5,219.0	.
Apr.	1,823.9	.	4,044.2	.	4,649.5	.	7,985.0	.	5,240.7	.
May	1,856.1	.	4,073.0	.	4,685.9	.	8,062.1	.	5,278.0	.
June	1,900.1	.	4,100.3	.	4,710.7	.	8,141.4	.	5,371.5	.
July	1,901.0	.	4,117.7	.	4,719.9	.	8,161.5	.	5,407.9	.
Aug.	1,865.8	.	4,084.5	.	4,701.3	.	8,164.4	.	5,402.9	.
Sep.	1,892.0	.	4,093.8	.	4,728.1	.	8,215.6	.	5,442.7	.
Oct.	1,897.4	.	4,110.5	.	4,747.8	.	8,286.6	.	5,490.4	.
Nov.	1,933.6	.	4,140.5	.	4,801.3	.	8,387.8	.	5,556.3	.
Dec.	1,988.5	.	4,239.6	.	4,893.2	.	8,410.2	.	5,589.0	.
2000 Jan.	1,997.1	9.4	4,233.6	4.2	4,900.2	5.3	8,467.4	8.1	5,633.8	8.8
Feb.	1,986.7	10.8	4,226.9	5.2	4,920.9	6.2	8,529.0	8.5	5,670.0	9.5
Mar.	1,998.1	10.1	4,236.7	4.9	4,961.3	6.5	8,627.2	8.4	5,741.4	9.9
Apr.	2,039.8	11.4	4,280.5	5.4	5,016.0	6.7	8,693.1	8.7	5,803.8	10.5
May	2,021.0	8.7	4,271.8	4.6	5,011.3	6.0	8,728.6	8.2	5,834.5	10.3
June	2,038.0	7.1	4,282.0	4.2	5,004.2	5.4	8,745.2	7.3	5,902.4	9.5
July	2,037.8	6.9	4,281.0	3.6	5,010.9	5.2	8,760.1	7.1	5,931.9	9.2
Aug.	2,002.5	7.0	4,269.5	4.1	5,011.4	5.6	8,763.2	7.1	5,951.9	9.6
Sep.	2,014.5	6.1	4,275.4	4.0	5,011.0	5.1	8,852.2	7.3	6,038.9	10.1
Oct.	2,013.7	5.7	4,282.7	3.7	5,031.1	5.1	8,892.8	6.7	6,082.9	9.9
Nov.	2,032.4	4.9	4,304.9	3.7	5,062.6	4.8	8,934.3	6.1	6,119.0	9.4
Dec.	2,098.5	5.5	4,397.2	3.7	5,138.5	5.0	8,961.9	6.5	6,154.2	9.6

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

(percentages per annum and EUR billions)

	Money market rates		Government bond yields		Euro-denominated securities issued by residents of the euro area plus Greece					
	3-month deposits 11	12-month deposits 12	2 years 13	10 years 14	Gross issues				Net issues 19	Amounts outstanding 20
					Total 15	By MFIs ⁴⁾ 16	By general government ⁴⁾ 17	By non-financial and non-monetary financial corporations ⁴⁾ 18		
1999 Jan.	3.33	3.24	3.11	3.87	348.2	47.1	39.4	13.5	64.0	5,787.2
Feb.	3.27	3.19	3.17	4.02	292.0	49.1	35.6	15.3	49.5	5,835.8
Mar.	3.21	3.19	3.19	4.22	297.2	47.8	35.4	16.8	43.7	5,880.0
Apr.	2.87	2.91	2.93	4.09	333.7	48.8	34.3	16.9	42.2	5,922.0
May	2.75	2.83	2.89	4.24	290.3	46.5	37.8	15.7	50.4	5,973.5
June	2.80	2.98	3.16	4.56	279.3	48.6	28.7	22.7	38.2	6,012.0
July	2.84	3.17	3.38	4.89	328.0	44.5	36.4	19.1	42.1	6,052.5
Aug.	2.86	3.37	3.65	5.10	239.1	50.2	32.3	17.5	35.4	6,088.4
Sep.	2.89	3.43	3.75	5.27	311.6	51.7	31.2	17.1	59.8	6,146.8
Oct.	3.53	3.81	4.16	5.51	305.1	51.6	30.2	18.2	52.6	6,200.6
Nov.	3.64	3.82	4.07	5.22	285.1	57.1	26.2	16.7	41.8	6,243.6
Dec.	3.58	3.94	4.24	5.32	236.0	66.7	20.1	13.2	-32.7	6,215.8
2000 Jan.	3.47	4.04	4.43	5.72	347.8	56.6	30.5	12.9	1.2	6,211.1
Feb.	3.65	4.18	4.59	5.68	355.0	57.7	26.4	15.9	61.5	6,271.4
Mar.	3.86	4.33	4.62	5.51	378.7	58.7	26.4	14.9	53.7	6,327.0
Apr.	4.03	4.42	4.61	5.43	345.7	54.1	26.3	19.6	38.2	6,363.2
May	4.44	4.88	5.04	5.53	384.1	59.9	22.7	17.4	52.1	6,424.1
June	4.59	5.01	5.05	5.36	335.5	57.8	21.7	20.5	32.3	6,458.1
July	4.66	5.14	5.21	5.47	376.9	56.4	21.8	21.8	37.2	6,495.5
Aug.	4.85	5.28	5.30	5.41	345.7	59.7	21.6	18.8	33.9	6,531.0
Sep.	4.91	5.24	5.24	5.48	386.9	61.4	21.3	17.3	20.1	6,552.2
Oct.	5.08	5.23	5.19	5.42	442.7	63.5	19.3	17.2	34.3	6,587.1
Nov.	5.12	5.20	5.14	5.34	378.0	59.1	20.9	20.1	21.5	6,607.9
Dec.	4.94	4.87	4.80	5.07	319.3	62.9	14.6	22.5	-39.7	6,571.7

Sources: ECB, Reuters for columns 11 and 12.

- 1) Calculated from monthly differences in levels adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions. For the calculation of growth rates, see the technical notes.
- 2) Excluding holdings of money market fund shares/units by non-residents of the euro area.
- 3) Credit comprises loans granted to non-MFIs resident in the euro area plus Greece and holdings of securities issued by non-MFIs resident in the euro area plus Greece.
- 4) As a percentage of the total.

B. Price, real economy and fiscal developments

B.1 Price developments

(annual percentage changes)

	HICP					Industrial producer prices (excluding construction)	Deflators of GDP				
	Total	Goods			Services		GDP	Private consumption	Government consumption	Gross fixed capital formation	
		Food	Non-energy industrial goods	Energy							
	1	2	3	4	5	6	7	8	9	10	11
1996	2.3	2.0	2.3	1.6	3.1	2.9	0.4	2.1	2.5	2.2	1.0
1997	1.7	1.2	1.5	0.6	2.6	2.5	1.1	1.6	2.0	1.8	1.1
1998	1.2	0.7	1.7	1.0	-2.6	2.0	-0.7	1.7	1.5	1.7	1.0
1999	1.1	0.9	0.6	0.7	2.3	1.6	-0.4	1.3	1.1	2.2	1.0
2000	2.4	2.7	1.4	0.7	13.4	1.7	5.4	1.3	2.2	1.9	2.4
1999 Q4	1.5	1.5	0.5	0.5	8.0	1.5	2.2	1.1	1.5	2.5	1.5
2000 Q1	2.1	2.3	0.5	0.5	13.7	1.6	4.4	1.2	2.1	2.0	2.1
Q2	2.1	2.3	0.9	0.6	12.3	1.7	5.2	1.2	2.0	1.7	2.4
Q3	2.5	2.9	1.9	0.6	13.7	1.8	5.8	1.4	2.4	1.9	2.5
Q4	2.7	3.2	2.2	1.1	13.8	1.8	6.1	1.5	2.5	1.8	2.8
1999 Dec.	1.7	1.8	0.6	0.5	10.2	1.6	2.9	-	-	-	-
2000 Jan.	1.9	2.0	0.4	0.5	12.2	1.7	3.8	-	-	-	-
Feb.	2.1	2.3	0.6	0.5	13.6	1.6	4.4	-	-	-	-
Mar.	2.2	2.5	0.4	0.6	15.4	1.6	4.9	-	-	-	-
Apr.	1.9	1.9	0.7	0.6	10.3	1.8	4.7	-	-	-	-
May	1.9	2.2	0.8	0.6	12.0	1.6	5.3	-	-	-	-
June	2.4	2.7	1.2	0.7	14.6	1.7	5.6	-	-	-	-
July	2.4	2.7	1.7	0.5	13.5	1.7	5.6	-	-	-	-
Aug.	2.4	2.7	2.0	0.6	12.0	1.8	5.6	-	-	-	-
Sep.	2.8	3.4	2.1	0.9	15.6	1.8	6.3	-	-	-	-
Oct.	2.7	3.3	2.0	1.0	14.7	1.9	6.6	-	-	-	-
Nov.	2.9	3.5	2.2	1.1	15.3	1.9	6.4	-	-	-	-
Dec.	2.6	3.0	2.3	1.1	11.3	1.8	5.4	-	-	-	-

B.2 Real economy and fiscal developments

(annual percentage changes, unless otherwise indicated)

	Real GDP and expenditure components				Industrial production (excluding construction)	Retail sales (constant prices)	Employment (whole economy)	Unemployment (% of labour force)	Trade balance (EUR billions; (ECU billions to end-1998))	Fiscal developments	
	GDP	Private consumption	Government consumption	Gross fixed capital formation						Deficit (-)/surplus (+) (% of GDP)	Government debt (% of GDP)
	12	13	14	15	16	17	18	19	20	21	22
1996	1.4	1.6	1.7	1.3	0.4	0.5	0.5	11.5	62.4	-4.3	76.0
1997	2.3	1.6	0.9	2.5	4.2	1.2	0.9	11.5	74.5	-2.6	75.4
1998	2.9	3.1	1.0	5.1	4.4	2.9	1.8	10.8	68.7	-2.1	73.6
1999	2.5	3.0	1.5	5.2	2.0	2.6	2.1	10.0	33.8	-1.2	72.6
2000	3.4	2.6	1.9	4.5	5.6	2.4	2.3	8.9	-14.7	-0.7	70.1
1999 Q4	3.4	2.9	1.7	5.5	4.5	3.0	2.2	9.6	8.5	-	-
2000 Q1	3.5	2.6	2.0	5.6	4.9	2.4	2.3	9.3	-6.8	-	-
Q2	3.7	3.2	2.2	4.9	6.1	3.4	2.5	9.0	-2.6	-	-
Q3	3.3	2.5	1.7	4.0	5.8	2.3	2.3	8.8	-0.5	-	-
Q4	2.9	2.1	1.9	3.6	5.5	1.7	2.3	8.6	-4.8	-	-
1999 Dec.	-	-	-	-	5.3	2.9	-	9.5	1.5	-	-
2000 Jan.	-	-	-	-	2.8	2.4	-	9.4	-6.6	-	-
Feb.	-	-	-	-	6.0	3.7	-	9.3	-1.8	-	-
Mar.	-	-	-	-	5.9	1.0	-	9.2	1.5	-	-
Apr.	-	-	-	-	6.0	4.0	-	9.1	-1.3	-	-
May	-	-	-	-	7.8	4.7	-	9.0	-1.0	-	-
June	-	-	-	-	4.6	1.4	-	8.9	-0.4	-	-
July	-	-	-	-	5.6	1.8	-	8.9	3.8	-	-
Aug.	-	-	-	-	6.9	1.8	-	8.8	-2.2	-	-
Sep.	-	-	-	-	5.2	3.2	-	8.7	-2.1	-	-
Oct.	-	-	-	-	4.0	1.6	-	8.6	0.0	-	-
Nov.	-	-	-	-	4.5	1.4	-	8.6	-2.2	-	-
Dec.	-	-	-	-	8.2	1.9	-	8.5	-2.5	-	-

Sources: European Commission (Eurostat) and ECB calculations.

C. Summary balance of payments ¹⁾

(EUR billions; net flows)

	Current account					Capital account	Direct investment	Portfolio investment	Financial derivatives	Other investment
	Total	Goods	Services	Income	Current transfers					
	1	2	3	4	5	6	7	8	9	10
2000	-44.6	30.0	-5.5	-20.9	-48.3	12.5	-24.0	-127.6	-1.6	146.2
2000 Q1	-11.5	3.1	-3.9	-6.6	-4.2	3.9	147.5	-190.4	2.7	91.6
Q2	-9.4	8.9	1.3	-6.8	-12.7	3.2	-18.0	52.9	4.8	-45.6
Q3	-6.2	12.7	2.1	-7.4	-13.5	1.6	-95.9	7.6	0.5	70.7
Q4	-17.4	5.4	-4.9	-0.2	-17.8	3.8	-57.6	2.2	-9.6	29.4
2000 Jan.	-10.4	-2.4	-1.8	-5.2	-1.1	1.5	0.5	-4.2	-0.8	28.6
Feb.	-1.1	2.2	-1.8	-1.0	-0.4	0.9	145.9	-151.7	1.9	1.4
Mar.	0.0	3.3	-0.3	-0.4	-2.7	1.5	1.1	-34.4	1.6	61.6
Apr.	-7.0	2.5	-0.7	-4.0	-4.8	2.3	1.1	-5.6	2.1	6.1
May	-1.1	2.3	0.7	-1.2	-2.9	0.6	-8.5	1.1	0.4	16.8
June	-1.3	4.0	1.3	-1.6	-5.1	0.3	-10.5	57.4	2.3	-68.4
July	-2.6	6.3	1.5	-4.8	-5.5	0.5	-24.6	-13.1	-0.4	27.8
Aug.	-3.6	2.4	1.0	-1.7	-5.3	0.2	-42.8	17.1	-0.9	25.4
Sep.	0.0	4.0	-0.4	-0.9	-2.7	0.9	-28.5	3.7	1.8	17.5
Oct.	-3.2	3.9	-0.9	0.1	-6.3	0.3	-16.4	-3.9	-2.3	13.9
Nov.	-4.3	1.8	-0.4	-0.1	-5.6	1.6	-9.9	-2.8	-3.2	-2.8
Dec.	-9.9	-0.4	-3.5	-0.1	-6.0	1.8	-31.3	8.9	-4.2	18.3

D. Effective exchange rates

(period averages; index 1999 Q1=100)

	Narrow group				Broad group	
	Nominal	Real CPI	Real PPI	Real ULCM	Nominal	Real CPI
	1	2	3	4	5	6
1996	108.1	108.7	107.4	111.2	95.4	105.8
1997	99.1	99.4	99.1	99.7	90.3	96.5
1998	101.5	101.3	101.5	99.7	96.5	99.1
1999	95.6	95.7	95.7	96.2	96.5	95.8
2000	85.4	86.3	86.8	86.6	88.0	86.1
1999 Q4	92.0	92.1	92.2	93.1	94.1	92.5
2000 Q1	88.8	89.5	89.6	89.3	90.9	89.4
Q2	85.7	86.4	86.8	87.0	88.2	86.5
Q3	84.5	85.4	86.0	86.0	87.1	85.1
Q4	82.7	83.8	84.6	84.2	85.7	83.5
1999 Dec.	89.9	90.3	90.2	-	92.1	90.6
2000 Jan.	90.1	90.7	90.8	-	92.3	90.7
Feb.	89.0	89.7	89.8	-	91.0	89.4
Mar.	87.4	88.1	88.3	-	89.5	88.0
Apr.	85.8	86.4	86.8	-	88.2	86.6
May	84.2	84.8	85.5	-	86.7	84.9
June	87.1	88.0	88.2	-	89.8	88.0
July	86.7	87.7	87.9	-	89.2	87.4
Aug.	84.3	85.3	85.8	-	86.8	85.0
Sep.	82.5	83.4	84.3	-	85.1	83.1
Oct.	81.3	82.1	83.1	-	84.2	82.0
Nov.	82.0	83.0	83.8	-	84.9	82.7
Dec.	85.1	86.2	86.8	-	87.9	85.7

Source: ECB.

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

Technical notes¹

Relating to Table 2.4

Seasonal adjustment of the euro area monetary aggregates

The approach used relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2).² 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. 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. Seasonal factors are revised at annual intervals or as and when required.

Calculation of growth rates

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

If F_t represents the flow in month t , L_t the level outstanding at the end of the month t , $X_t = (F_t / L_{t-1} + 1)$, and I_t the index of the 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:

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

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

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

Relating to Tables 2.5 to 2.8

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

Finally, since the values reported for Tables 2.5 to 2.8 are revised on a quarterly basis (in the March, June, September and December issues), minor discrepancies may occur between these tables and those reporting monthly data.

Relating to Table 4.1

Seasonal adjustment of the HICP

The approach used relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2).² The seasonal adjustment of the total HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series of processed food, unprocessed food, industrial goods excluding energy and services. Energy is added as a raw component since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as and when required.

¹ For details see "Seasonal adjustment of monetary aggregates and HICP for the euro area", ECB (August 2000).

² 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. For internal purposes, multiplicative models of TRAMO-SEATS also are used. For details on TRAMO-SEATS, see Gomez, V. and Maravall, A. (1996), "Programs TRAMO and SEATS: Instructions for the User", Bank of Spain, Working Paper No. 9628, Madrid.

General notes

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

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

Owing to the fact that the composition of the ECU does not coincide with the currencies of the Member States which have adopted the single currency, pre-1999 amounts converted from the participating currencies into ECU at current ECU exchange rates are affected by movements in the currencies of Member States which have not adopted the euro. To avoid this effect in the monetary statistics, the pre-1999 data in Tables 2.1 to 2.8 are expressed in units converted from national currencies at the irrevocable euro exchange rates established on 31 December 1998. Unless indicated otherwise, price and cost statistics before 1999 are based on the data expressed in national currency terms.

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

As a general rule, the cut-off date for the statistics included in the ECB Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, it was 4 July 2001.

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

Overview

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

Monetary policy and financial statistics

Tables 1.1 to 1.5 show the consolidated financial statement of the Eurosystem, data on Eurosystem operations, statistics relating to minimum reserves, and the banking system's liquidity position. Tables 1.2 and 1.3 reflect the switch to variable rate tenders in June 2000. Monetary data relating to Monetary Financial Institutions (MFIs), including the Eurosystem, are shown in Tables 2.1 to 2.3. Table 2.3 is consolidated; inter-MFI positions within the euro area are not shown, but any difference between the sum total of such claims and liabilities as recorded is shown in column 13. Table 2.4 sets out monetary aggregates drawn from the consolidated MFI balance sheet; they also include some (monetary) liabilities of central government. The M3 data shown in Table 2.4 exclude holdings by non-residents of the euro area of shares/units issued by money market funds located in the euro area. Accordingly, these holdings are included in the item external liabilities shown in Table 2.3, and as a result

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).

have an impact on the item net external assets shown in Table 2.4. Table 2.5 shows a quarterly sectoral and maturity analysis of loans by MFIs to euro area residents. Table 2.6 shows a quarterly analysis of deposits held by euro area residents with MFIs. Table 2.7 provides a quarterly analysis of MFI claims on and liabilities to non-residents of the euro area. Table 2.8 shows a quarterly currency analysis of certain MFI balance sheet items. A complete list of MFIs is published on the ECB's website. Details of the sector definitions are set out in the "Money and Banking Statistics Sector Manual: Guidance for the statistical classification of customers" (ECB, November 1999). The "Money and Banking Statistics Compilation Guide" (EMI, April 1998) explains recommended practices to be followed by the NCBs. From 1 January 1999 the statistical information is collected and compiled on the basis of the ECB Regulation concerning the consolidated balance sheet of the Monetary Financial Institutions sector (ECB/1998/16).

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

Statistics on securities issues are presented in Tables 3.5 and 3.6. They are broken down into short-term and long-term securities. "Short-term" means securities with an original maturity of one year or less (in accordance with the ESA 95, in exceptional cases two years or less). Securities with a longer maturity, or with optional maturity dates, the latest of which is more than one year away, or with indefinite maturity dates, are classified as long-term. The statistics on securities issues are estimated to cover approximately 95% of total issues by euro area residents. Table 3.5 shows securities issued, redemptions and amounts outstanding, broken down into short-term securities and long-term securities. Net issues differ from the change in amounts outstanding owing to valuation changes, reclassifications and other

adjustments. Table 3.6 contains a sectoral breakdown of issuers of euro-denominated securities, whether resident in the euro area or elsewhere. For euro area residents, the sectoral breakdown is in line with the European System of Accounts 1995 (ESA 95).² For non-euro area residents, the term "banks (including central banks)" is used to indicate institutions of a similar type to MFIs (including the Eurosystem) resident outside the euro area. The term "international organisations" includes the European Investment Bank. (The ECB is included in the Eurosystem.)

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

Prices and real economy indicators

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

² The code numbers in the ESA 95 for the sectors shown in tables in the Monthly Bulletin are: MFIs (including Eurosystem) comprises the ECB and the national central banks of Member States in the euro area (S.121) and other monetary financial institutions (S.122); non-monetary financial corporations comprises other financial intermediaries (S.123), financial auxiliaries (S.124) and insurance corporations and pension funds (S.125); non-financial corporations (S.11); central government (S.1311); other general government comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. Data from January 2000 include the cost of health and educational services; data from January 2001 also cover hospital services and social services provided to people living at home, in retirement homes and in residences for the disabled; earlier data on the extended basis are, in general, not available. The HICP from January 2000 also covers spending by non-residents which had previously been excluded from the HICP in certain Member States. The table includes seasonally adjusted HICP data which are compiled by the ECB.

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

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

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

Employment data (Table 5.4) are based on the ESA 95. Whenever coverage of the euro area is incomplete, some data will be estimated by the ECB on the basis of the information available. Unemployment rates conform to International Labour Organization (ILO) guidelines.

Financial accounts statistics

Table 6.1 shows quarterly data on financial accounts for non-financial sectors in the euro area, comprising general government (S.13), non-financial corporations (S.11), and households (S.14) including non-profit institutions serving households (S.15). The data (not seasonally adjusted) cover levels outstanding and financial transactions classified according to the ESA 95 and show the main financial investment and financing activities of the non-financial sectors. On the financing side (liabilities), the data are presented by ESA 95 sector and original maturity. Whenever possible the financing taken from MFIs is separately presented. The information on financial investment (assets) is currently less detailed than that on financing, especially since a breakdown by sector is not possible. While both levels and transactions may throw light on economic developments, the latter are more likely to be the focus of attention.

The quarterly data are based on euro area MFI and securities issues statistics, government finance statistics, quarterly national financial accounts, and BIS international banking statistics. While all euro area countries contribute to the euro area statistics, Ireland and Luxembourg, as yet, do not provide quarterly national financial accounts data.

Table 6.2 shows annual data on saving, (financial and non-financial) investment and financing in the euro area. These data cannot yet be reconciled with the quarterly data presented in Table 6.1.

General government fiscal position

Tables 7.1 to 7.3 show the general government fiscal position in the euro area. The data are mainly consolidated and are based on the ESA 95 methodology. The euro area aggregates are compiled by the ECB from harmonised data provided by the NCBs, which are regularly updated. Data on deficit

and debt for the euro area countries may therefore differ from those used by the European Commission in the context of the excessive deficit procedure.

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

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

The concepts and definitions used in balance of payments statistics (Tables 8.1 to 8.6) and international investment position (i.i.p.) statistics generally conform to the 5th edition of the IMF Balance of Payments Manual (October 1993), to the ECB Guideline of May 2000 (ECB/2000/04) on the statistical reporting requirements of the ECB, and to Eurostat's documentation.

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

Some earlier data have been partially estimated and may not be fully comparable

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

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

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

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

Table 10 shows ECB calculations of nominal and real effective exchange rate indices for the euro based on weighted averages of bilateral euro exchange rates. Weights are based on 1995-97 manufactured goods trade

with the trading partners and capture third-market effects. Up to December 2000, the narrow group is composed of the countries whose currencies are shown in the table plus the Greek drachma. On adopting the euro in January 2001, Greece ceased to be a partner country in the effective exchange rate of the euro and the weighting scheme has been adjusted accordingly. In addition, the broad group includes the following countries: Algeria, Argentina, Brazil, China, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Morocco, New Zealand, the Philippines, Poland, Romania, Russia, Slovakia, Slovenia, South Africa, Taiwan, Thailand and Turkey. Real rates are calculated using consumer prices (CPI), producer prices in manufacturing (PPI) and unit labour costs in manufacturing (ULCM). Where deflators are not yet available, estimates are used. The bilateral rates shown are those against the 12 currencies used in the ECB's calculation of the "narrow" effective exchange rate of the euro. The ECB publishes daily reference rates for these and some other currencies.

Other statistics

Statistics on other EU Member States (Table I 1) follow the same principles as those for data relating to the euro area. Data for the United States and Japan contained in Tables/Charts 12.1 and 12.2 are obtained from national sources. Saving, investment and financing data for the United States and Japan (Table/Chart 12.2) are structured in the same way as the capital and financial flows data shown for the euro area in Table/Chart 6.

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

Data for the euro area plus Greece up to end-2000 are shown in an additional table at the end of the "Euro area statistics" section. This table provides past data for the euro area plus Greece for a selected number of

indicators. Detailed information on the different parts of the table is provided below.

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

Table A.2 shows financial market interest rates and securities other than shares statistics. Before January 1999 synthetic euro area money market rates were calculated on the basis of national rates weighted by GDP. From January 1999 to December 2000 euro interbank offered rates (EURIBOR) and ATHIBOR are weighted by GDP. Up to August 2000, euro area yields are calculated on the basis of harmonised national government bond yields weighted by GDP. Thereafter, the weights are the nominal outstanding amounts of government bonds in each maturity band.

For securities issues statistics (also shown in Table A.2), the fact that residents of Greece will become residents of the euro area has given rise to two structural modifications. The first change involves the inclusion of all securities issued by Greek residents in euro and Greek drachmas. The second effect is caused by the inclusion of all securities issued by euro area residents – in addition to those in Greece – and denominated in Greek drachmas. Securities issues statistics including Greece are compiled for both stocks and flows.

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

Table C presents selected balance of payments past data for the euro area plus Greece. The methodology applied is generally the same as that used in Section 8. All available information for the past data is shown on the ECB's web site (in the "Statistics, Latest monetary, financial and balance of payments statistics – release schedules" section).

Table D shows past nominal and real effective exchange rate indices for the euro plus the Greek drachma. The methodology applied for the calculation is the same as that described in the article in the April 2000 issue of the ECB Monthly Bulletin entitled "The nominal

and real effective exchange rates of the euro". New weights for the euro area partner countries have been calculated, excluding Greece from the partners but including it in the euro area (for the countries included in the calculations, see footnote I to Table 10 on "Exchange rates" in the "Euro area statistics" section of this issue). A "theoretical" euro exchange rate, in which account is taken of Greek drachma-related developments as well as deflators for the euro area plus Greece, has been constructed prior to January 2001. The full set of data, starting from 1990 (1993 for the broad group), can be downloaded in csv format from the ECB's website.

Chronology of monetary policy measures of the Eurosystem¹

4 January 2000

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

5 January 2000

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

15 January 2000

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

20 January 2000

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

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

3 February 2000

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

17 February, 2 March 2000

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

16 March 2000

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

30 March, 13 April 2000

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

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

27 April 2000

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

11 May 2000

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

25 May 2000

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

8 June 2000

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

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

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

19 June 2000

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

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

21 June 2000

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

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

6 July, 20 July, 3 August 2000

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

31 August 2000

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

14 September 2000

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

5 October 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.75%, with effect from the operation to be settled on 11 October 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.75% and 3.75% respectively, both with effect from 6 October.

19 October, 2 November, 16 November, 30 November 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

14 December 2000

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides to reconfirm the existing reference value for monetary growth, namely an annual growth rate of 4½% for the broad aggregate M3. This decision is taken on the grounds that the available evidence continues to support the assumptions underlying the initial derivation of the reference value in December

1998 (and its confirmation in December 1999), namely that, over the medium term, M3 income velocity declines at a trend rate in the range from ½% to 1% per annum and potential output grows at a trend rate between 2% and 2½% per annum. The Governing Council will undertake the next review of the reference value in December 2001.

2 January 2001

On 1 January 2001 the euro was introduced in Greece. Greece thus became the twelfth EU Member State to adopt the single currency and the first to do so since the start of Stage Three of Economic and Monetary Union (EMU) on 1 January 1999. As a result, the Bank of Greece is now a full member of the Eurosystem, with the same rights and obligations as the 11 national central banks of the EU Member States which previously adopted the euro. In accordance with Article 49 of the Statute of the European System of Central Banks and of the European Central Bank, the Bank of Greece pays up the remainder of its contribution to the capital of the ECB, as well as its share of the ECB's reserves, and also transfers to the ECB its contribution to the foreign reserve assets of the ECB.

Further to the announcement on 29 December 2000, the first main refinancing operation of 2001, in which the Greek counterparties of the Eurosystem participate for the first time, is successfully conducted. The allotment volume of €101 billion takes into account the additional liquidity needs of the euro area banking system resulting from the integration of the Greek Monetary Financial Institutions.

4 January 2001

The Governing Council of the ECB decides that the minimum bid rate for the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

In addition, it decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2001. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2001 and the desire of the Eurosystem to continue to provide the bulk of refinancing of the financial sector through its main refinancing operations. The Governing Council may adjust the allotment amount in the course of the year in the event of unexpected developments in liquidity needs.

18 January, 1 February, 15 February, 1 March, 15 March, 29 March, 11 April, 26 April 2001

The Governing Council of the ECB decides that the minimum bid rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 4.75%, 5.75% and 3.75% respectively.

10 May 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operation by 0.25 percentage point to 4.50%, with effect from the operation to be settled on 15 May 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.50% and 3.50% respectively, both with effect from 11 May 2001.

23 May, 7 June, 21 June, 5 July 2001

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

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"Annual Report 1998", April 1999.

"Annual Report 1999", April 2000.

"Annual Report 2000", May 2001.

Convergence Report

"Convergence Report 2000", May 2000.

Monthly Bulletin

Articles published from January 1999 onwards:

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

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

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

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

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

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