



EUROPEAN CENTRAL BANK

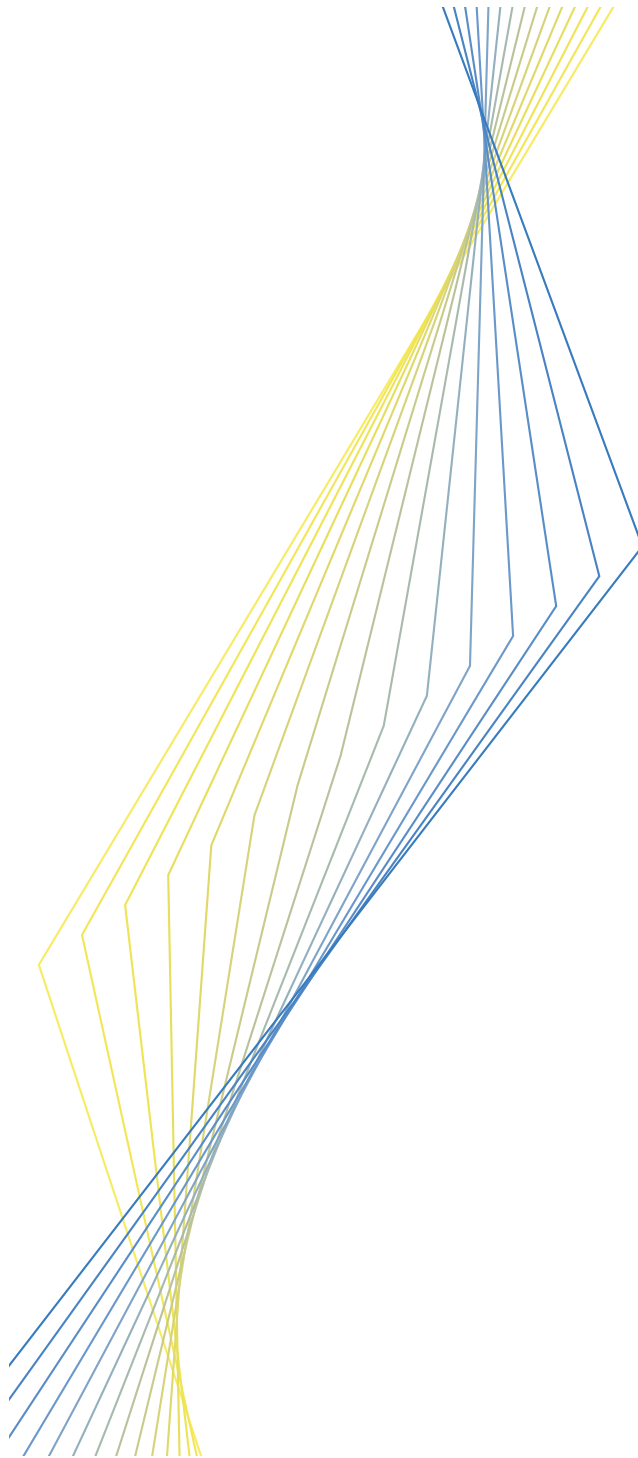
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**M O N T H L Y
B U L L E T I N**

July 2002



EUROPEAN CENTRAL BANK



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Contents

Editorial	5
Economic developments in the euro area	7
Monetary and financial developments	7
Price developments	17
Output, demand and labour market developments	24
Exchange rate and balance of payments developments	32
Boxes:	
1 Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 June 2002	12
2 Recent developments in consumers' inflation perceptions	18
3 Recent developments in services prices in the euro area	20
4 The Broad Economic Policy Guidelines 2002	28
Characteristics of the euro area business cycle in the 1990s	39
The Eurosystem's dialogue with EU accession countries	51
Developments in the external direct and portfolio investment flows of the euro area	65
Euro area statistics	1*
Chronology of monetary policy measures of the Eurosystem	81*
Documents published by the European Central Bank	87*

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
EER	effective exchange rate
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
NACE Rev. 1	Statistical classification of economic activities in the European Community
NCBs	national central banks
PPI	Producer Price Index
repos	repurchase agreements
SITC Rev. 3	Standard International Trade Classification (revision 3)
ULCM	Unit Labour Costs in Manufacturing

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 meeting on 4 July 2002, the Governing Council of the ECB decided to leave the minimum bid rate on the main refinancing operations of the Eurosystem unchanged at 3.25%. The interest rates on the marginal lending facility and the deposit facility were also left unchanged at 4.25% and 2.25% respectively.

These decisions were based on a comprehensive analysis of monetary, financial and economic trends in the euro area. The Governing Council concluded that while risks to price stability over the medium term remain tilted to the upside, the most recent developments have sent mixed signals.

As regards the analysis under the first pillar of the ECB's monetary policy strategy, the three-month average of the annual growth rates of M3 increased to 7.5% in the period from March to May 2002, from 7.4% in the period from February to April. While there was some normalisation of M3 growth in early 2002, M3 dynamics have strengthened again recently. This development may partly reflect renewed portfolio shifts into M3 instruments, related to the recent increase in financial market uncertainty. However, more fundamental factors, such as the low opportunity cost of holding money and the economic recovery in the euro area, also seem to have driven the monetary expansion in recent months. This view is supported by the increasingly strong expansion of M1 and the pick-up in the growth of loans to the private sector. While due caution in interpreting recent monetary developments is warranted, it is a matter of concern that there is significantly more liquidity available in the euro area than would be needed to finance sustainable, non-inflationary economic growth.

Concerning the second pillar, the latest data confirmed that a gradual recovery in real GDP growth in the euro area is under way. Survey data and leading indicators for both the manufacturing and services sectors point to somewhat higher real GDP growth rates in the second quarter of this year than in the

first quarter. Looking ahead, an ongoing strengthening in both domestic and foreign demand, with real GDP growth returning to potential towards the end of the year, remains the most likely scenario. Indeed, the conditions for an acceleration in economic activity in the euro area remain in place. There are no major imbalances in the euro area, financing conditions are very favourable and a decline in inflation from the temporarily high level of the first quarter of 2002 should underpin an increase in real disposable income and a resumption of consumption growth. In addition, the economic recovery outside the euro area is under way. However, the uncertainty surrounding the strength of the economic upturn – both outside and inside the euro area – has not diminished over recent weeks, as also signalled by indicators related to consumption and by financial market developments. Regarding the latter, stock markets in the euro area and in the United States fell sharply in June, following a downward trend observed since March 2002, coupled with rising volatility. These recent developments reflect concerns regarding the reliability of financial accounting information. At the same time, the portfolio reallocation out of stocks, prompted by high uncertainty in equity markets, contributed to a significant decline in bond yields in the euro area.

Turning to price developments, Eurostat's flash estimate indicates that annual HICP inflation fell from 2.0% in May 2002 to 1.7% in June. However, it is too early to interpret this fall as a sign of receding upward pressure on prices. In fact, HICP inflation excluding the more volatile items of energy and unprocessed food prices has remained high since the beginning of the year reflecting, in particular, trends in services prices. Also, taking account of base effects, annual HICP inflation rates are expected to fluctuate around 2% in the coming months.

The strengthening of the euro exchange rate should have a moderating effect on inflation. However, it is difficult to quantify the size and establish the timing of this effect. For

price stability to be maintained over the medium term it is crucial that the high wage increases resulting from recent negotiations in some regions do not spread across the euro area, not least because this would have negative consequences for competitiveness, employment growth and eventually consumption. In this respect, it is of concern that nominal wage growth in 2001 and in early 2002 tended to increase in the euro area, despite subdued economic growth.

Overall, while the strengthening of the euro exchange rate should contribute to lower inflation, other factors, in particular monetary developments and wage trends, do not point to a moderation in longer-term price pressures. Monetary policy therefore needs to remain vigilant with regard to the key factors determining the outlook for price stability over the medium term.

Worrying developments regarding fiscal policies in the euro area over the past few months have to be noted. It is important to recall that all member countries must honour the commitments made to achieve budgets close to balance or in surplus by 2003-04. In this respect, it needs to be re-emphasised that fiscal targets have to embody sufficiently ambitious structural consolidation efforts and be based on realistic growth assumptions. Any temptation to improve artificially the

current budgetary position by means of accounting measures should be resisted. Full transparency in fiscal accounts must be guaranteed. Only a determined implementation of all the elements of the Stability and Growth Pact can preserve its credibility, which is needed in order to maintain and further strengthen confidence in the stability-oriented policy framework of the euro area. Moreover, governments are encouraged to push ahead with reforms relating to the size and structure of public expenditure and revenue, which will also create room for tax cuts and absorb the fiscal cost of population ageing.

In the field of structural reforms, the recent adoption of the Broad Economic Policy Guidelines by the EU Council is a welcome development. If implemented in a determined way, structural reforms will contribute to expanding the euro area's potential for non-inflationary growth and to reducing its high level of unemployment.

This issue of the Monthly Bulletin contains three articles. The first analyses the characteristics of the euro area business cycles in the 1990s, the second deals with the Eurosystem's dialogue with EU accession countries, and the third reviews developments in the external direct and portfolio investment flows of the euro area.

Economic developments in the euro area

I Monetary and financial developments

Monetary policy decisions of the Governing Council of the ECB

At its meeting on 4 July, the Governing Council of the ECB decided to leave the minimum bid rate in the main refinancing operations, conducted as variable rate tenders, unchanged at 3.25%. The interest rates on both the marginal lending facility and the deposit facility were also kept unchanged, at 4.25% and 2.25% respectively (see Chart 1).

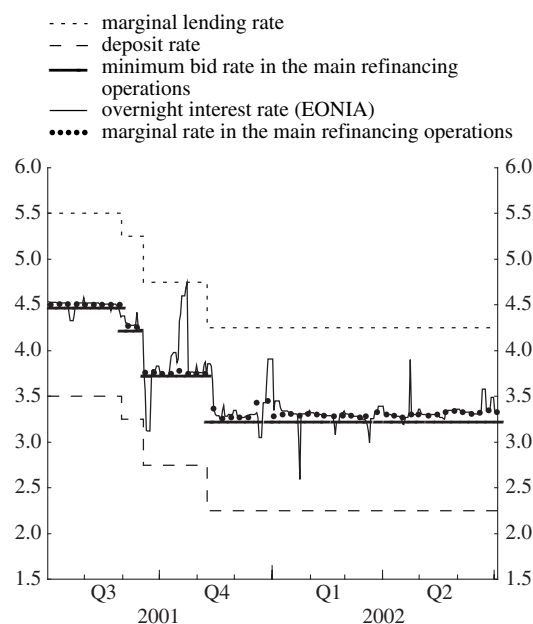
Strong M3 growth in May

M3 recorded a strong monthly increase in May 2002. As a consequence, the annual rate of growth of M3 rose to 7.8% in May, from 7.4% in the preceding month. The three-month average of the annual growth rates of M3 in the period from March to May 2002 went up to 7.5%, from 7.4% in the

Chart 1

ECB interest rates and money market rates

(percentages per annum; daily data)

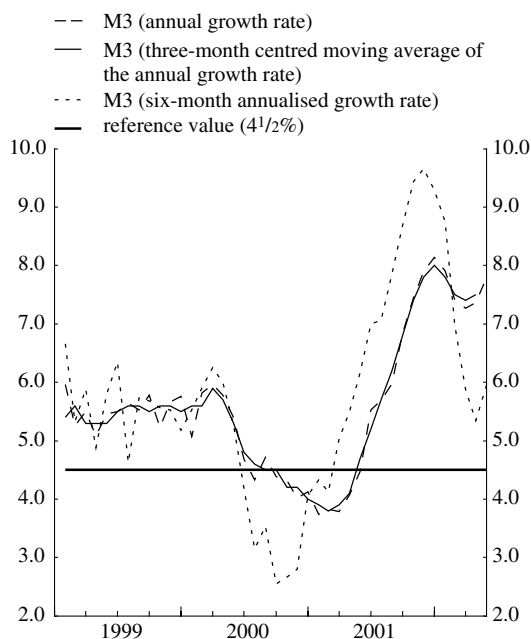


Sources: ECB and Reuters.

Chart 2

M3 growth and the reference value

(adjusted for seasonal and calendar effects)



Source: ECB.

three-month period ending in April 2002 (see Chart 2).

The high rate of annual M3 growth still partly reflects the portfolio shifts to M3 instruments that occurred in the autumn of 2001 when economic and financial market uncertainty led to a strong increase in the demand for short-term liquid assets. In the first quarter of 2002, the development of M3 seemed to indicate that economic agents had stopped shifting speculative funds to M3 instruments and had even started to reverse past portfolio reallocations. However, the more recent increase in annual M3 growth may partly have been driven by renewed portfolio shifts to M3 instruments, possibly in reaction to higher financial market uncertainty.

At the same time, and in contrast to the developments in the autumn of last year, the effects of more fundamental factors – such as the low level of short-term interest rates and the ongoing economic recovery in the euro area – also seem to have been more strongly

reflected in monetary growth over the past few months. This latter hypothesis is supported by the increasingly strong expansion of M1 and the rising growth of MFI loans to the private sector. As a consequence of the high monetary growth in April and May 2002, measures of both the nominal and the real money gap have picked up again,¹ indicating that liquidity in the euro area is very ample.

All in all, upward risks to future price stability stemming from the first pillar are becoming increasingly apparent. It is a matter of concern that there is significantly more liquidity available in the euro area than would be needed to finance sustainable non-inflationary economic growth. In fact, there is a growing risk that the substantial excess liquidity might translate into inflationary pressures, in particular in a situation of economic recovery in the euro area.

The rise in M3 growth recorded in May was driven by a stronger expansion of each of its three main components: M1, short-term deposits other than overnight deposits, and marketable instruments.

The annual rate of growth of the narrow monetary aggregate M1 increased to 7.0% in

May, from 6.8% in the previous month (see Table I). This development was due to a less pronounced annual rate of decline in currency in circulation (-18.0% in May, compared with -21.8% in April). In the three months since the end of the dual circulation period, currency in circulation has increased by around €10 billion per month in seasonally adjusted terms. The data underlying this gradual recovery in currency in circulation suggest that both euro area and non-euro area residents are resuming their hoarding of currency. At the same time, the annual growth rate of overnight deposits declined to 11.8% in May, from 12.4% in the previous month. This seems to be mainly related to the reversal of past shifts from currency to overnight deposits (i.e. a compensating move within M1). The overall strong growth of M1 probably reflects both the low opportunity cost of holding currency and overnight deposits and the recovery in economic activity in the euro area.

Turning to the other components of M3, the annual rate of growth of short-term deposits other than overnight deposits rose to 6.7% in May, from 6.0% in the preceding month. This

¹ See *Monthly Bulletin of June 2002*, page 8, for a description of these measures.

Table I
Summary table of monetary variables in the euro area
(annual percentage changes; quarterly averages)

	2001 Q3	2001 Q4	2002 Q1	2002 Feb.	2002 Mar.	2002 Apr.	2002 May
<i>Adjusted for seasonal and calendar effects</i>							
M1	3.8	5.5	6.2	6.2	5.9	6.8	7.0
<i>of which: currency in circulation</i>	-7.5	-18.5	-28.0	-28.4	-25.2	-21.8	-18.0
<i>of which: overnight deposits</i>	6.1	10.4	13.0	13.1	12.1	12.4	11.8
M2 - M1 (= other short-term deposits)	4.9	5.8	6.7	6.4	6.5	6.0	6.7
M2	4.4	5.7	6.4	6.3	6.2	6.4	6.8
M3 - M2 (= marketable instruments)	16.4	20.7	15.7	14.7	14.0	13.5	13.8
M3	5.9	7.6	7.7	7.4	7.3	7.4	7.8
<i>Not adjusted for seasonal and calendar effects</i>							
Longer-term financial liabilities (excluding capital and reserves)	2.2	2.9	3.2	3.0	3.6	3.7	4.7
Credit to euro area residents	5.6	5.2	5.1	5.1	4.9	4.4	4.5
Credit to general government	-1.9	-0.6	1.8	2.1	3.1	2.2	1.8
<i>of which: loans to general government</i>	-1.5	-0.8	-0.7	-0.3	0.2	-1.1	-0.8
Credit to other euro area residents	7.8	6.9	6.1	6.0	5.4	5.1	5.3
<i>of which: loans to the private sector</i>	7.4	6.5	5.7	5.6	5.5	5.5	5.8

Source: ECB.

reflected a stronger increase in the two components of this item. The annual growth rate of deposits with an agreed maturity of up to two years rose to 3.8%, from 2.4% in April. The annual rate of increase of deposits redeemable at a period of notice of up to three months also strengthened in May, to 9.4%, from 9.2% in the previous month.

Finally, the annual rate of growth of marketable instruments rose to 13.8% in May, from 13.5% in the previous month. This increase was driven solely by a strong rise in the annual growth of money market paper and debt securities with a maturity of up to two years (to 5.2% in May, from -6.5% in April). By contrast, the annual rates of growth of the other two components of marketable instruments decreased in May, with the annual growth rate of money market fund shares/units falling to 26.6%, from 29.1% in April. The continued high growth rates of marketable instruments could indicate that the recent increase in financial market uncertainty has led to renewed portfolio shifts to short-term liquid instruments. In contrast to the situation in the autumn of 2001, however, it is plausible to assume that the portfolio shifts were also directed towards longer-term interest-bearing assets not included in M3, given the relatively steep yield curve in the euro area. In fact, demand for MFIs' longer-term financial liabilities increased significantly in May 2002 (see below).

Increase in the annual growth rate of loans to the private sector

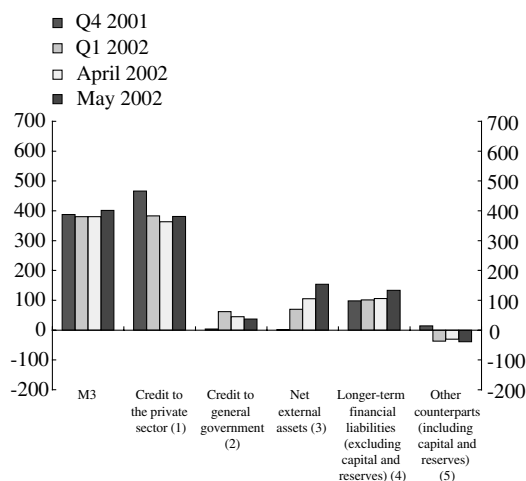
The annual rate of growth of credit to euro area residents remained broadly stable at 4.5% in May. However, this reflected divergent developments in the two main components of credit (see Chart 3). On the one hand, the annual rate of growth of credit to the private sector increased to 5.3%, from 5.1% in April. On the other hand, the annual rate of growth of credit to the general government declined to 1.8%, from 2.2% in April.

The increase in the annual rate of growth of credit to the private sector was mainly due to a strong rise in the annual growth rate of loans to 5.8% in May, from 5.5% in March and April. This confirms earlier indications of a possible turnaround in the trend growth of loans to the private sector, related to both a strengthening of economic activity and the pertaining low level of retail lending rates in the euro area.

The annual rate of growth of MFIs' longer-term financial liabilities (excluding capital and reserves) rose to 4.7% in May, from 3.7% in the preceding month (see Table 1). The gradual increase in this item since August 2001 has been driven mainly by the stronger demand for debt securities issued with a maturity of over two years. This development probably reflects the steepening of the yield curve in 2001 and early 2002. More recently it could also, as mentioned above, indicate portfolio shifts related to uncertainty in global stock markets.

Finally, the net external asset position of the euro area MFI sector increased strongly in May, by €35.2 billion in seasonally unadjusted terms. Over the 12 months up to May, the net external assets of the euro area MFI

Chart 3
Movements in M3 and its counterparts
(annual flows, end of period; EUR billions; not adjusted for seasonal and calendar effects)



Source: ECB.
 $M3 = 1 + 2 + 3 - 4 + 5$

sector rose by €153.5 billion, compared with €105.4 billion in the 12 months up to April. Although the gradual increase in the 12-month flow partly reflects base effects, it also seems to be related to euro area residents investing less abroad, or even repatriating funds, as reflected in the balance of payments figures for April.

Decline in the growth of debt securities issuance in April

The annual percentage growth in the amount outstanding of debt securities issued by euro area residents decreased to 7.0% in April 2002, from 7.3% in March. Underlying this was a slight decrease of 0.1 percentage point in the annual growth rate of the amount outstanding of long-term debt securities, to 7.7% in April 2002, and a strong decline in the annual growth of short-term debt securities, by 2.5 percentage points to 0.8% (see Chart 4). The continued decline in short-term debt securities issuance would seem to have been partly linked to the emergence of credit risk concerns at the lower end of the credit quality spectrum.

The currency breakdown shows that the annual growth in the amount outstanding of euro-denominated debt securities issued by euro area residents decreased from 6.9% in March to 6.7% in April. At the same time, the share of euro-denominated debt securities in total gross issuance by euro area residents increased from 92.7% to 93.7%.

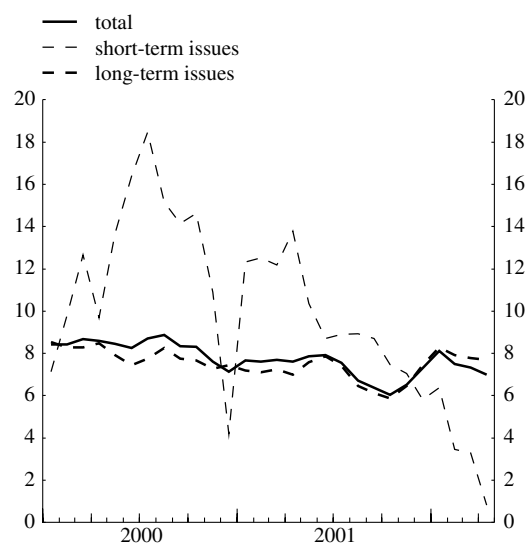
Turning to the sectoral breakdown of euro-denominated debt securities issuance, the annual growth in the amount outstanding of debt securities issued by MFIs decreased from 4.7% in March 2002 to 4.5% in April. The annual growth in the amount outstanding of debt securities issued by non-monetary financial corporations remained high, increasing slightly from 40.7% in March to 41.3% in April. The annual growth in the amount outstanding of debt securities issued by non-financial corporations decreased slightly, falling from 14.7% in March to 14.5%

in April. In each of the aforementioned sectors, the growth in the amounts outstanding of debt securities was unevenly distributed between long and short-term instruments, with the rate of growth in the amount outstanding of long-term securities either increasing or stabilising across all three sectors in April 2002. At the same time, the rate of growth in short-term issuance dropped quite sharply. Annual growth in short-term securities issued by the MFI sector fell from -2.1% in March to -4.7% in April. For the amount outstanding of short-term debt securities issued by non-monetary financial corporations, the annual rate of change dropped from -16.3% to -23.6%. This should be put into the perspective of the very limited amount of short-term debt securities issued by that sector. The rate of change in the amount outstanding of debt securities issued by non-financial corporations decreased from 2.6% in March to -0.1% in April.

Turning to the general government sector, there was a decline in the annual growth in the amount outstanding of debt securities

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.

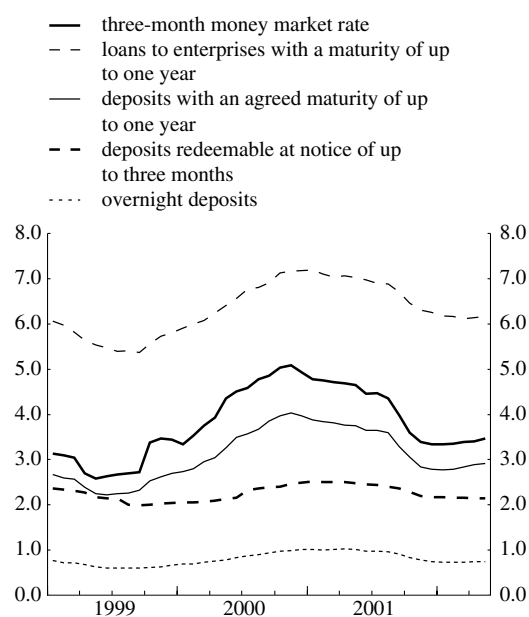
issued by this sector from 4.9% in March 2002 to 4.7% in April. This reflected a decline in the rate of growth in the amounts outstanding of debt securities issued by central government, down from 4.3% in March 2002 to 4.0% in April, while the annual growth rate in the amount outstanding of debt securities issued by other general government increased from 25.2% in March 2002 to 26.6% in April.

Slight increase in retail interest rates in May

Short-term retail bank interest rates inched upwards in May 2002 compared with April, reflecting the continued, gradual increase in short-term market interest rates over previous months (see Chart 5). Average interest rates on deposits with an agreed maturity of up to one year and the average rate for short-term loans to enterprises both increased by about 3 basis points in May 2002 compared to April. The remaining short-term

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

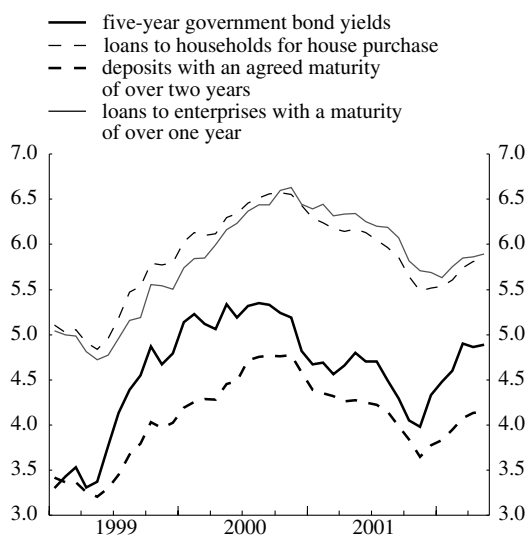
(percentages per annum; monthly averages)



Sources: ECB aggregation of individual country data and Reuters.
Note: From 1 January 2001, data include Greece.

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, data include Greece.

retail interest rates hardly changed from April to May.

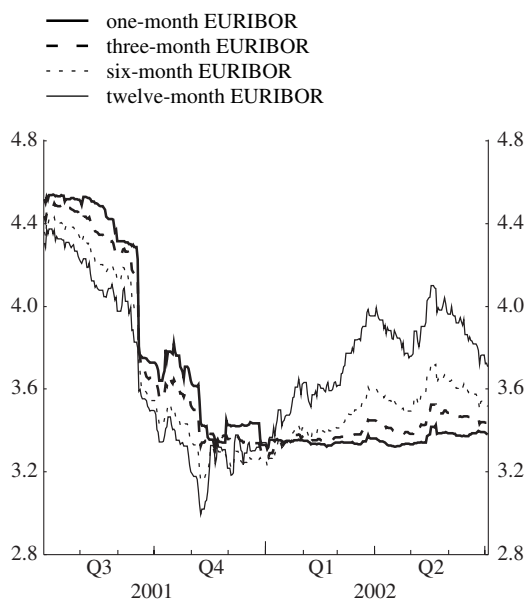
Long-term retail bank interest rates increased marginally in May 2002 compared with April (see Chart 6). From a longer-term perspective, after November 2001, when long-term interest rates started to rise, long-term retail bank interest rates had, by May, increased by between 30 and 50 basis points, while the average five-year government bond yield had increased by more than 90 basis points. It is typical for retail bank interest rates to react with some lag to the movements in market rates. Therefore, particularly when developments in market rates quickly change direction, it is normal that spreads between market rates and retail rates change noticeably, as has been the case over the past few months.

Money market interest rates at longer maturities decreased slightly in June

After having increased throughout most of the period since November 2001, money

Chart 7
Short-term interest rates in the euro area

(percentages per annum; daily data)



Source: Reuters.

market interest rates at the longer maturities declined slightly in June. Money market rates at shorter maturities were broadly stable, so that the (positive) slope of the money market yield curve became less steep. Moreover, short-term interest rates implied in futures prices also decreased during June.

The overnight interest rate, as measured by the EONIA, fluctuated in a range between 3.30% and 3.36% for most of the period between end-May and 3 July. This was somewhat above the minimum bid rate of 3.25% in the ECB's main refinancing operations, in part reflecting markets' expectations of gradually rising money market rates. The EONIA rose temporarily at the end of the maintenance period on 23 June 2002 (see Box 1). Two-week money market

rates remained stable, hovering around 3.34% in the period between end-May and 3 July. The marginal and average rates of allotment in the Eurosystem's main refinancing operations settled in June and on 2 July 2002 exceeded the minimum bid rate by between 6 and 11 basis points.

The one-month and the three-month EURIBOR declined by 1 and 6 basis points respectively in the period between end-May and 3 July. On the latter date, these rates stood at 3.38% and 3.43% respectively (see Chart 7). The marginal and average interest rates in the Eurosystem's longer-term refinancing operation settled on 27 June were close to the then prevailing three-month EURIBOR, at 3.38% and 3.41% respectively. They were thus 7 and 6 basis points lower respectively than the corresponding rates in the longer-term refinancing operation settled on 30 May. Interest rates at the longer end of the money market yield curve decreased more significantly. The six-month and the twelve-month EURIBOR fell by 12 and 25 basis points respectively in the period between end-May and 3 July, to stand at 3.52% and 3.71% on the latter date. The slope of the money market yield curve, as measured by the difference between the twelve-month and the one-month EURIBOR, thus became less steep, falling from 57 to 33 basis points in the period under review.

The expected path of the three-month EURIBOR, as implied in the futures prices on contracts with delivery dates in 2002 and early 2003, also declined in the course of June. In the period between end-May and 3 July, the rates implied in futures prices on contracts with delivery dates in September and December 2002 and March 2003 decreased by 31, 46 and 54 basis points

Box 1
Monetary policy operations and liquidity conditions in the reserve maintenance period ending on 23 June 2002

During the reserve maintenance period under review, the Eurosystem settled four main refinancing operations (MROs) and one longer-term refinancing operation (LTRO).

Regular monetary policy operations

(EUR billions; interest rates in percentages per annum)

Operation	Date of settlement	Date of maturity	Bids (amount)	Allotment (amount)	Bid-cover ratio	Number of participants	Minimum bid rate	Marginal rate	Weighted average rate
MRO	29/05/2002	12/06/2002	114.2	48.0	2.4	386	3.25	3.34	3.35
MRO	05/06/2002	19/06/2002	114.3	65.0	1.8	328	3.25	3.33	3.34
MRO	12/06/2002	26/06/2002	97.5	42.0	2.3	325	3.25	3.31	3.32
MRO	19/06/2002	03/07/2002	112.2	70.0	1.6	339	3.25	3.32	3.33
LTRO	30/05/2002	29/08/2002	37.6	20.0	1.9	198	-	3.45	3.47

Source: ECB.

The marginal rate decreased gradually from 3.34% to 3.31% in the first three MROs of the maintenance period, and increased by one basis point in the last one. The weighted average bid rate in each MRO was one basis point above the respective marginal rate.

During the first week of the maintenance period the EONIA stood at 3.34-3.35%, increasing to 3.36% on 31 May because of the end-of-month effect. From 4 until 10 June it was unchanged at 3.33%. The EONIA then gradually declined, reaching 3.30% on 18 and 19 June. After an increase by two basis points on the following day, it then rose to 3.58% on Friday, 21 June, the last business day of the maintenance period. The period finished with a net recourse to the marginal lending facility of €3.6 billion. Average daily excess reserves amounted to €0.8 billion (i.e. the difference between average current accounts of €131.8 billion and average minimum reserve requirements of €131.0 billion). The slightly higher than usual excess reserves resulted from the maintenance period ending on a Sunday.

The net liquidity-absorbing impact of the autonomous factors, i.e. factors not related to monetary policy operations (item (b) of the table below), was, on average, €40.9 billion. The published estimates of the average liquidity needs stemming from autonomous factors ranged between €37.6 billion and €44.1 billion. The largest deviation between the published estimate and the actual figure occurred in the second week of the maintenance period and amounted to €1.3 billion.

Contributions to the banking system's liquidity

(EUR billions)

Daily average during the reserve maintenance period from 24 May to 23 June 2002

	Liquidity providing	Liquidity absorbing	Net contribution
(a) Monetary policy operations of the Eurosystem	173.1	0.4	+ 172.7
Main refinancing operations	112.6	-	+ 112.6
Longer-term refinancing operations	60.0	-	+ 60.0
Standing facilities	0.5	0.4	+0.1
Other operations	-	-	0.0
(b) Other factors affecting the banking system's liquidity	396.2	437.1	- 40.9
Banknotes in circulation	-	300.8	- 300.8
Government deposits with the Eurosystem	-	45.1	- 45.1
Net foreign assets (including gold)	396.2	-	+ 396.2
Other factors (net)	-	91.2	- 91.2
(c) Credit institutions' holdings on current accounts with the Eurosystem (a) + (b)			131.8
(d) Required reserves			131.0

Source: ECB.

Note: Totals may not add up due to rounding.

respectively, to stand at 3.50%, 3.71% and 3.85% on 3 July.

Long-term government bond yields declined in June

Between the end of May and 3 July 2002, ten-year government bond yields in the euro area and the United States declined by around 20 and 35 basis points respectively, to 5.1% and 4.8% (see Chart 8). As a result, the differential between ten-year government bond yields in the United States and those in the euro area widened by about 15 basis points over this period, standing at close to -30 basis points on 3 July.

In the United States, government bond yields fell sharply across the entire maturity spectrum during June, with short maturities experiencing the largest declines. The most important driving force behind the decline in US bond yields seems to have been flight-to-safety portfolio shifts from stock markets into

the most liquid fixed-income government bonds. At the same time, there was a limited overall change in the real yield on ten-year US inflation-indexed bonds, suggesting that market participants had not significantly changed their views on the average long-term growth prospects for the United States. Owing to these trends, the differential between the yields on ten-year nominal and index-linked bonds narrowed considerably. However, given the current turbulence on the stock markets, the narrowing of this spread, known as the break-even inflation rate, is unlikely to have reflected a decline of a corresponding magnitude in long-term inflation expectations, but seems to be more a reflection of the lower liquidity of the index-linked bonds.

In Japan, the ten-year government bond yield fell by close to 10 basis points between the end of May and 3 July, closing the period at about 1.3%. This decline in long-term bond yields seems to be the consequence of global stock market turbulence and the continued appreciation of the Japanese yen against the US dollar. The decline in long-term bond yields took place despite some signs of improvement in the outlook for the Japanese economy.

Chart 8
Long-term government bond yields in the euro area and the United States

(percentages per annum; daily data)



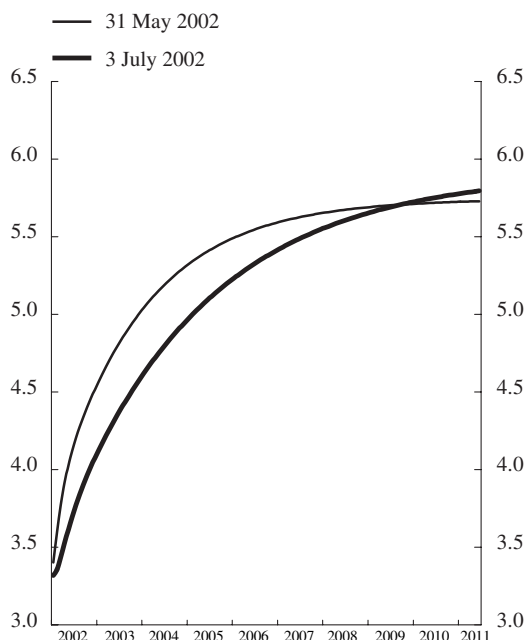
Source: Reuters.

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

In the euro area, government bond yields across the maturity spectrum declined by 20 to 30 basis points during June. By 3 July, the ten-year nominal bond yield had fallen to its lowest level since the end of 2001. However, the real yield on French ten-year bonds indexed to the euro area HICP excluding tobacco only declined slightly between the end of May and 3 July, suggesting a limited change in market participants' average long-term growth expectations for the euro area economy. Consequently, the associated measure of the break-even inflation rate declined by 15 basis points between the end of May and 3 July. In line with developments in the United States, this seems to be mainly a reflection of the impact of portfolio reallocations from stocks into the most liquid fixed-income bonds, rather than of a reduction in inflation expectations.

Chart 9
Implied forward euro area overnight interest rates

(percentages per annum; daily data)



Source: ECB estimate.

Note: The implied forward yield curve, which is derived from the term structure of interest rates observed in the market, reflects the market expectations of future levels for short-term interest rates. The method used to calculate 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.

Considering developments in the euro area yield curve, the implied forward overnight interest rate curve experienced a downturn with regard to short and, in particular, medium-term maturities, while long maturities were little changed from the levels at the end of May (see Chart 9). These changes in the shape of the implied forward yield curve seem to have mainly mirrored the aforementioned flight-to-safety effects which had their largest impact on medium-term yields.

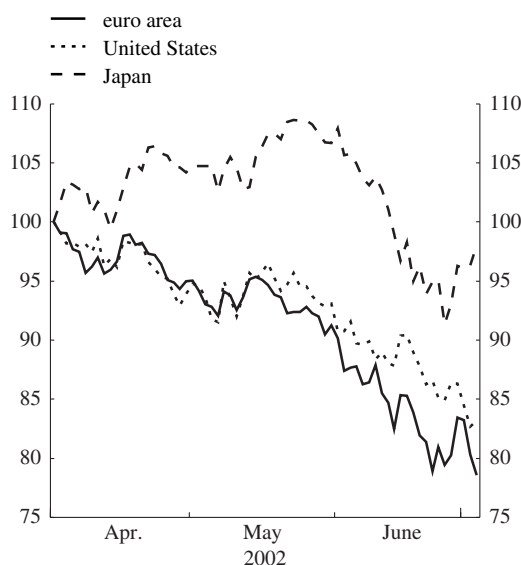
Between the end of May and 3 July, implied bond market volatility increased by around 20 basis points to about 4.7%, reflecting higher uncertainty among market participants about future long-term bond yield movements in the euro area. However, this level of implied volatility was still well below the average levels of recent years.

Sharp decline in global stock prices in June

Against the background of weak corporate profit reports and continuing concern about the reliability of financial accounting information, stock price indices in the major economic regions declined significantly between end-May and 3 July 2002. In particular, stock prices in the euro area, the United States and Japan were subject to sharp drops, almost reaching the lows seen in the aftermath of the terrorist attacks in the United States in September 2001. By 3 July, euro area stock prices, as measured by the broad Dow Jones EURO STOXX index, had fallen by 14% compared with end-May, while the Standard & Poor's 500 index in the United States had fallen by 11% (see Chart 10). All in all, since the latest peak reached in mid-March 2002, stock prices in the euro area and in the United States had dropped by 22% and 18% respectively. In Japan, the Nikkei 225 index fell by 8% between end-May and 3 July, thereby reversing the upward trend seen earlier in the year.

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

(index: 1 April 2002 = 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.

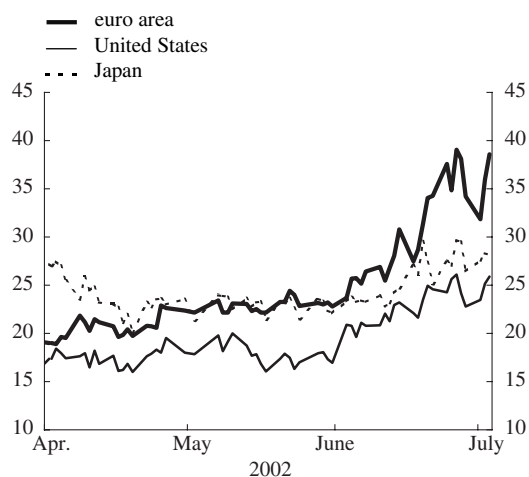
In the United States, broad stock market indices sharpened their declining trend amid weak corporate earnings statements in June. Furthermore, growing concern about the reliability of information disclosed by corporations and further cases of poor corporate governance added to already subdued market sentiment. In parallel with declining stock prices, the implied volatility derived from options on the Standard & Poor's 500 index, rose by 9 percentage points between the end of May and 3 July (see Chart 11), to a level well above the average of the last two years. Although the stock price declines were spread across most sectors, market sentiment regarding growth industries such as the high-technology sectors, where concerns about accounting irregularities were most acute, was particularly pessimistic. This was reflected in a 15% decline in the technology-sensitive Nasdaq Composite index in the period between end-May and 3 July.

In Japan, stock prices, as measured by the Nikkei 225 index, fell to their lowest levels since February 2002 in June. The declines occurred despite indications of improving economic growth prospects in Japan. Their cause seemed to lie mainly in spillover effects, reflecting concerns about accounting irregularities in the United States, especially in the high-technology sector. As in other major markets, uncertainty, measured by implied volatility extracted from options on the Nikkei 225 index, increased between end-May and 3 July, reaching a level close to the average of the past two years.

In the euro area, stock prices, as measured by the broad Dow Jones EURO STOXX index, broadly paralleled the US pattern. However, as has been the case since the global stock market correction began in March 2000, the declines in the euro area

Chart 11
Implied stock market volatility in the euro area, the United States and Japan

(percentages per annum; daily data)



Source: Bloomberg.

Note: The implied volatility series reflect the expected standard deviation of percentage stock price changes over a period of up to three months, as implied in the prices of options on stock price indices. The equity indices to which the implied volatilities refer are the Dow Jones EURO STOXX 50 for the euro area, the Standard & Poor's 500 for the United States, and the Nikkei 225 for Japan.

were larger than those in the United States. In this environment, the implied volatility derived from options on the Dow Jones EURO STOXX index surged by nearly 16 percentage points between end-May and 3 July, to a level markedly above its two-year average. These developments seemed mainly to reflect uncertainties resulting from accounting irregularities in the United States as well as weaker than expected earnings statements and sales forecasts, primarily but not exclusively in the highly indebted telecommunications sector. Although the declines in euro area stock prices during the period between end-May and 3 July were broadly based across all sectors, the telecommunications, technology and financial sectors were those affected most severely.

2 Price developments

HICP inflation in June 2002 estimated to have fallen below 2.0%

HICP inflation is expected to have decreased further in June 2002, as indicated by the flash estimate of 1.7% published by Eurostat (see Table 2). The moderation in oil prices and the appreciation of the euro exchange rate experienced in that month, which led euro-denominated oil prices to decrease by more than 8% in June compared with May 2002, should have contributed to the decline. A further unwinding of the rise in unprocessed food prices at the beginning of the year is

also likely to have contributed. However, no detailed information about the breakdown of HICP developments in June is available at this stage.

For an assessment of how developments in HICP inflation seem to have been perceived by consumers over the past months, as, for example, reported in the results of the Consumer Surveys of the European Commission, see Box 2 entitled "Recent developments in consumers' inflation perceptions".

Table 2

Price and cost developments in the euro area

(annual percentage changes, unless otherwise indicated)

	1999	2000	2001	2001	2001	2002	2002	2002	2002	2002	2002	2002	2002
				Q3	Q4	Q1	Q2	Jan.	Feb.	Mar.	Apr.	May	June
Harmonised Index of Consumer Prices (HICP) and its components													
Overall index ¹⁾	1.1	2.3	2.5	2.4	2.1	2.6	.	2.7	2.5	2.5	2.4	2.0	1.7
<i>of which:</i>													
Goods	0.9	2.7	2.5	2.3	1.7	2.2	.	2.4	2.1	2.0	2.0	1.3	.
Food	0.6	1.4	4.5	5.1	4.7	4.9	.	5.6	4.8	4.2	3.6	2.7	.
Processed food	0.9	1.1	2.8	3.3	3.5	3.5	.	3.8	3.3	3.3	3.2	3.1	.
Unprocessed food	0.0	1.7	7.0	7.9	6.7	7.0	.	8.4	7.1	5.5	4.1	2.1	.
Industrial goods	1.0	3.4	1.5	1.0	0.2	0.9	.	0.9	0.8	1.0	1.2	0.6	.
Non-energy industrial goods	0.7	0.7	1.1	0.9	1.6	1.8	.	1.7	1.9	1.8	1.8	1.7	.
Energy	2.4	13.3	2.7	1.1	-4.1	-2.0	.	-1.8	-2.8	-1.5	-0.5	-2.9	.
Services	1.5	1.7	2.5	2.5	2.8	3.1	.	3.0	3.0	3.2	3.0	3.3	.
Other price and cost indicators													
Industrial producer prices ²⁾	-0.4	5.5	2.1	1.4	-1.0	-0.9	.	-0.8	-1.1	-0.8	-0.8	-0.9	.
Unit labour costs ³⁾	1.4	1.0	2.6	2.5	3.4	.	.	-	-	-	-	-	-
Labour productivity ³⁾	0.9	1.5	0.1	0.2	-0.5	-1.0	.	-	-	-	-	-	-
Compensation per employee ³⁾	2.3	2.6	2.7	2.7	2.9	.	.	-	-	-	-	-	-
Total hourly labour costs ⁴⁾	2.3	3.2	3.4	3.7	3.3	3.7	.	-	-	-	-	-	-
Oil prices (EUR per barrel) ⁵⁾	17.1	31.0	27.8	29.0	22.4	24.6	27.8	22.6	23.5	27.9	29.3	28.1	25.8
Commodity prices ⁶⁾	-5.9	16.7	-7.6	-10.4	-15.6	-3.6	-5.5	-6.5	-4.0	-0.3	-1.4	-6.8	-8.4

Sources: Eurostat, national data, Thomson Financial Datastream, HWWA (Hamburg Institute of International Economics) and ECB calculations.

Note: For periods prior to 2001, HICP data do not include Greece. The other price and cost indicators include Greece for periods prior to 2001.

1) HICP inflation in June 2002 refers to Eurostat's flash estimate.

2) Excluding construction.

3) Whole economy.

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

5) Brent Blend (for one-month forward delivery).

6) Excluding energy. In euro; in ECU up to December 1998. Weighted according to extra-euro area commodity imports.

Box 2

Recent developments in consumers' inflation perceptions

Survey evidence suggests that, over the past two years, consumers have perceived inflation as being higher than it has been in reality. Most notably, in the first half of 2002, overall HICP inflation declined from 2.7% in January to 1.7% in June (Eurostat's flash estimate), while consumers appeared to have the impression that price increases had been rising. Such a situation could be a cause for concern if it persists. If consumers overestimate current price developments, they may be underestimating developments in their real wages and thereby also their purchasing power. This might, for instance, lead to misguided wage demands and sub-optimal consumption decisions. This box starts by presenting an indicator of perceived inflation obtained from the European Commission Consumer Survey (EC survey). Following on from this, recent developments are assessed –with a special focus on possible explanations for the divergence between perceived and actual inflation, as has been observed since mid-2000.

An indicator of perceived inflation

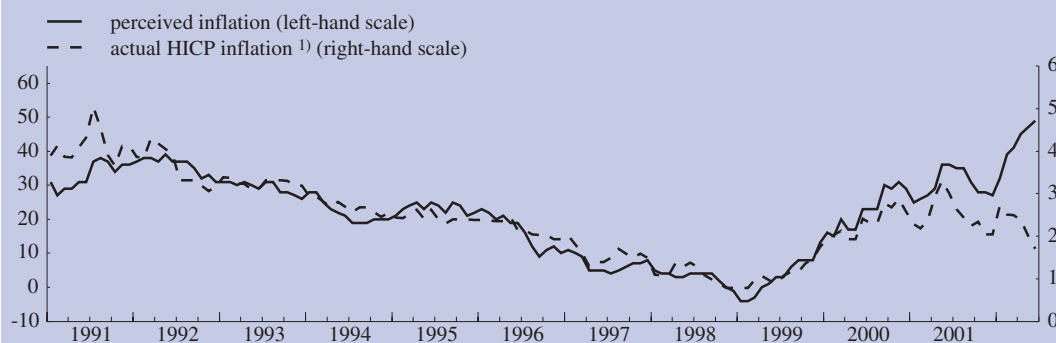
Two questions related to price developments in the euro area are asked in the EC survey. The first question covers consumers' expectations as regards price developments one year ahead, whereas the second concerns their perceptions of price developments over the previous twelve-month period. The EC survey is conducted at a national level on a monthly basis. The participants –approximately 26,000 consumers –are all asked the following question regarding their perceptions of current inflation: “Compared with what it was twelve months ago, do you think the cost of living is now: (i) very much higher, (ii) quite a bit higher, (iii) a little higher, (iv) about the same, (v) lower or (vi) don't know?” The survey results are summarised by the European Commission in the form of a “balance statistic”, computed as the difference (in percentage points) between the proportion of respondents stating that the cost of living was higher and the proportion of respondents stating that the cost of living was lower or unchanged. It should be noted, however, that this measure provides qualitative information on the perceived direction of the change in inflation, and not the actual, quantitative, rate of inflation.

Although actual HICP inflation declined in the first half of 2002, consumers perceived inflation as increasing

The chart depicts consumers' inflation perceptions together with actual HICP inflation from January 1991 to June 2002. It appears that consumers captured actual price developments quite well in their assessment of past inflation developments over most of this period. However, since mid-2000 the evolution of the perceived

Consumers' inflation perceptions and actual HICP inflation

(percentage balances; annual percentage changes; monthly data)



Sources: European Commission Business and Consumer Surveys and Eurostat.

1) Data up to December 1994 are estimates based on national CPIs.

inflation indicator has not been consistent with actual developments in the euro area HICP. Notably, this inconsistency has increased further in the course of 2002, reflecting, on the one hand, the slowdown of actual inflation and, on the other hand, a further increase in the indicator of perceived inflation.

The most plausible explanation behind the divergent developments in actual and perceived inflation over the past two years is that – in completing the survey – consumers attach a very large weight to price developments in the goods and services they buy more frequently (such as food, petrol, etc.). If price developments in these frequently purchased items differ significantly from price developments in products purchased less frequently (such as cars, refrigerators, cameras, etc.), the consequence is that consumers form an unrepresentative picture of the broad consumption basket – from which the HICP weights are derived – and thereby also of the price movements at an aggregate level.

The above explanation finds support if recent actual price developments are scrutinised. Euro area inflation has been hit by a number of adverse price shocks since 1999 (see the box entitled “The clustering of shocks to HICP inflation since the start of Stage Three of EMU” in the June 2002 issue of the Monthly Bulletin). Reflecting the energy price shock in 1999 and most of 2000 (which was reinforced by the depreciation of the euro exchange rate), the annual rate of change in petrol prices increased from -6.1% in December 1998 to 23.8% in March 2000 – in line with the increase in oil prices, which rose from €8.8 to €28.2 per barrel over the same period. Moreover, in 2000 the price of meat started to increase as a result of the health concerns related to cases of BSE in a number of euro area countries. The outbreak of foot-and-mouth disease in some countries and the measures taken in order to prevent a further spread of the disease generated further upward pressures on food prices. In fact, from January to May 2001, when the annual inflation rate peaked at 3.3%, unprocessed food prices were the main factor behind the increase. In the latter half of 2001, when the shock to meat prices began to unwind, unfavourable weather conditions started to exert upward pressures on vegetable prices. In January 2002, vegetable prices were almost 20% higher than they were one year earlier. As regards the euro cash changeover, there is no hard evidence at the aggregate level of any significant price effect. However, prices of certain services, such as restaurants, hairdressing and dry cleaning, rose more than usual during the first half of 2002, which may be related to the introduction of the euro banknotes and coins. For instance, in January 2002 the month-on-month price increase for restaurant services was three times higher (at 1.3%) than the average increase in this month during the period 1996-2001 (0.4%). Stronger than usual price rises in some of these items continued at least until May 2002.

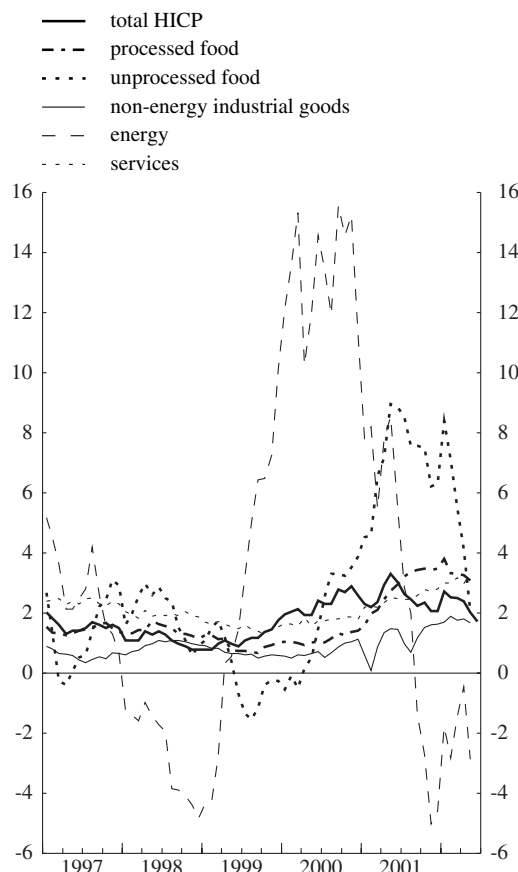
Petrol, meat, vegetables and restaurant services are all good examples of items that are purchased more frequently and, hence, their price developments may be viewed as being particularly important by consumers when they assess developments in inflation. In the light of recent price increases in those items, it is clear why consumers perceived inflation as being higher than it actually was over the last two-year period. Unless new price shocks occur, consumers’ perceptions as regards current price developments should decline again to become more in line with developments in actual inflation. Such convergence is crucial, since it would help prevent consumers from wrongly assessing, for instance, their real wage developments.

In May 2002, the annual rate of HICP inflation in the euro area stood at 2.0%, i.e. 0.4 percentage point lower than in April 2002, mainly as a result of lower annual rates of change in energy and unprocessed food prices. The annual rate of change in the HICP excluding unprocessed food and energy remained at 2.6% for the fifth consecutive month.

The annual rate of decline in energy prices was 2.9% in May 2002, compared with 0.5% in April (see Chart 12). This higher rate of decline reflects a base effect, and, to a lesser extent, the slight moderation in oil prices in May and the appreciation of the euro exchange rate. Unprocessed food prices were 2.1% higher in May 2002 than in May 2001, down from a year-on-year increase of 4.1% in April 2002. This noticeable decline reflects

Chart 12
Breakdown of HICP inflation in the euro area by component

(annual percentage changes; monthly data)



Source: Eurostat.
 Note: For periods prior to 2001, HICP data do not include Greece.

the fact that the pick-up in meat prices in May 2001, as a result of the food-related health concerns, fell out of the annual rate of

change for May 2002. An additional factor behind the decline was the gradual unwinding of upward pressure on vegetable prices resulting from adverse weather conditions in several euro area countries at the beginning of 2002.

The annual rate of change in services prices rose further in May 2002, to 3.3% from 3.0% in April. The highest annual rate of increase was again recorded in the recreation and personal services sub-component (at 4.4%). In particular, package holiday prices made the largest contribution to the increase in the annual rate of change in overall services prices between April and May 2002. However, recent developments in the annual rate of increase in this sub-component seem to reflect extraordinary seasonal developments in some countries. In addition, increases in restaurant and café prices over the past few months have remained above their historical averages, which suggests that they might be partly related to the introduction of the euro banknotes and coins. For a detailed assessment of the recent trends in the services price component of the HICP see Box 3.

In contrast to services prices, the year-on-year rates of change in processed food and non-energy industrial goods prices decreased by 0.1 percentage point to 3.1% and 1.7% respectively, which suggests that the indirect effects of past shocks to these components are gradually unwinding.

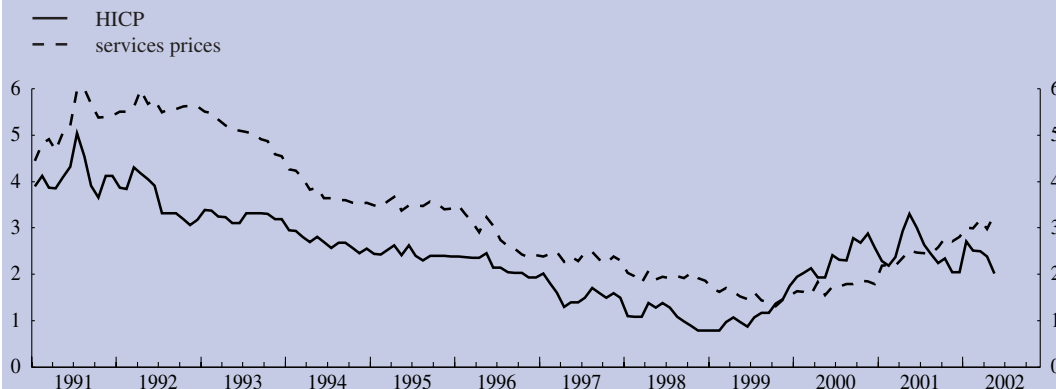
Box 3
Recent developments in services prices in the euro area

By contrast with the other main sub-components of the HICP, the annual rate of change in services prices has continued to increase in recent months. Although services prices, as included in the HICP, comprise a heterogeneous range of items, most activities in the services sector have a sufficiently homogeneous economic structure for price dynamics in services to be considered a meaningful economic concept. Indeed, as services prices account for approximately 40% of the overall HICP and tend to be less volatile than some other components, they are important in the assessment of the medium-term outlook for prices.

Chart A depicts the evolution of services prices and the overall HICP in the euro area from the early 1990s. Although the same broad pattern of falling year-on-year rates of change during most of the 1990s and rising rates around 1999/2000 is observed in both series, there are some important differences. First, during most of the 1990s the annual rate of change in services prices was above that of total HICP inflation. This was due

Chart A: Overall HICP and services prices in the euro area

(annual percentage changes; monthly data¹⁾)



Source: Eurostat.

1) Data up to December 1994 are estimates based on national CPIs.

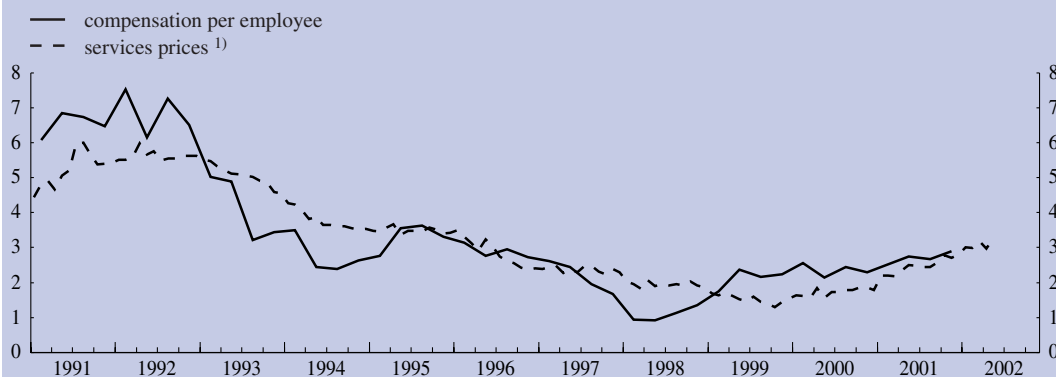
primarily to lower rates of productivity growth in the services sector compared with the goods-producing sector, which – given comparable nominal wage increases in the two sectors – results in higher unit labour cost growth in the services sector. Second, the annual rate of change in the total HICP started to rise before that in services prices, reflecting the more immediate direct impact of oil and exchange rate shocks on the energy component of the HICP, whereas the indirect effects of these shocks on services prices were observed with a lag.

This pattern of falling rates of change in services prices throughout most of the 1990s and rising rates of change from 1999 is observed across most euro area economies and most services sub-sectors. For example, while price levels have fallen in the telecommunications sector as a result of productivity gains stemming from technological advances and market deregulation, the rate of decline has slowed significantly over the past two years. Similarly, while the rate of change in services prices varies to some extent across euro area countries, reflecting, inter alia, convergence in productivity levels and the position of the business cycle, an increase in the rate of change was nonetheless observed in all countries over the past two years. This pattern across sectors and countries suggests that some common factors lie behind recent developments.

The year-on-year rate of change in euro area services prices increased steadily from 1.3% in October 1999 to 3.3% in May 2002. In addition, an upward movement was also observed in the annual rate of change in non-energy industrial goods prices, which increased from 0.5% to 1.7% over the same period. These

Chart B: Services prices and compensation per employee in the euro area

(annual percentage changes; monthly and quarterly data)



Source: Eurostat.

1) Data up to December 1994 are estimates based on national CPIs.

developments suggest that some of the increase in these two components is due to common factors such as the indirect effects of previous oil and exchange rate movements as well as wage developments. Nonetheless, the fact that services prices have accelerated more than goods prices suggests that these factors may have played different roles. In particular, there has been some acceleration in wages since around 1999, which seems to have particularly affected services prices. Chart B depicts the annual rate of change in services prices alongside wage developments in the euro area. Given the relatively large weight of labour costs in the cost structure of service providers, wages (adjusted for productivity growth) are expected to play a major role in the determination of future services price developments. Profitability also plays an important role in explaining price developments in the services sectors. Thus continued product and labour market reform would further contribute to containing price increases in these sectors.

Another factor behind the recent rise in the annual rate of change in services prices appears to be some impact from the cash changeover. This impact seems to be most evident in a number of specific sectors, including restaurants, hairdressing and dry cleaning. Nonetheless, the extent of the cash changeover effect has been relatively limited, and should be temporary.

Looking forward, the annual rate of increase in services prices may ease slightly over the second half of 2002, as the indirect effects of previous shocks unwind. Barring further oil or other price shocks, the outlook thereafter will depend to a large extent on wage developments.

Higher year-on-year rate of decline in producer prices in May 2002

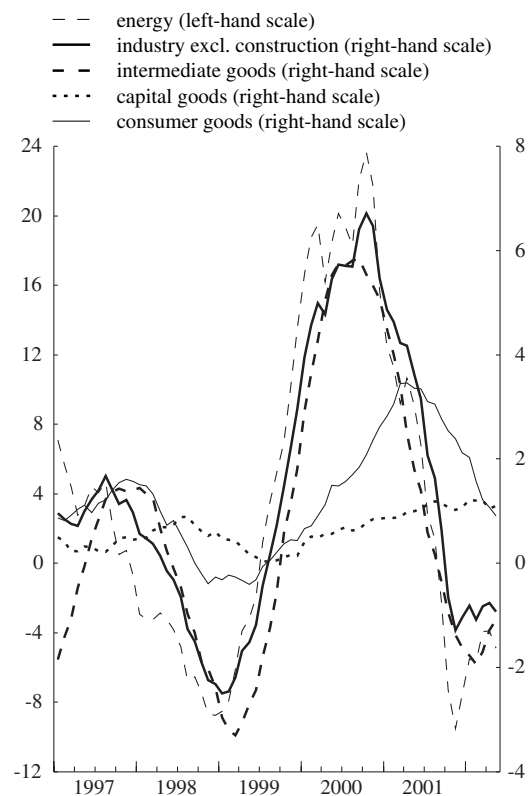
In May, the year-on-year rate of decline in euro area industrial producer prices was 0.9% after 0.8% in April (see Chart 13). This was mainly a result of a higher annual rate of decline in energy prices. Consumer goods prices also contributed to this development, with their annual rate of increase reaching its lowest level in two years, most likely on account of the unwinding of the indirect effects of past import price increases. This has been most notable in the case of non-durable consumer goods prices.

Developments in intermediate goods prices, whose annual rate of decline slowed further in May, seem to reflect the pick-up in commodity prices, particularly oil, between January and April 2002. The year-on-year rate of increase in capital goods prices was also higher in May.

With regard to survey indicators of developments in producer prices, the Eurozone Price Index (EPI) rose further in June 2002, signalling an increase in input prices for the third consecutive month (see Chart 14).

Chart 13
Breakdown of industrial producer prices for the euro area

(annual percentage changes; monthly data)



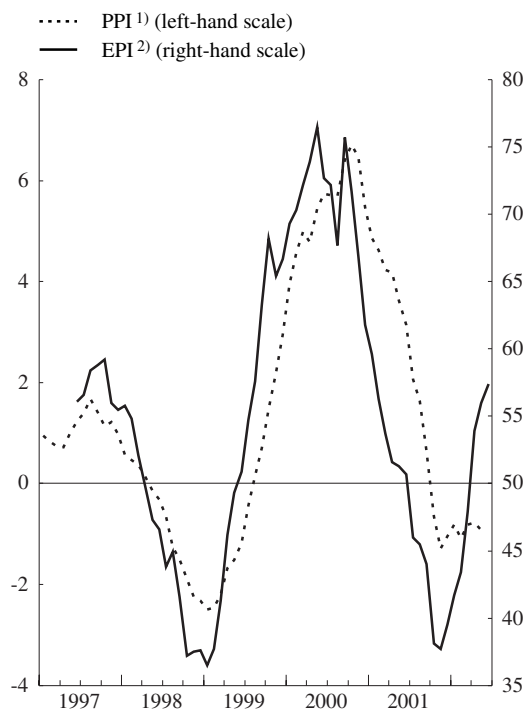
Source: Eurostat.

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

Chart 14

Overall 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.

Labour cost indicators continue to increase

According to the first estimate released by Eurostat, the annual rate of growth in total hourly labour costs in the non-agricultural business sector was 3.7% in the first quarter of 2002, i.e. 0.4 percentage point higher than in the last quarter of 2001. Although this rise may have been influenced by statistical factors in some countries, the rate of growth in hourly labour costs has been rising since the beginning of 2001, in line with developments in other labour cost indicators, such as

compensation per employee and negotiated wages.

The annual rate of change in compensation per employee reached 2.9% in the fourth quarter of 2001, up from 2.7% in the third quarter. Combined with a strong decline in labour productivity, reflecting the weak economic activity, this development led to a 0.9 percentage point rise in the annual rate of change in unit labour costs to 3.4% in the fourth quarter of 2001. For 2001 as a whole, the rate of growth of compensation per employee was 2.7%. Although this was only 0.1 percentage point above the average in the previous year, combined with productivity developments it led unit labour cost growth to average 2.6% in 2001, which is substantially higher than its average of 1.0% for the year 2000.

HICP inflation expected to fluctuate around 2.0% in the short term

The likely fall in annual HICP inflation to below 2.0% in June 2002 cannot, as yet, be interpreted as a signal of receding upward pressure on prices. Rather, annual inflation rates are expected to hover around 2.0% in the coming months, depending mainly on developments in oil prices and the euro exchange rate. The short-term pattern of overall HICP will reflect some unfavourable base effects on the more volatile components of the HICP as well as a, for the time being, limited unwinding of past upward pressures on the HICP excluding energy and unprocessed food prices, particularly in services prices.

Beyond the short term, the recent appreciation of the euro should, if sustained, have some downward impact on consumer price inflation. However, for inflation rates to come down on a sustainable basis, it is crucial that wage increases remain compatible with price stability over the medium term.

3 Output, demand and labour market developments

Real GDP rose in the first quarter of 2002

As reported in the previous issue of the ECB Monthly Bulletin, according to Eurostat's first estimate, euro area real GDP increased by 0.2% quarter-on-quarter in the first quarter of 2002, after declining by 0.3% in the fourth quarter of 2001 (see Table 3). The increase in real GDP was ascribed to a positive net trade contribution which more than offset negative contributions from inventories and final domestic demand. It should be borne in mind that revisions are often made from Eurostat's first to its second estimate, in particular to the contributions to real GDP growth. However, even allowing for the possible size of revisions, final domestic demand was weaker than previously expected, mainly owing to real private consumption. This

may be the result of weak labour market conditions and higher inflation, which adversely affected real disposable income in the early part of this year. According to value-added data, the increase in export growth, induced by the pick-up in growth elsewhere in the world economy, fostered an expansion mainly in the industrial sector.

In April 2002, euro area industrial production (excluding construction) decreased by 0.7% month-on-month (see Table 4). However, the decline in April seems to be due to special factors and should not in itself give cause for concern. Indeed, on a three-month moving average basis, industrial production increased by 0.6% in April, unchanged from March, thus showing a continued expansion. However, as

Table 3
Composition of real GDP growth in the euro area

(percentage changes, unless otherwise indicated; seasonally adjusted)

	Annual rates ¹⁾								Quarterly rates ²⁾				
	1999	2000	2001	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1
Real gross domestic product	2.7	3.5	1.5	2.5	1.6	1.3	0.3	0.1	0.5	0.0	0.1	-0.3	0.2
<i>of which:</i>													
Domestic demand	3.4	3.0	0.8	1.8	1.1	0.7	-0.4	-0.8	-0.1	0.2	-0.2	-0.3	-0.5
Private consumption	3.3	2.5	1.7	1.9	1.7	1.8	1.5	0.3	1.0	0.4	0.1	-0.1	-0.2
Government consumption	2.1	1.9	2.2	2.3	2.4	2.3	1.9	1.3	0.8	0.4	0.2	0.5	0.2
Gross fixed capital formation	5.9	4.7	-0.5	1.6	0.2	-1.7	-2.2	-2.4	-0.4	-0.7	-0.6	-0.5	-0.7
Changes in inventories ^{3), 4)}	-0.2	0.1	-0.5	-0.1	-0.4	-0.4	-1.1	-0.7	-0.7	0.1	-0.2	-0.2	-0.3
Net exports ³⁾	-0.6	0.6	0.7	0.7	0.5	0.7	0.7	0.8	0.6	-0.2	0.3	0.0	0.7
Exports ⁵⁾	5.3	12.2	2.5	7.7	4.5	0.9	-2.8	-1.7	-0.2	-0.8	-0.5	-1.3	0.9
<i>of which: goods</i>	5.0	12.3	2.5	8.3	4.1	1.1	-2.8	.	0.1	-1.3	-0.2	-1.4	.
Imports ⁵⁾	7.4	10.9	0.8	6.1	3.2	-1.0	-4.8	-4.1	-1.9	-0.3	-1.4	-1.3	-1.1
<i>of which: goods</i>	7.3	11.3	0.5	6.4	3.1	-1.5	-5.4	.	-2.6	-0.3	-1.5	-1.2	.
Real gross value added:													
Agriculture and fishing ⁶⁾	2.3	-0.3	-0.7	-0.6	-0.7	-0.8	-0.6	0.8	-1.4	0.1	1.1	-0.4	0.0
Industry	1.4	4.1	0.5	2.7	1.0	0.2	-1.9	-2.1	0.9	-1.0	-0.2	-1.5	0.7
Services	3.1	3.8	2.3	2.9	2.5	2.2	1.7	1.5	0.6	0.4	0.4	0.3	0.4

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.

Table 4**Industrial production in the euro area***(annual percentage changes, unless otherwise indicated)*

	2000	2001	2002			2002			2001			2002		
			Feb.	Mar.	Apr.	Feb.	Mar.	Apr.	Nov.	Dec.	Jan.	Feb.	Mar.	
			month-on-month			three-month moving averages								
Total industry excluding construction by main industrial groupings:	5.5	0.2	-3.3	-2.3	-1.2	0.0	0.8	-0.7	-1.8	-1.5	-0.4	0.6	0.6	
Total indus. excl. construction and energy ¹⁾	6.0	0.0	-4.0	-2.7	-1.7	0.3	0.4	-0.2	-2.5	-2.3	-0.5	0.7	0.9	
Intermediate goods	6.0	-0.9	-2.8	-0.5	-0.5	1.5	1.3	-1.1	-2.5	-2.3	-0.2	2.4	3.1	
Capital goods	9.3	1.2	-7.8	-6.8	-3.3	-0.7	0.0	0.6	-2.3	-2.6	-1.9	-1.3	-0.8	
Consumer goods	2.3	0.1	-1.4	-1.7	-1.6	1.3	-0.7	0.4	-1.9	-1.7	-0.6	-0.3	0.3	
Durable consumer goods	6.2	-2.7	-7.1	-8.0	-6.5	-0.6	-1.8	0.8	-2.8	-2.0	-0.2	-1.1	-1.7	
Non-durable consumer goods	1.6	0.7	-0.2	-0.3	-0.6	1.6	-0.5	0.4	-1.7	-1.6	-0.7	-0.1	0.7	
Energy	1.6	0.9	1.3	1.0	3.0	-0.4	0.9	-0.4	0.8	2.0	1.9	0.4	-0.3	
Manufacturing	5.9	0.1	-4.0	-3.3	-1.2	0.5	0.2	0.4	-2.2	-2.2	-0.8	0.5	1.1	

*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).**1) Manufacturing excluding the manufacture of coke and refined petroleum products, but including non-energy mining and quarrying activities.*

regards the main industrial groupings, the upturn in recent months does not yet appear to be broadly based. In particular, the durable consumer goods sector is not yet showing clear signs of recovery. By contrast, output in the capital goods sector increased month-on-month in April, after having been

unchanged in March, although it still declined on a three-month moving average basis. In the intermediate goods sector, production declined in April for the first time since December 2001, but on a three-month moving average basis the increase in growth rates continued.

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

	1999	2000	2001	2001		2002		2002		2002		2002	
				Q3	Q4	Q1	Q2	Jan.	Feb.	Mar.	Apr.	May	June
Economic sentiment index ¹⁾	-0.2	2.6	-2.7	-1.3	-1.4	0.4	0.4	0.2	0.1	0.3	-0.1	0.5	-0.3
Consumer confidence indicator ²⁾	7	12	6	3	0	1	2	0	2	2	1	3	2
Industrial confidence indicator ²⁾	0	12	-1	-3	-10	-6	-3	-7	-7	-4	-4	-2	-3
Construction confidence indicator ²⁾	14	21	15	13	11	9	9	8	10	9	8	11	9
Retail trade confidence indicator ²⁾	0	5	-1	-1	-4	-9	-10	-6	-10	-10	-10	-10	-11
Services confidence indicator ²⁾	5	8	-7	-8	-26	-18	-15	-21	-19	-13	-14	-14	-18
Business climate indicator ³⁾	-0.1	1.3	-0.1	-0.4	-1.1	-0.8	-0.4	-1.0	-0.9	-0.6	-0.6	-0.2	-0.4
Capacity utilisation (%) ⁴⁾	81.9	83.9	82.8	82.4	81.3	80.8	.	80.8	-	-	80.7	-	-

*Sources: 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 April 1995 for the services confidence indicator, since July 1986 for the retail trade confidence indicator, and since January 1985 for the other confidence indicators.**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.*

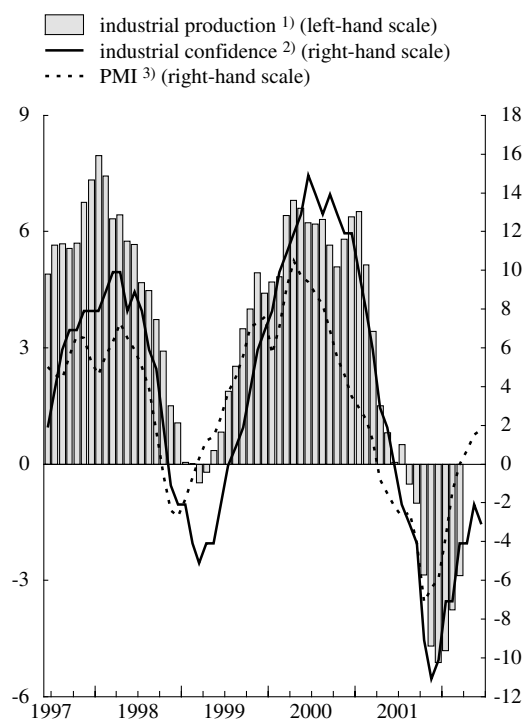
Business confidence suggests continued growth in the second quarter

Business survey data generally strengthened from the first to the second quarter. At the same time, however, the uneven monthly pattern of the various indicators still points to uncertainty concerning the strength of the recovery.

As regards the manufacturing sector, in June 2002 the Purchasing Managers' Index (PMI) for the euro area manufacturing sector continued to improve, rising to 51.8 (see Chart 15). The PMI was consistently above

the threshold level for signalling an expansion of manufacturing production in the second quarter of 2002. However, the PMI increased at a slower rate in the second quarter than in the first quarter of 2002. According to the latest European Commission Business and Consumer Surveys, euro area industrial confidence increased from the first to the second quarter, although it declined slightly in June (see Table 5). Furthermore, the rate of increase in this indicator in the second quarter of 2002 is lower than it was in the first quarter. All components relating to production expectations, assessment of order books and stocks improved from the first to the second quarter. This pattern of general improvement in business activity and orders is also shown by the PMI data.

Chart 15
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: Where 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 deviations indicate an expansion of economic activity.

The latest data on services confidence confirm the picture arising from the survey data on the manufacturing sector. According to the European Commission Business and Consumer Surveys, confidence in the services sector increased from the first to the second quarter, but remained unchanged in May and decreased in June. This decline was due, in particular, to a decrease in expected demand.

Evidence from household spending indicators remains mixed

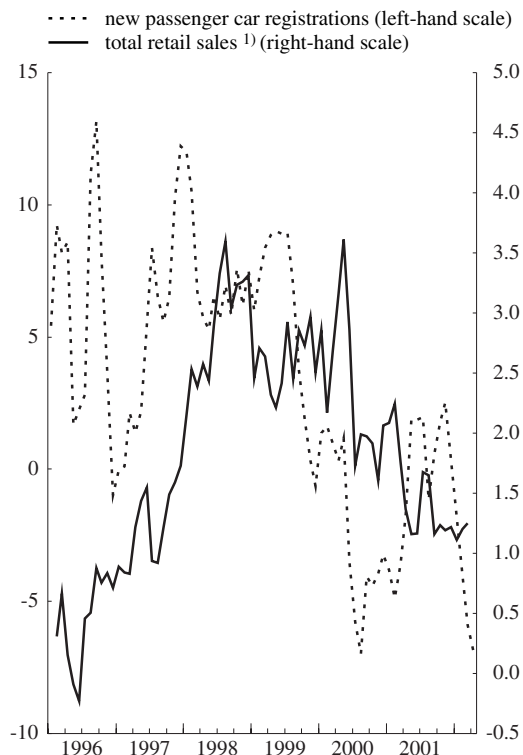
The evidence from indicators of private consumption in the second quarter of 2002 remains mixed.

Euro area retail sales volumes decreased by 0.6% month-on-month in April 2002, having risen in March and February. In the three-month period up to April, compared with the three-month period up to January, growth in retail sales was 0.3%, down further from the rate of growth in the first quarter of 0.5%. New passenger car registrations increased by 2.3% month-on-month in May 2002, the first increase after five consecutive months of decline. However, on a three-month moving average basis, car registrations continued to decline (see Chart 16).

Chart 16

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.

The European Commission Business and Consumer Survey data indicate that consumer confidence, although decreasing in June, improved slightly in the second quarter of 2002. This improvement was mainly due to a more positive assessment of the future general economic situation. However, the expected financial situation of consumers

continued to deteriorate slightly in the second quarter, and there is still no clear turnaround detectable in this component. Confidence in the retail trade sector declined marginally from the first to the second quarter. There is therefore no sign as yet of a turnaround in confidence in this sector.

Continued uncertainty as regards the strength of the recovery

Recent indicators of developments in economic activity suggest that real GDP growth was somewhat higher in the second quarter than in the first quarter. However, there still remains some uncertainty as to the strength of the recovery in the short term, especially in relation to domestic demand. Looking further ahead, the most likely scenario is a continued, gradual strengthening of economic activity over the course of the year to levels around potential towards the end of the year. The decrease from high rates of inflation after the first quarter of 2002 should underpin an increase in real disposable income and thereby real private consumption growth. In addition, other supporting factors are an expected reversal of destocking, the absence of major imbalances in the euro area and very favourable financing conditions. Despite this positive outlook, future oil price developments and the existing economic imbalances elsewhere in the world economy remain elements of risk in the medium term. The recently adopted Broad Economic Policy Guidelines 2002 aim, inter alia, to strengthen the macroeconomic framework and to foster job creation (see Box 4).

Box 4

The Broad Economic Policy Guidelines 2002

Following the endorsement by the European Council in Seville on 21 and 22 June 2002, the Broad Economic Policy Guidelines (BEPGs) for 2002 were formally adopted by the ECOFIN Council. The BEPGs are addressed to EU Member States and the Community as a whole and lay down both general and country-specific guidelines for economic policies.

This year's BEPGs highlight four key challenges: to safeguard and further strengthen the macroeconomic framework, to promote more and better jobs, to strengthen conditions for high productivity growth and to promote sustainable development in the interest of current and future generations. To meet these challenges, it is of great importance that the EU Member States respect the targets agreed both for fiscal consolidation and for structural policy reforms. The main general recommendations are mentioned below.

Ensure growth- and stability-oriented macroeconomic policies

Member States should achieve and preserve a sound budgetary position as agreed in the Stability and Growth Pact. In particular, Member States with remaining imbalances should step up efforts to achieve budgetary positions close to balance or in surplus as soon as possible and at the latest by 2004. All Member States should ensure that tax reforms are financed appropriately, avoid pro-cyclical fiscal policies and allow automatic stabilisers to operate in full as the recovery gets under way. Public finances should be strengthened, with a view to securing their long-term sustainability prior to the demographic changes taking hold.

According to the BEPGs, it is necessary for nominal wages to be consistent with price stability and for real wage increases not to exceed labour productivity growth. In addition, wage developments in Member States have to reflect different economic and employment situations. National labour institutions and collective bargaining systems, respecting the autonomy of social partners, should be designed in such a way as to take into account local labour market conditions.

Improve the quality and sustainability of public finances

Member States should make tax and benefit systems more employment-friendly and, where appropriate, reduce the overall tax burden while continuing with fiscal consolidation. They are asked to pursue targeted reforms of the tax and benefit systems, especially with respect to low-wage labour. They should redirect public expenditure towards physical and human capital accumulation and research and development and enhance the efficiency of public spending by institutional and structural reforms.

In order to improve the long-term sustainability of public finances, Member States should pursue a comprehensive three-pronged strategy, based on actions to raise employment rates, a reduction in public debt and adapting pension systems. They should also pursue tax co-ordination further so as to avoid harmful tax competition.

Invigorate labour markets

Member States are asked to "vigorously implement" the Employment Guidelines adopted by the Council in January 2002.¹ In particular, they are asked to adapt tax and benefit systems to make work pay, encourage job search and reduce incentives for early retirement. They should improve the efficiency and effectiveness of active labour market policies and target these towards individuals most prone to the risk of long-term

1 For details on the 2002 Employment Guidelines, see Box 4 of the January 2002 issue of the ECB Monthly Bulletin.

unemployment. In addition, they should facilitate occupational mobility through training, reskilling and better lifelong learning and bring down obstacles to labour mobility within and between Member States.

In collaboration with social partners, Member States are urged to promote more flexible work organisation and review employment contract regulations. They should remove existing barriers to female labour participation and address the underlying factors that lead to gender pay gaps.

Reignite structural reform in product markets

Member States are asked to increase the transposition rate of internal market directives and pursue more vigorously the elimination of remaining barriers to trade and market entry. They should open up further and render more transparent public procurement markets, ensure independence and adequate capacity of the competition and regulatory authorities and reduce and redirect state aid towards identified market failures.

Furthermore, Member States are asked to accelerate the liberalisation of the network industries. In particular, they should fully implement the new communications regulatory package by July 2003. As regards electricity and gas, they should ensure freedom of choice of supplier as of 2004 for all non-household consumers and establish a national regulatory function. Member States are also urged to agree on a transparent and non-discriminatory tariff system for cross-border electricity transactions and to ensure a minimum level of interconnection capacity between Member States by 2005. As regards transport, they are urged to make immediate decisions on European Commission proposals concerning airport slot allocation, port services and public services contracts, open the trans-European rail freight network to competition by early 2003 and consider measures to create a “Single Sky” by 2004.

Promote the efficiency and integration of the financial services market

In order to move towards a truly single market for financial services in Europe, all relevant parties – the Council, the European Parliament and the Commission – will need to ensure full implementation of the Financial Services Action Plan by 2005. In particular, they will need to implement the securities market legislation by 2003. They are also urged to step up efforts to implement the Risk Capital Action Plan by 2003. The BEPGs highlight the need to further improve arrangements to deliver efficient cross-border and cross-sector co-operation and co-ordination for prudential supervision and to strongly encourage the removal of barriers to efficient cross-border clearing and settlement systems.

Encourage entrepreneurship

Member States are urged to create a business-friendly environment, improving and simplifying the corporate tax system and regulatory environment and increasing the efficiency of public services. They should reduce barriers to cross-border economic activity associated with, among other things, differences in accounting standards, rules of corporate governance, business taxation and VAT. They should also encourage risk-taking through improved access to finance for small and medium-sized enterprises.

Foster the knowledge-based economy

Member States are invited to develop framework conditions conducive to raising EU research and development spending to 3% of GDP by 2010, with two-thirds of this coming from the private sector. They are also invited to improve ties between universities and business, enhance collaboration on research and innovation across Europe and adopt the sixth Research Framework Programme. In order to promote access to and use of information and communications technology, Member States are asked to implement the unbundling of the telephone “local loop”, thus speeding up the development of the broadband network, and stimulate internet use.

Enhance environmental sustainability

According to the BEPGs, market-based environmental policies should be used more extensively, for example taxation, user and polluter charges, insurance/liability schemes and tradable emission rights. By contrast, sectoral subsidies and tax exemptions with negative environmental impact should be reduced. Member States are asked to take appropriate measures and have in place monitoring and verification procedures to meet their Kyoto Protocol obligations. They are invited to agree on an appropriate framework for energy taxation at the European level and to continue to implement measures targeted at energy use. Finally, they should encourage the disclosure of environmental information in the annual accounts of companies and should provide environmental impact analysis of all policy measures.

Unemployment rate unchanged in May 2002

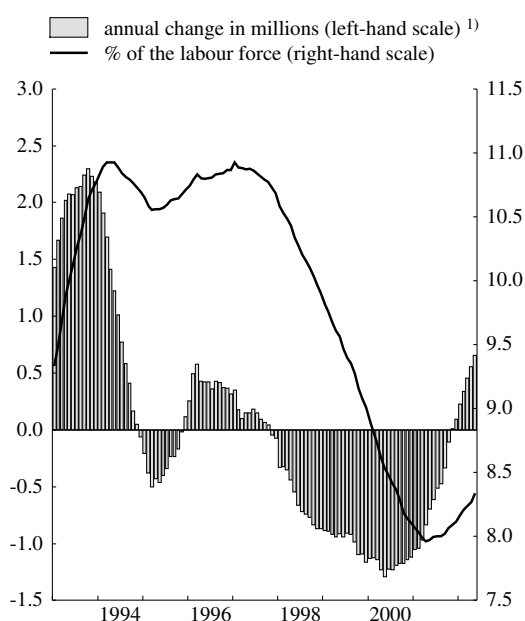
In May 2002 the standardised rate of unemployment in the euro area stood at 8.3%, i.e. unchanged compared with the previous month (see Table 6). However, the number of unemployed increased in May by around 100,000 compared with the previous month, higher than the month-on-month changes in the first quarter of the year and in April, which stood at around 60,000 and 50,000 respectively. Recent developments continue to point to an increase in the euro area unemployment rate in the first half of this year (see Chart 17).

In terms of the breakdown by age, the unemployment rate of those under 25 years of age increased in May by 0.2 percentage point, to 16.5%, while for those aged 25 and above the unemployment rate rose by 0.1 percentage point, to 7.3%. The rate of unemployment in the former group, which is usually more affected by cyclical developments, has increased by 0.5 percentage point since December 2001,

Chart 17

Unemployment in the euro area

(monthly data; seasonally adjusted)



Source: Eurostat.

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

1) Annual changes are not seasonally adjusted.

while for those aged 25 and above the increase has been 0.2 percentage point. At

Table 6

Unemployment in the euro area

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

	1999	2000	2001	2001	2001	2001	2002	2001	2002	2002	2002	2002	2002
				Q2	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.	Apr.	May
Total	9.4	8.5	8.0	8.0	8.0	8.1	8.2	8.1	8.2	8.2	8.2	8.3	8.3
Under 25 years ¹⁾	18.5	16.6	15.7	15.6	15.7	15.9	16.2	16.0	16.1	16.2	16.3	16.3	16.5
25 years and over	8.2	7.4	7.0	7.0	7.0	7.1	7.2	7.1	7.1	7.2	7.2	7.2	7.3

Source: Eurostat.

Notes: In accordance with ILO recommendations. Data refer to the Euro 12 (including periods prior to 2001).

1) In 2001 this category represented 22.9% of total unemployment.

the national level, although the unemployment rate rose in only a few countries in May, the number of unemployed continued to increase in most countries.

Employment growth fell in the first quarter of 2002

According to national accounts data, employment in the euro area recorded a quarter-on-quarter growth rate of 0.1% in the first quarter of 2002 (see Table 7), i.e. 0.1 percentage point lower than the rate in the previous quarter (which has been revised downwards by 0.1 percentage point to 0.2%). The slightly revised pattern of recent employment developments is in line, however, with the expected lagged effects of the past downturn in economic activity.

National accounts data on employment at the sectoral level for the euro area show that a slight deterioration in the first quarter of 2002 was common to all sectors. The quarter-on-quarter employment growth in

industry excluding construction was -0.4%, compared with -0.3% in the previous quarter. This is consistent with the development of industrial activity at the end of 2001. Employment in construction remained broadly stable compared with the previous quarter after an improvement in the last quarter of 2001. In the services sector, which is the only sector that contributed positively to the net job creation recorded in the first quarter of 2002, employment growth fell to 0.3% from 0.5% in the fourth quarter of 2001. The finance and business sub-sector continued to sustain the positive employment developments in services, while employment in trade and transport continued to slow down. Employment expectations for the euro area, according to the European Commission Business and Consumer Surveys and the Purchasing Managers' Survey up to June, point to lower employment growth in both the construction and services sectors in the second quarter of 2002. By contrast, employment expectations in manufacturing have improved since reaching a trough in the first quarter of 2002.

Table 7
Employment growth in the euro area

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

	1999	2000	2001	2001	2001	2001	2001	2002	2001	2001	2001	2001	2002
				Q1	Q2	Q3	Q4	Q1	Q1	Q2	Q3	Q4	Q1
	Quarterly rates ¹⁾												
Whole economy	1.7	2.1	1.4	1.9	1.4	1.2	1.0	0.8	0.3	0.2	0.2	0.2	0.1
<i>of which:</i>													
Agriculture and fishing ²⁾	-3.0	-1.4	-1.2	-0.1	-0.6	-1.7	-2.3	-2.9	0.1	-0.6	-1.2	-0.6	-0.5
Industry	0.3	1.0	0.6	1.2	0.8	0.4	-0.1	-0.5	0.2	-0.1	-0.1	-0.1	-0.3
Excluding construction	-0.1	0.7	0.5	1.3	0.7	0.3	-0.3	-0.8	0.1	-0.1	-0.1	-0.3	-0.4
Construction	1.3	1.9	0.7	0.9	0.9	0.6	0.4	0.1	0.3	0.0	-0.1	0.2	-0.0
Services	2.6	2.8	1.9	2.4	1.8	1.8	1.7	1.7	0.3	0.4	0.5	0.5	0.3
Trade and transport ³⁾	2.4	2.8	1.4	1.8	1.2	1.4	1.3	1.5	-0.0	0.2	0.7	0.4	0.2
Finance and business ⁴⁾	5.6	6.0	4.0	5.0	4.0	3.7	3.4	3.1	1.0	0.6	1.0	0.8	0.7
Public administration ⁵⁾	1.4	1.3	1.4	1.6	1.5	1.4	1.2	1.2	0.3	0.4	0.2	0.3	0.3

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) Also includes repairs, communication, hotels and restaurants.

4) Also includes real estate and renting services.

5) Also includes education, health and other services.

4 Exchange rate and balance of payments developments

Euro appreciated further in June 2002

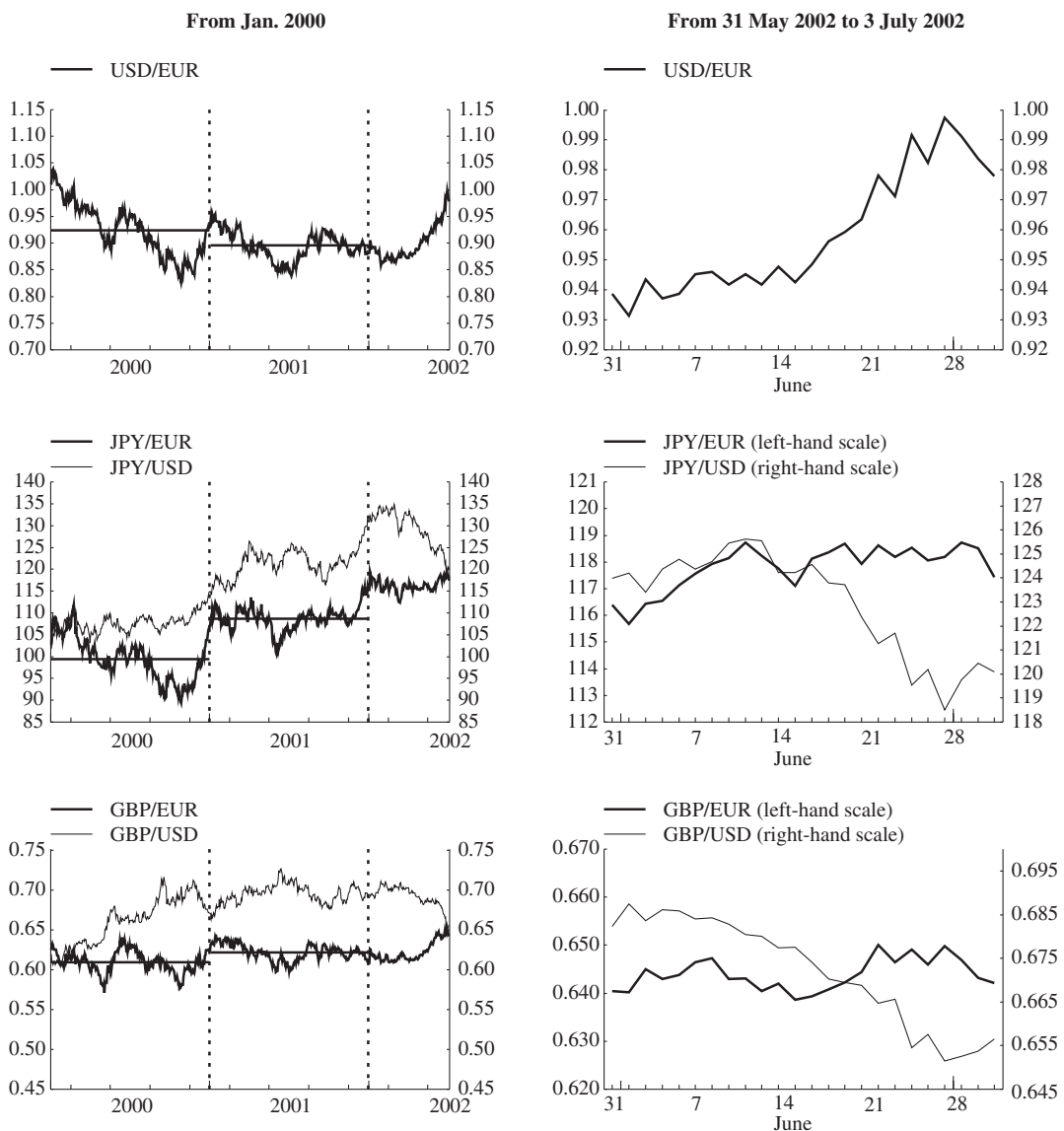
In June 2002 the foreign exchange markets were characterised by a continued depreciation of the US dollar against all major currencies. The weakness of the US currency – which seemed to be increasingly

driven by a growing awareness among market participants of the large US current account deficit as well as concerns related to accounting standards and corporate profits in the United States – was particularly pronounced vis-à-vis the euro. At the same time, the euro also appreciated against almost

Chart 18

Patterns in exchange rates

(daily data)



Source: ECB.

Note: The scaling of the charts is comparable in each column. Horizontal lines show annual averages.

all other currencies of the euro area's major trading partners. Overall, in nominal effective terms, on 3 July the euro was 1.8% stronger than it had been at the end of May.

In June the US dollar continued to depreciate in the wake of data releases suggesting that the US economy could be growing at a slower pace than financial markets had previously anticipated. In addition, the release of a widening US current account deficit for April 2002, together with expectations that the US Federal Budget will switch from a surplus to a deficit in the course of 2002, was also seen as exerting downward pressure on the dollar. These pressures were repeatedly amplified by weaknesses in the US equity markets that followed more widespread concerns in June regarding accounting practices and corporate profitability in the United States. The movement of the US dollar was particularly pronounced against the euro, which, in June also benefited from a widening of the long-term interest rate differential in favour of the euro area since early May. The decision by the US Federal Reserve to leave interest rates unchanged at its meeting on 26 June was widely anticipated and did not affect dollar exchange rates. On 3 July the euro was quoted at USD 0.98, 4.2% higher than at the end of May and 9.2% above its average value in 2001.

After an initial depreciation in the first two weeks of June, the Japanese yen fluctuated in a relatively narrow range against the euro for the remainder of the reference period (see Chart 18). Against the US dollar, following an initial mild depreciation, the Japanese currency encountered gradually increasing upward pressure. This development not only reflected the general climate of dollar weakness but was also associated with some positive signs that the Japanese economic downturn may have bottomed out, a view that was further consolidated by data showing a widening of the Japanese trade surplus in April 2002. As in the previous month, these movements continued to trigger interventions by the Bank of Japan on the foreign exchange market seeking to moderate the pace of the

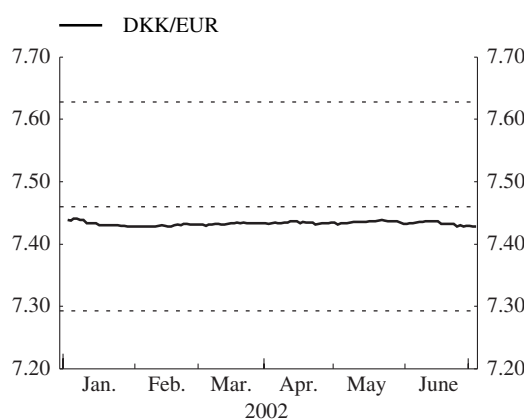
yen's appreciation. The ECB was involved in one such operation, acting on behalf of the Bank of Japan. On 3 July the euro stood at JPY 117, about 1% stronger than its level at the end of May and 8.1% above its 2001 average.

In the period under review, the pound sterling traded within a fairly narrow range against the euro of GBP 0.64–0.65, but rose significantly against the US dollar. The appreciation of the pound sterling against the US currency appeared to be related to the gradual widening of the long-term interest rate spread between the United Kingdom and the United States. On 3 July the euro was trading against the pound sterling at GBP 0.64, unchanged from its end of May level and around 3.3% above its 2001 average.

As far as other European currencies are concerned, in June and in the first few days of July the Danish krone moved close to its central parity within ERM II (see Chart 19). Meanwhile, the euro remained broadly unchanged against the Swedish krona and the Swiss franc.

The nominal effective exchange rate of the euro, as measured against the currencies of 12 important trading partners of the euro area, appreciated in the period under

Chart 19
Patterns of exchange rates within ERM II
(daily data)

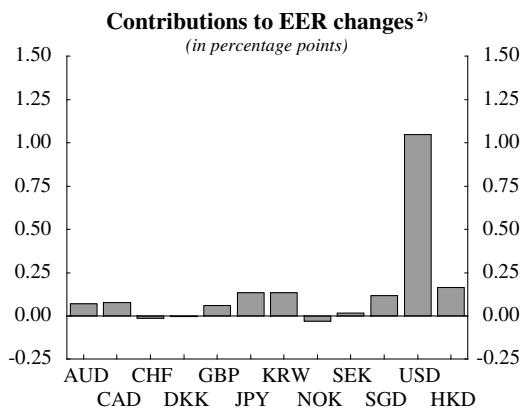
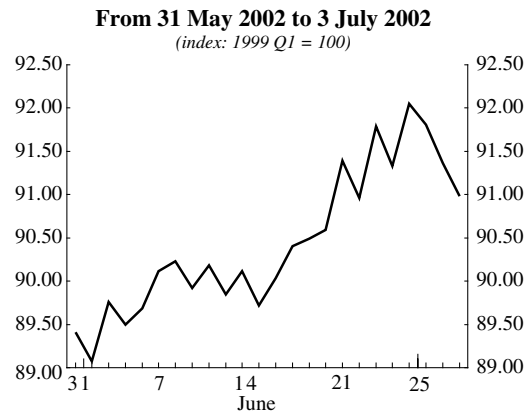


Source: ECB.
Note: The horizontal lines indicate the central parity (DKK 7.46) and the fluctuation bands ($\pm 2.25\%$ for DKK).

Chart 20

The effective euro exchange rate and its decomposition¹⁾

(daily data)



Source: ECB.

1) An upward movement of the index represents an appreciation of the effective exchange rate against 12 partner currencies.

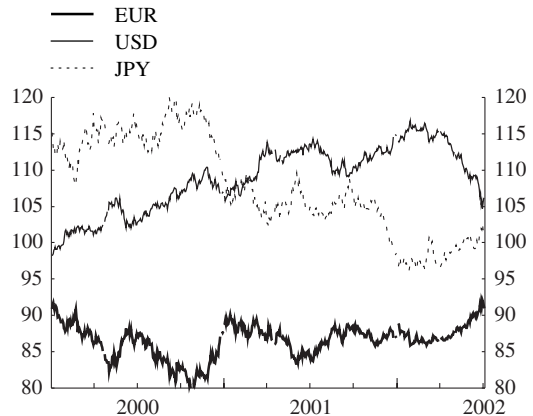
2) Changes are calculated using trade weights against 12 major trading partners.

consideration, to stand 1.8% higher on 3 July than at the end of May (see Chart 20). On 3 July the nominal effective exchange rate of the euro was 4.6% above its average level in 2001 (see Chart 21). Chart 21 also illustrates the developments in the nominal effective exchange rate indices of the US dollar and the Japanese yen, as measured against 12 important trading partners of the respective economic areas. Where the US dollar is concerned, its nominal effective index showed a further depreciation in the reference period to a level clearly below the 2001 average. At the same time, the Japanese yen index appreciated slightly but remained at a lower level than its average in 2001.

Chart 21

Effective exchange rates of the euro, the US dollar and the Japanese yen¹⁾

(daily data; index: 1999 Q1 = 100)



Source: ECB.

1) An upward movement of the indices represents an appreciation of the effective exchange rate against 12 partner currencies.

Current account deficit decreased in April 2002

In April 2002 the euro area current account deficit fell to €5.8 billion, down from €6.7 billion in April 2001 (see Table 8). This development was the result of an increase in the goods surplus (up from €3.1 billion to €8.2 billion), offsetting increases in the deficits of current transfers (up by €1.5 billion) and income (up by €0.9 billion), and a shift in services from a surplus of €1.6 billion to a small deficit of €0.1 billion. The year-on-year increase in the goods surplus was due to a combination of lower imports and higher exports in April compared with the same period last year. In April exports increased on a year-on-year basis for the first time since October 2001.

Developments in the goods surplus were also behind the fall in the cumulated current account deficit, down from €17.2 billion in the first four months of 2001 to €1.5 billion over the same period in 2002. More specifically, during this period the goods surplus rose from €8.6 billion to €29.2 billion, overcompensating for the increase in the deficits in services and current transfers, up by €3.0 billion and €2.2 billion

respectively. The income deficit decreased slightly (by €0.3 billion).

Looking at month-on-month developments on the basis of seasonally adjusted data, the values of exports and imports of goods declined in April 2002, compared with the previous month, by 7.9% and 7.7%

respectively, reversing the increases observed in February and March (see Chart 22). A large part of the downward movement in April with respect to March can, however, be explained by the exceptionally high values of exports and imports in March; the decrease in export and import values in April with respect to

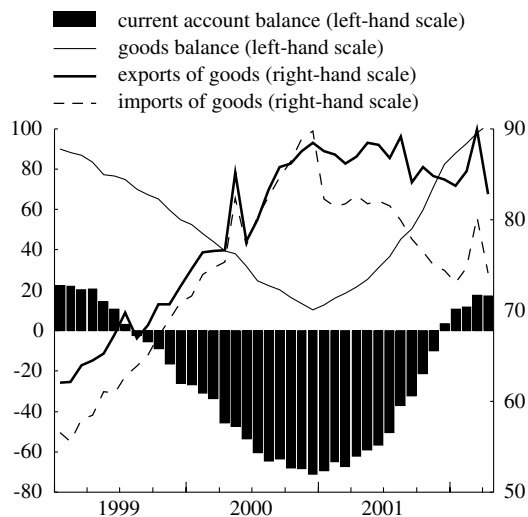
Table 8
Balance of payments of the euro area

(EUR billions; not seasonally adjusted)

	2001 Jan. - Apr.	2001 Apr.	2002 Jan. - Apr.	2002 Feb.	2002 Mar.	2002 Apr.
Current account balance	-17.2	-6.7	-1.5	2.1	3.7	-5.8
Credits	562.1	138.7	539.5	128.3	137.3	136.1
Debits	579.3	145.4	541.0	126.2	133.6	141.9
Goods balance	8.6	3.1	29.2	8.2	10.8	8.2
Exports	338.1	83.6	332.1	80.6	89.1	86.1
Imports	329.5	80.5	302.9	72.4	78.3	77.9
Services balance	-3.4	1.6	-6.4	-2.4	-1.2	-0.1
Exports	95.0	26.3	95.0	21.6	24.0	25.8
Imports	98.4	24.6	101.4	24.0	25.3	25.9
Income balance	-16.1	-7.0	-15.8	-0.1	-1.1	-7.9
Current transfers balance	-6.3	-4.5	-8.5	-3.6	-4.8	-6.0
Capital account balance	5.1	2.2	4.2	0.2	0.2	1.3
Financial account balance	42.2	11.7	-13.4	5.8	19.6	-1.1
Direct investment	-39.8	0.8	-3.7	-9.9	-5.9	7.7
Abroad	-72.2	-6.8	-44.6	-20.0	-13.2	-6.6
Equity capital and reinvested earnings	-35.9	-9.4	-29.1	-4.9	-14.9	-3.0
Other capital, mostly inter-company loans	-36.3	2.6	-15.5	-15.1	1.7	-3.6
In the euro area	32.4	7.6	40.8	10.1	7.3	14.3
Equity capital and reinvested earnings	31.5	2.8	23.1	3.1	6.7	6.7
Other capital, mostly inter-company loans	0.8	4.9	17.7	6.9	0.5	7.6
Portfolio investment	-57.7	-19.2	-31.5	-9.9	8.1	11.5
Equities	-15.8	-5.4	-0.9	0.7	4.2	-0.7
Assets	-45.5	-16.4	-31.4	-6.1	-8.3	-3.0
Liabilities	29.7	11.0	30.4	6.8	12.5	2.3
Debt instruments	-41.9	-13.8	-30.6	-10.5	3.9	12.2
Assets	-58.1	-4.3	-39.5	-5.1	-13.8	-5.6
Liabilities	16.2	-9.5	8.9	-5.4	17.7	17.8
Memo item:						
Combined net direct and portfolio investment	-97.5	-18.4	-35.2	-19.8	2.2	19.3
Financial derivatives	-0.4	1.7	-1.4	1.3	-5.4	2.1
Other investment	123.6	21.4	17.9	21.7	22.9	-30.8
Reserve assets	16.5	7.0	5.3	2.5	-0.2	8.3
Errors and omissions	-30.1	-7.1	10.6	-8.1	-23.5	5.6

Source: ECB.

Notes: Figures may not add up due to rounding. For the financial account, a positive sign indicates an inflow, a negative sign an outflow; for reserve assets, a negative sign indicates an increase, a positive sign a decrease. Revisions to data for third and fourth quarters of 2001 are reported in the February 2002 Balance of Payments press release. A detailed set of tables on Euro 12 balance of payments data can be found on the ECB's website.

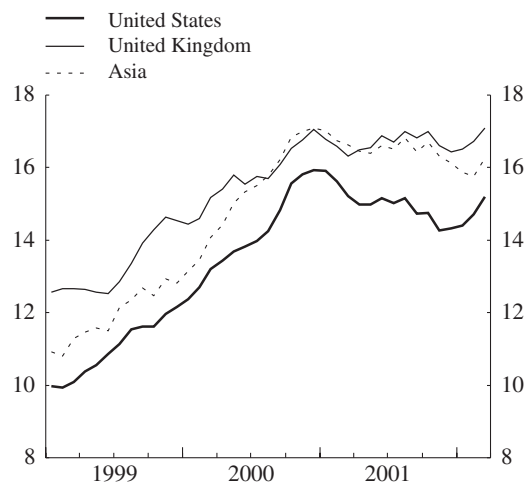
Chart 22**The euro area current account balance, the goods balance and exports and imports of goods***(EUR billions; seasonally adjusted)*

Source: ECB.

Note: Data refer to the Euro 12. Balances are cumulated over 12 months; exports and imports of goods are monthly values.

February amounted to only 2.9% and 0.8% respectively. Import values decreased somewhat less than export values in April partly due to higher oil prices in that month.

Turning to the geographical breakdown of export values on the basis of external trade statistics (see Table 9 in the Statistical Appendix; latest available data refer to March 2002), the decline in export values in 2001 was mainly attributable to exports to the United States and Asia, while export values to the United Kingdom remained relatively stable (see Chart 23). However, export values to the United States started increasing in December 2001, leading to a bottoming out of the decrease in total export values of the euro area at the beginning of 2002. This development was mainly due to the economic recovery in the United States. Export values to the United Kingdom also increased, though to a lesser extent, while export values to Asia continued their decline until March 2002.

Chart 23**The euro area export values to the United States, the United Kingdom and Asia***(EUR billions; seasonally adjusted; three-month moving average)*

Sources: Eurostat and ECB calculations based on Eurostat data.

Sizeable inflows in the financial account in April 2002

Combined direct and portfolio investment in the euro area experienced net inflows of €19.3 billion in April 2002 (see Table 8). Net inflows both in direct investment (€7.7 billion) and in portfolio investment (€11.5 billion) contributed to this development.

Net direct investment in the euro area by non-residents amounted to €14.3 billion, which is similar to the monthly flows registered in this category over the previous year. However, the most salient feature in the direct investment account in April was the low net direct investment abroad by euro area residents. In particular, net equity direct investment abroad by euro area residents in April (€3.0 billion) was the lowest since February 2001.

Net inflows of €11.5 billion in the portfolio investment account in April were relatively high compared with previous months. These

net inflows are attributable to the net portfolio investment of non-residents in the euro area (€20.0 billion), while net portfolio investment abroad by euro area residents was substantially lower than for most other months since January 2001 (€8.5 billion; see Table 8.5 in the Statistical Appendix). The most important aspect in the portfolio investment account in April was the large net inflows in money market instruments (€10.8 billion), the highest since June 2000. In April the net inflows in this category by non-residents totalled €7.8 billion, while euro area residents repatriated €3.0 billion from abroad previously invested in this category.

In the other investment account, the category “other” sectors’ assets, i.e. mainly loans and deposits in foreign accounts, experienced large net outflows of €22.0 billion in April

(see Table 8.6 in the Statistical Appendix). However, no single transaction or country is accountable for this development as net outflows were observed in several euro area countries. These flows included, in particular, significant transactions by financial institutions.

Overall, the net inflows in combined direct and portfolio investment in April 2002 were among the largest over the past 12 months. Moreover, the large net inflows in money market instruments in this month constitute a reversal of developments in this category compared with 2001 and early 2002. On a cumulated basis, net outflows in combined direct and portfolio investment were substantially lower in the first four months of 2002 (€35.2 billion) than during the same period in 2001 (€97.5 billion).

Characteristics of the euro area business cycle in the 1990s

As part of its monetary policy strategy, the ECB regularly monitors the development of a wide range of indicators and assesses their implications for price developments and risks to price stability in the euro area. It is helpful for such analysis to have background knowledge regarding the typical behaviour of economic indicators during different phases of economic development. This article identifies some of the main characteristics of the euro area business cycle for the 1990s as a whole, based on developments in real GDP, its main expenditure components, some key labour market variables and industrial production. Moreover, it reviews the development of these indicators during individual sub-periods in order to assess how shorter-term cyclical behaviour has conformed to the average characteristics. The article finds that some regularities are observed over all sub-periods, but also that the average characteristics derived for the 1990s as a whole conceal important specific features in individual sub-periods. This implies that, in conjunctural analysis and forecasting, it is necessary to carefully analyse specific circumstances in order to understand differences between a particular cycle and the average cyclical developments.

I Introduction

Market economies are typically subject to recurrent fluctuations in economic activity, referred to as business cycles, which are the outcome of a combination of shocks, mechanisms that propagate these shocks and policy responses to them. Economic cycles normally have both common and distinct features. Understanding both the regularities and specific features of business cycles is an important element in conjunctural analysis and forecasting.

This article aims to identify some of the main characteristics of the euro area business cycle in the 1990s, relying on statistical measurement instead of economic theories imposed a priori. For the purposes of this article, the main characteristics refer to the average statistical properties of the variables of interest and their relationship with overall business cycle dynamics. This information is a useful benchmark when analysing the outlook for future cyclical developments. In addition to the analysis of past average cyclical developments, it is also important for conjunctural analysis and forecasting to have a good understanding of the extent to which cyclical developments in individual sub-periods may deviate from the average behaviour observed over a longer time frame. Although the 1990s, i.e. ten years, are a relatively short period from which to draw statistical averages, this was chosen as a

reference period for specific reasons. First, harmonised national accounts data for the euro area as a whole are only available since the early 1990s. Second, the integration process towards Monetary Union is likely to have had a significant impact on the functioning of the individual euro area economies. As a result, average observations over longer periods may be less useful as regards information on the current economic relationships at play in the euro area.

In the light of the above considerations, this article is divided into two main sections. Section 2 identifies and discusses average features of the cyclical behaviour of the variables of interest in the 1990s as a whole. The variables of interest are the expenditure components of real GDP, some key labour market variables and industrial production. Data on extra-euro area exports of goods from the trade statistics are also used to distinguish the external from the domestic sector. This distinction would not be feasible only on the basis of national accounts data in which trade flows include intra-euro area transactions. Real GDP is used to measure overall economic activity. In this respect, it is interesting, for instance, to establish whether cyclical movements in the individual variables are coincident with those in real GDP as a whole or whether they lead or lag them. Section 3 of the article compares the

cyclical development of these variables in the course of the 1990s and assesses the extent to which they correspond to the average characteristics derived for the 1990s as

whole. This sheds some light on the extent to which cycles have differed from each other in the past.

2 Average characteristics of the euro area business cycle in the 1990s

This section identifies some of the average statistical characteristics of business cycles in the euro area over the past decade. In the first sub-section, the concepts and statistical measures used in this article are described, while their application to the euro area business cycle in the 1990s is presented in the second sub-section.

Definition of concepts and statistical measures

As regards the identification of the business cycle itself, different concepts and methodologies are commonly used, with no conclusive consensus on which are the best or most relevant (the box below provides more details on the various definitions and measurements of business cycles). Reference is made in this article to the so-called “deviation cycle”, i.e. deviations of economic activity from its trend. Since the trend is not observable, it needs to be estimated. The

“band-pass filter”, one of the most widely used methods for separating the cyclical component of variables from their trend, has been chosen for the purposes of this article. The variables examined are real GDP and its main expenditure components, some key labour market variables (total employment, the unemployment rate and labour productivity) as well as industrial production (excluding construction). The data are quarterly data and extend from the first quarter of 1991 to the fourth quarter of 2001.¹ The table entitled “Average summary statistics of the euro area business cycle in the 1990s” reports a set of results based on statistical measures commonly used in the analysis of business cycle characteristics.

1 The dataset consists of official Eurostat data and ECB estimates. On account of the way in which they are constructed, estimates of the trends using methods such as the band-pass filter are not reliable towards the beginning and the end of the sample. In order to improve the reliability of the estimated trends for these periods, the data were extended backward and forward. Then, as is usual practice, the first and last three years of the de-trended data were discarded.

Box

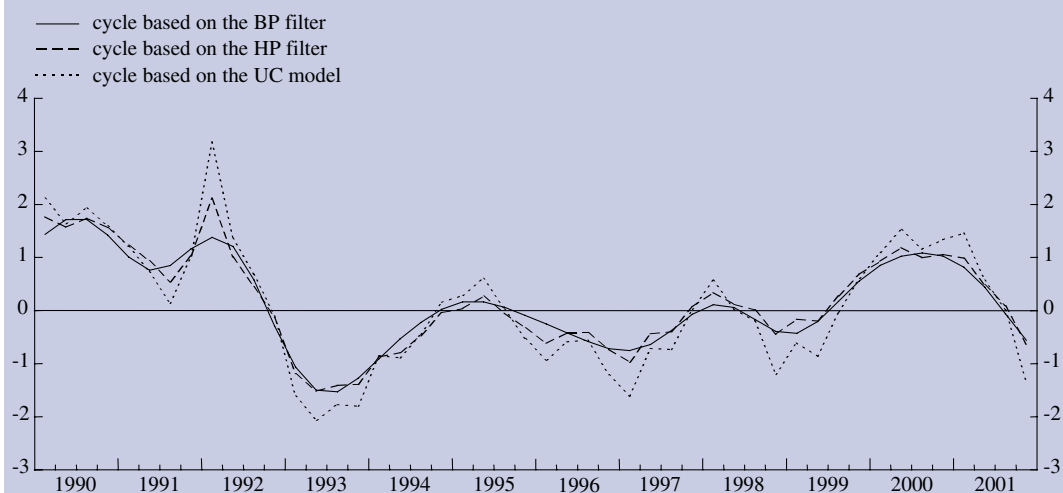
Definition and measurement of business cycles

There is a basic distinction between two different, but related, concepts of the business cycle. On the one hand, “classical business cycles” refer to periods of absolute declines and increases in the level of economic activity. On the other hand, “deviation cycles” – also referred to as growth cycles – denote deviations of economic activity from its underlying trend. In a classical cycle a downturn is thus always associated with negative rates of output growth, while in a deviation cycle it is associated with the level of output being below its trend, which can occur during periods of still positive growth rates. Several methods have been proposed to estimate the unobserved trend which underpins the analysis of deviation cycles. This box discusses how deviation cycles can be computed and to what extent they are different from the fluctuations observed when looking at the growth rates of output. As in the rest of this article, and in line with common practice, economic activity is assumed to be represented by real GDP.

Chart A shows the deviations from trend of euro area real GDP obtained from the most commonly applied methods of estimating the trend component, namely the Baxter-King band-pass (BP) filter, unobserved

components (UC) models and the Hodrick-Prescott (HP) filter.¹ The estimated cyclical components appear to be quite similar, their pair-wise correlation being between 0.9 and 1.0 in each case. The analysis of characteristics of the euro area business cycles in the 1990s would therefore lead to very similar conclusions whatever method is chosen to estimate the trend and the cyclical components of GDP. In this article the BP filter is used for de-trending the variables of interest.

Chart A: Alternative estimates of the deviations of real GDP from its long-term trend



Note: The BP filter and the UC model allow three components of a series to be distinguished: the trend, irregular “noisy” fluctuations and a cyclical component. The latter is shown in Chart A. In the case of the HP filter, a distinction is made only between the trend and the cyclical component.

Chart B: Deviation of real GDP from its long-term trend versus year-on-year growth rates

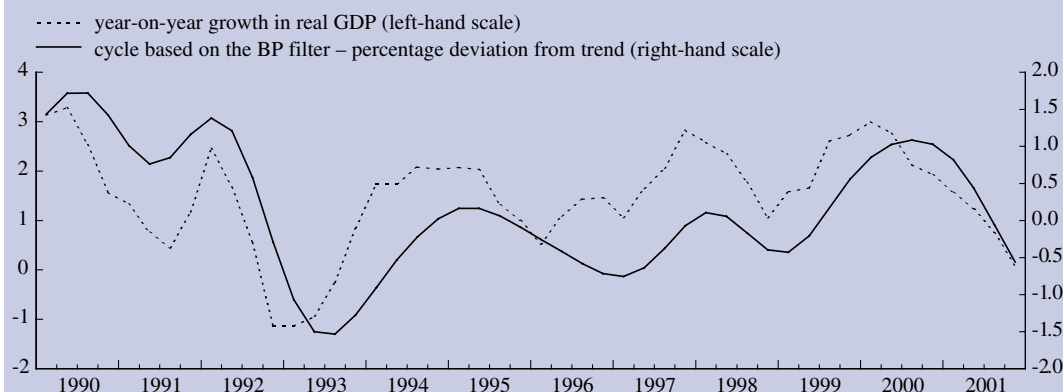


Chart B illustrates the pattern of economic developments based on deviation cycles (i.e. focusing on deviations of GDP from its underlying trend, measured here by the BP filter) and that based on year-on-year growth rates in real GDP, which are typically used in regular conjunctural analysis. It is apparent that changes in growth rates tend to anticipate those in the deviation cycle, the maximum correlation (0.7) between the two series being found when the growth rate series is lagged by two quarters. This reflects the fact that, for example, growth may be declining (the dotted line heads downwards) while remaining at above-average rates, which still implies a further widening of the positive gap between the actual level of the variable and its trend (the full line continues to head upwards). This was observed in early 2000, for instance. The sharper the downturns or upturns in activity, the more the movements in the growth rates and deviation cycles coincide. In practice,

¹ For an explanation of these methods, see the articles on composite indicators, potential output and key euro area indicators in the *Monthly Bulletin* (November 2001, October 2000 and July 1999 respectively).

conjunctural analysis usually refers to growth rates rather than deviations from trend, mainly because the former are easier to compute. The latter are more technical and practitioners need to choose between the various possible estimation methods. However, analyses based on growth rates do not take into account the fact that trend developments may be changing over time and that various economic variables have different trend patterns. Moreover, as the economy is generally growing and absolute declines in activity are relatively rare, deviation cycles encompass classical cycles. Therefore medium-term business cycle analysis, which is the subject of this article, is generally based on deviation cycles.

A series of statistical measures can be used in order to identify some main characteristics of the business cycle. Thus, the *correlation* between the cyclical component of GDP and that of its components or other variables is a measure which provides information in two respects. First, a positive value close to 1 for the correlation between two variables indicates that these variables tend to move in the same direction and that the degree of co-movement between them is strong. Conversely, a negative value close to -1 indicates that the two variables tend to move in opposite directions with similar patterns. If the correlation is close to zero, then the two variables move independently of one another. Second, by comparing the

correlation between real GDP and a variable shifted forwards or backwards by a given number of quarters, it is possible to derive whether this variable tends to precede, or follow, the business cycle. If the maximum correlation is obtained with no shift of the variable, the variable is said to be “coincident”; if it is found when the variable is shifted forward, the variable is said to be “lagging”; and if the correlation coefficient is highest when the variable is shifted backwards, the variable is said to be “leading”.

These two aspects should be analysed jointly, as is suggested by the figures reported in the table below. For example, consider the cases of government and private consumption:

Table
Average summary statistics of the euro area business cycle in the 1990s

Variable	Contemporaneous correlation	Maximum correlation ¹⁾	Lead/lag ²⁾	Standard deviation ratio ³⁾	Autocorrelation		
					x(t)-x(t-1)	x(t)-x(t-2)	x(t)-x(t-3)
Real GDP					0.88	0.65	0.35
Domestic demand	0.94	0.94	coincident	1.4	0.91	0.72	0.46
Private consumption	0.83	0.86	lagging (1)	1.1	0.93	0.79	0.59
Government consumption	0.02	0.87	lagging (7)	0.7	0.92	0.74	0.52
Gross fixed capital formation	0.94	0.94	coincident	3.0	0.91	0.72	0.46
Inventory changes	0.57	0.60	leading (1)	39.5	0.87	0.59	0.26
Total exports ⁴⁾	0.81	0.81	coincident	3.2	0.89	0.61	0.25
Total imports ⁴⁾	0.96	0.96	coincident	4.0	0.90	0.67	0.38
Employment	0.82	0.89	lagging (1)	0.9	0.91	0.78	0.61
Unemployment rate	-0.47	-0.69	lagging (2)	1.1	0.87	0.72	0.57
Labour productivity	0.21	0.32	leading (1)	0.9	0.69	0.37	0.10
Industrial production (excluding construction) ⁵⁾	0.92	0.92	coincident	2.9	0.89	0.63	0.30
Extra-euro area exports of goods	0.19	0.23	leading (1)	3.9	0.88	0.60	0.28

Sources: Eurostat and ECB calculations.

1) The maximum correlation corresponds to the highest correlation coefficient across shifts in the variable of interest between -8 and +8 quarters.

2) Figures in brackets indicate the number of quarters (leading or lagging) for which the maximum correlation is observed.

3) In relation with the standard deviation of real GDP.

4) Including intra-euro area transactions.

5) Figures for industrial production (excluding construction) are based on data from 1991 to 1998.

these two variables are characterised by similar maximum correlation coefficients, relatively close to 1, with GDP. In addition, both variables appear, on average, to be lagging the cycle. However, while private consumption is found to be lagging the cycle by, on average, only one quarter, government consumption lags GDP by almost two years. Given that the latter lag is long compared with the average duration of the cycle, it is difficult to relate the cyclical developments in government consumption over the 1990s to those in overall economic activity, despite the high maximum correlation with GDP. Thus, while government consumption will be considered to show cyclical movements independent from those of GDP, the results for private consumption will be interpreted as showing a strong relationship between the cycle of this variable and that of GDP.

A second measure is the ratio of the *standard deviation* of the cyclical component of the variable of interest to that of real GDP. This indicates whether the range of fluctuations in the variable is wider or narrower than that of real GDP. A high standard deviation may be a sign of large and abrupt changes. This is typically the case for inventory changes, as confirmed by the very high standard deviation for this variable compared with that of GDP, reported in the table above. However, smoothly evolving variables may also give rise to high relative standard deviations if cyclical changes steadily build up in the same direction over several quarters. Exports, imports and gross fixed capital formation are examples of the latter case, as is shown in the table by the ratios of the standard deviations of these variables with that of GDP, which range between 3 and 4.

A further measure complements the analysis of the cyclical behaviour of economic variables. If a variable shows erratic changes from one quarter to the next, the correlation between the variable and its past values will be relatively low. For this purpose, *autocorrelations* are computed, i.e. the correlation between a variable and its own lags. The table above reports the results for

the correlation between the variables and their lags by one, two and three quarters. The higher the value of the autocorrelations, the smoother, or more persistent, a variable. For example, taking the autocorrelation values of GDP as a reference, it can be concluded that private consumption appears to be a relatively persistent variable.

Standard deviations and autocorrelations should also be assessed jointly. Volatile variables are characterised by a relatively high standard deviation and low autocorrelations. The very high standard deviation of changes in inventories, along with relatively lower autocorrelation coefficients than for the other variables, indicate the very high volatility of this variable, for instance.

Observed characteristics of the euro area business cycle

Drawing on these various measures, the following average characteristics emerge for the euro area over the past decade.

The *expenditure components* of GDP generally exhibit a strong positive co-movement with real GDP, reflected in both high maximum correlations and a coincident pattern or very short leads or lags with GDP. Government consumption is the only expenditure component which appears to have a relatively weak relationship with the cycle, as suggested by the long lag for this variable. This lag of government spending on the business cycle is accounted for by the fact that changes in the stance of public expenditure take time on account of, in particular, legal budgetary procedures. Private consumption, which is the main expenditure component, has tended to lag the cycle by one quarter. Inventory changes, which account for the smallest share of GDP, have the lowest (but still significant) correlation with real GDP and have led the cycle by one quarter on average. For the other expenditure components, gross fixed capital formation and total trade variables – all of which display a coincident pattern over the cycle – the degree of co-movement

with real GDP is very high, ranging between 0.8 and 1. As regards total trade variables, the relatively high value of the correlation coefficients is partly accounted for by the fact that euro area national accounts data on imports and exports include intra-euro area trade. The correlation between GDP and extra-euro area trade is likely to be weaker, as suggested by the low correlation between extra-euro area goods exports and GDP reported in the last row of the table above. The correlation coefficients also suggest that cyclical developments in extra-euro area exports have tended to precede those in GDP by only around one quarter.

The expenditure components display significantly different ranges of fluctuations and degrees of persistence. Private and government consumption show limited volatility, with a standard deviation similar to and lower than that of GDP respectively, and a higher degree of persistence than GDP. As regards private consumption, the higher degree of persistence compared with real GDP is consistent with the idea of “consumption smoothing”, i.e. households tending to offset the impact of short-term changes in income by adjusting their savings. With regard to government consumption, low volatility is partly related to the fact that the number of public sector employees tends to evolve in a very stable manner over the cycle.

By contrast with consumption, the ranges of fluctuation for gross fixed capital formation and total trade flows over the 1990s are more than twice as large as that of GDP as a whole. This reflects the higher sensitivity of these variables to changes in the domestic and external environment of the euro area. The persistence of fluctuations in imports and exports is lower than that of investment. Thus, the joint consideration of the standard deviations and autocorrelations of these variables points to a somewhat higher volatility of the total trade variables. Finally, it is a generally held view that aggregate sales tend to be more volatile than aggregate production. As production is then adjusted in subsequent quarters, the level of inventories

can vary considerably from one quarter to the next. This view is supported by the very high standard deviation of changes in inventories.

The results shown in the table for the *labour market variables* support the conventional view that the cyclical components of employment and unemployment tend to lag the business cycle, while the cycle tends to be preceded by cyclical developments in labour productivity, as measured by GDP per employed person. All labour market variables display a similar standard deviation, but employment and the unemployment rate show a higher degree of persistence than real GDP, while that of labour productivity is significantly lower. The higher persistence of employment is related to the fact that firms usually prefer to wait for more information on cyclical developments in a given direction before adjusting their staff. In the case of the unemployment rate, this is reinforced by transitions into and out of the labour force.

Finally, a further interesting issue is the extent to which the variability in the cyclical component of GDP is explained by the cyclical variability in *industrial production* (excluding construction). Although the share of industrial output in total output in the euro area was only around 23% on average between 1991 and 2001, the figures presented in the table point to a significant role of industrial production in shaping the business cycle. The cyclical pattern of industrial production is coincident with that of GDP and the maximum correlation is very high. In addition, the cycle of industrial production is found to have a much wider range of fluctuations and a similar degree of persistence compared with that of real GDP. From a sectoral perspective, these data indicate that industrial production developments can account for more than half of the cyclical variability of total output in the 1990s.

The purpose of the above analysis was to highlight the main average characteristics of the euro area business cycle over the last

decade. On that basis, it is also interesting to focus on specific shorter periods and to examine whether this general pattern was reflected in each of the successive cycles or

whether economic variables have, at times, departed from their average cyclical behaviour.

3 Regularities and specific features of the euro area business cycles in the 1990s

This section discusses the cyclical development of the variables of interest in the course of the 1990s and compares them with the average features found in the previous section. Three full peak-to-peak deviation cycles can be identified during the 1990s:

- the first cycle occurred in the early 1990s, from the peak in the first quarter of 1992 to the peak in the first quarter of 1995;
- a second cycle took place in the mid-1990s, from the peak in the first quarter of 1995 to the peak in the first quarter of 1998;
- a third cycle was recorded in the late 1990s, from the peak in the first quarter of 1998 to the peak in the third quarter of 2000.

In Charts 1, 2 and 3, which correspond to each of the above cycles, the panels on the left show the cyclical development of GDP and domestic demand on the left-hand scale and extra-euro area exports on the right-hand scale. The panels on the right show consumption and employment on the left-hand scale and investment on the right-hand scale. The shaded areas in all charts represent periods of slowdown, i.e. from peaks to troughs. The right-hand and left-hand scales are the same in all three sets of charts to enable comparison between the successive cycles.

The cycle of the early 1990s

Although, in general, the features of this cycle were in line with the average characteristics of the 1990s, some specific factors are worth highlighting. The cyclical movements in the external sector (represented by extra-euro

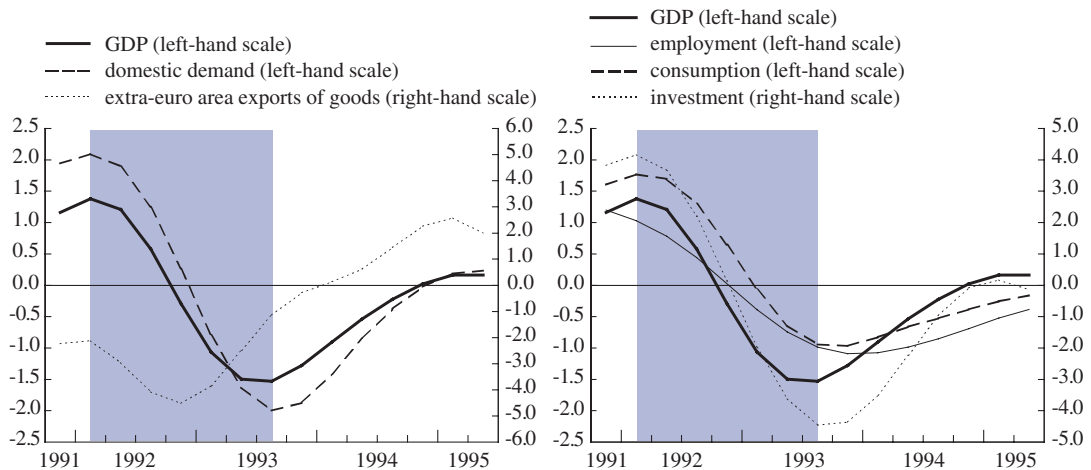
area exports) preceded those of GDP and a significantly longer lead than average was observed (see the left-hand panel of Chart 1). However, the variability of the export cycle was lower than on average in the 1990s. Meanwhile, the domestic expenditure components and labour market variables were in line with the average pattern observed as regards the relative timing of cyclical developments (see the right-hand panel of Chart 1). Investment, for example, was coincident, whereas consumption and employment lagged the cycle. In addition, domestic expenditure components and labour market variables displayed a degree of co-movement with the overall cycle and a range of variability similar to the average for the whole decade.

Cyclical developments in the early 1990s were mainly the result of developments in domestic demand. To a large extent, the unusually long lead of the decline in extra-euro area exports compared with GDP reflects the impact of German unification, a situation where national developments were significant enough to shape developments in the euro area as a whole. The expansionary impact of German unification on euro area domestic demand more than offset the downturn in exports which had already begun in 1990 and 1991 as a result of the recessions in the United States and the United Kingdom. The negative impact of the deterioration in foreign demand on extra-euro area exports was reinforced by a loss of price competitiveness in the euro area, caused by rising inflation in the early 1990s. As a result, extra-euro area exports recorded a cyclical downturn around one and a half years before GDP. Once the boost to domestic demand related to German unification ran out,

Chart 1

The euro area business cycle of the early 1990s: mainly a result of developments in domestic demand

(% deviation from trend; quarterly)



Sources: Eurostat and ECB calculations.

weakening private consumption and investment started to reinforce the cyclical downturn, thereby accounting for its depth. The subsequent upturn was supported by external developments, which turned favourable already in early 1993. However, overall economic activity only strengthened when domestic demand started to recover in the second half of 1993.

The cycle of the mid-1990s

This cycle was typical in terms of the relative variability of most variables. However, the variation of GDP during the mid-1990s cycle was lower than the average for the whole decade, and much smaller than in the cycle of the early 1990s. Moreover, the downturn of the mid-1990s was longer than the other downturns of the decade. The leads and lags between some variables over this period also differed somewhat from the average pattern. The cyclical downturn of exports was coincident with that of GDP, instead of the average leading pattern, whereas the upturn of exports led that of GDP by more quarters than on average (see the left-hand panel of Chart 2). By contrast, domestic demand tended to lag GDP, especially in the upturn, instead of being coincident as observed on

average in the 1990s. Most notably, the peak in the consumption and employment cycles only occurred at the end of 1995, implying a longer than usual lag vis-à-vis the real GDP cycle (see the right-hand panel of Chart 2).

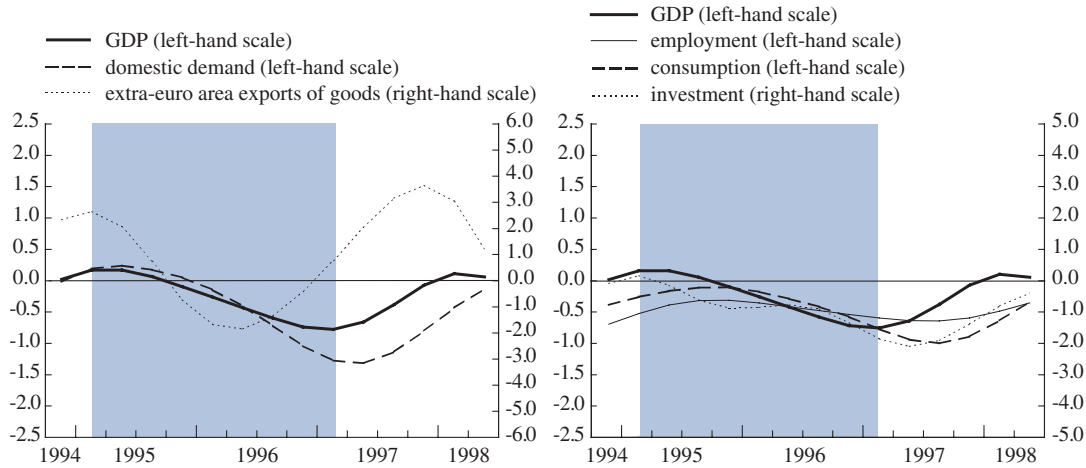
The strong appreciation of the effective exchange rate of most currencies of the euro area countries in 1994 and 1995 was one of the main factors behind the cyclical decline in extra-euro area exports, which took place despite an ongoing strengthening in foreign demand. The weakening in extra-euro area export growth is likely to have contributed to the slowdown in fixed capital formation as of early 1995. Meanwhile, at the start of the cyclical downturn, the continued strengthening in job creation helped to sustain the cyclical expansion of consumption. However, the cyclical downturn in exports and investment spilled over into employment and consumption towards the end of 1995, which, in turn, had a negative impact on investment. Thus, the cyclical component of investment was stable for a few quarters in mid-1995 and then declined further in 1996.

As foreign demand strengthened and the effective exchange rate started to depreciate in mid-1996, extra-euro area exports improved, i.e. between two and three

Chart 2

Exports and investment as the main driving forces in the mid-1990s

(% deviation from trend; quarterly)



Sources: Eurostat and ECB calculations.

quarters earlier than real GDP. The positive impulse from exports, along with declines in both short-term and long-term interest rates, restored favourable conditions for a strengthening of investment and, subsequently, employment and consumption.

The cycle of the late 1990s

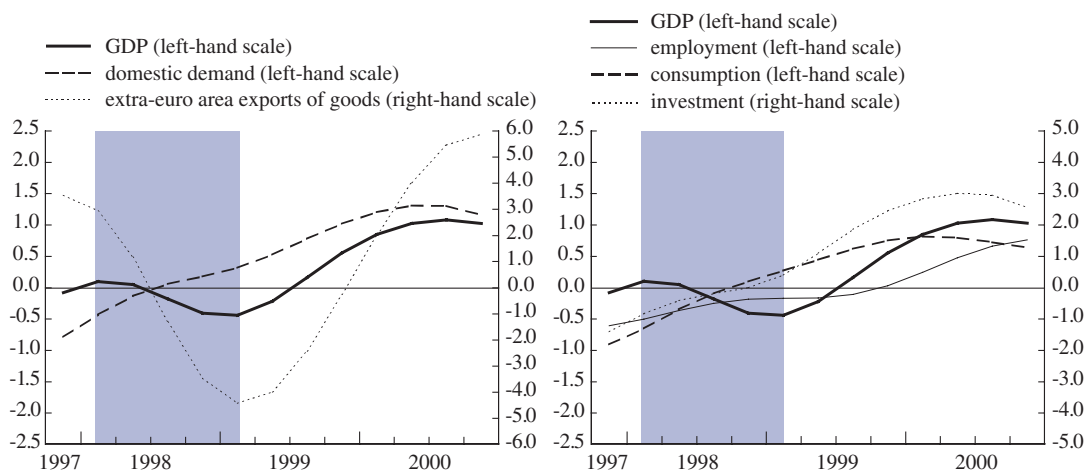
In the late 1990s, cyclical developments in GDP were almost entirely caused by developments in the external sector. The

decline in extra-euro area exports was much larger than observed in the previous cycles, with the deviation from trend falling by around 8 percentage points from peak to trough (see the left-hand panel of Chart 3), compared with a difference of around 4.5 percentage points in the mid-1990s and around 2 percentage points in the early 1990s. Domestic activity was sustained throughout the period, its expansion only slowing down somewhat towards the end of 1998. In particular, the cyclical component of private consumption continued to expand

Chart 3

Large fluctuations in foreign demand but continued robust domestic demand in the late 1990s

(% deviation from trend; quarterly)



Sources: Eurostat and ECB calculations.

steadily (see the right-hand panel of Chart 3), while fixed capital formation and employment did not experience any downturn. This pattern of consumption, investment and employment therefore departs from the close relationship observed on average between these variables and GDP. Moreover, the downturn in GDP was particularly short-lived and shallow.

At the end of 1997, the effects of the crisis in Asian emerging market economies and the financial turmoil in Russia were sharp enough to bring about a significant deterioration in the external environment which led to a downturn in euro area GDP, with a one to two-quarter delay. However, several factors contributed to the ongoing strength in domestic demand. Compared with previous downturns in the 1990s, the stabilising influence of fixed exchange rates between the countries of the euro area is likely to have helped to sustain domestic demand. The absence of a devaluation risk removed a potential source of instability and uncertainty which had dampened growth, for example, in

1995. In addition, domestic demand was supported by further declines in interest rates during 1998 and in early 1999 prior to and shortly after the start of Monetary Union. Moreover, in the case of fixed capital formation, ongoing robustness is likely to have been linked to the low investment in previous years and to global developments in the area of information and communication technologies (ICT). Finally, the uninterrupted cyclical expansion of private consumption was essentially a reflection of the robustness of employment and declines in inflation, which helped to maintain a high level of spending power and consumer confidence.

When foreign demand picked up again in early 1999, extra-euro area exports improved and real GDP growth increased. The exceptionally strong cyclical upturn in extra-euro area exports in 1999 and 2000 benefited from an unusually sharp expansion in the world economy and from the rise in price competitiveness associated with a protracted depreciation of the effective euro exchange rate.

4 Concluding remarks

The analysis of the euro area business cycles over the 1990s permits a number of average characteristics to be identified. First, the expenditure components of GDP mostly exhibit a strong positive co-movement with real GDP, but they differ with respect to volatility and the degree of synchronisation with the cycle. Second, the results support the conventional view that the cyclical components of employment and unemployment tend to lag the business cycle. Third, the findings point to a significant role of industrial production in shaping cyclical developments in real GDP.

The study of the individual cycles over the 1990s tends to confirm that some of the average characteristics can be regularly observed, but also, to some extent, that each individual cycle reflects specific factors. Some average characteristics, such as the lagging

nature of labour market variables, appear to have been present in all the individual cycles of the 1990s, whereas a number of variables also displayed specific features. For example, although the cyclical component of private consumption tends to exhibit a high degree of co-movement with GDP, lagging by one quarter on average, it can also move independently from the cycle. This occurred in the downturn of the late 1990s when the cyclical component of consumption continued to expand. One major difference between the cycles was the relationship between external and domestic developments. In general, developments in foreign demand and their impact on euro area exports have played an important role in setting off cyclical movements in real GDP, but the depth and duration of the cycles was ultimately determined by the behaviour of domestic demand. In this respect, the slowdowns

of the early 1990s and mid-1990s mainly reflected weak domestic demand rather than weak foreign demand. Moreover developments in the late 1990s showed that shocks to foreign demand only lead to small cyclical reactions as long as the developments in domestic demand remain robust.

Overall, the analysis has shown that average characteristics can be a useful benchmark, but specific events may force the cycle to diverge from its average characteristics. This implies that, in conjunctural analysis and forecasting, analysts need to take account of specific circumstances which may imply differences between the current cycle and average cyclical developments.

The Eurosystem's dialogue with EU accession countries

The process of accession to the European Union (EU) has entered its final phase for a first group of countries, which are expected to complete negotiations by the end of this year. It is currently envisaged that, following the ratification of the accession treaties, these countries could enter the EU in 2004. Upon accession, the countries will join Economic and Monetary Union (EMU) with the status of "countries with a derogation" and their central banks will become part of the European System of Central Banks (ESCB). Once the countries have achieved sustainable convergence, assessed on the basis of the Maastricht criteria, they would also adopt the euro and their central banks would become part of the Eurosystem.

The Eurosystem has been involved in the accession process in its areas of competence, i.e. with regard to issues related to central banking. The involvement has taken the form of an ongoing dialogue – comprising both a policy and a technical dimension – that aims to prepare for the integration of the new central banks into the ESCB and, later on, the Eurosystem. The dialogue covers policy issues that are of relevance to central banks, such as macroeconomic developments, monetary and exchange rate strategies, financial sector structure and central bank independence. In addition, it entails technical co-operation activities with accession countries' central banks in a wide range of areas, such as payment systems, legal issues and statistics.

This article describes the structure and contents of the Eurosystem's dialogue with accession countries' central banks. It shows that the accession countries have made impressive advances on the path to the EU and future euro area membership, and highlights some of the remaining policy challenges.

I Introduction

The 12 countries that are currently negotiating accession to the EU are Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia. Turkey is also an official candidate for EU membership, but has not yet started negotiations and is therefore not referred to in this article. Accession negotiations have made considerable progress during the past year, and the Laeken European Council in December 2001 confirmed the intention to complete negotiations with as many as ten countries – all except Bulgaria and Romania – by the end of 2002.

The accession countries have to adopt the entire legal framework of the EU – the so-called *acquis communautaire* – upon EU membership, although negotiations can lead to an agreement on transition periods, implying that countries may be required to adopt certain provisions only some time after becoming EU members. So far, however, transition periods have been agreed on only in a limited number of areas. For the purpose of negotiations, the *acquis communautaire* is subdivided into

31 chapters. From the viewpoint of the Eurosystem – i.e. the ECB and the national central banks (NCBs) of the euro area – the two most important chapters are the EMU chapter, which includes the principle of central bank independence, and the chapter on the free movement of capital. Other chapters that are particularly relevant relate to the Single Market, such as those concerning the free movement of goods, services and persons respectively, and competition policy. By mid-June 2002 about three-quarters of the chapters had been provisionally closed for the accession countries as a group. The EMU chapter and the chapter on free movement of capital had been closed with all countries except Romania.

The Eurosystem is not directly involved in accession negotiations, although it is consulted on central banking issues. In addition, it has embarked on an in-depth dialogue with accession countries' central banks to prepare for an orderly integration process. The following sections describe the structure of the dialogue and give an overview of some of the issues involved.

2 Structure of the dialogue with EU accession countries

The dialogue with the accession countries is based on two main elements: a policy dialogue at Board and management level, and a technical dialogue at expert level. The main purpose of the policy dialogue is to exchange views on topics that are of common interest and to exchange first-hand information on economic and central banking issues. At the centre of this dialogue are annual high-level seminars, which are organised by the ECB in co-operation with one euro area NCB and which bring together Governors and Board-level representatives of the Eurosystem and accession countries' central banks. The first of these annual seminars took place in Helsinki in 1999, organised together with Suomen Pankki – Finland's Bank and laid the foundation for the regular policy and technical dialogue. The subsequent seminars were held in Vienna and Berlin, organised with the Oesterreichische Nationalbank and Deutsche Bundesbank respectively. This year's seminar is scheduled to take place in Brussels in December 2002 and will be organised with the Nationale Bank van België/Banque Nationale de Belgique.

In addition, meetings between Governors and managers from individual accession countries' central banks and the ECB have taken place on a regular basis. During these meetings, discussions have focused on policy issues similar to those addressed at the high-level seminars, such as monetary policy and exchange rate strategies, the disinflation process, implications of real income convergence and the implementation of central bank independence. These meetings have allowed a more in-depth exchange of views on the accession process and, in many cases, have also paved the way for technical discussions at expert level.

The technical dialogue is meant to support – from a technical and operational viewpoint – the preparatory work of accession countries' central banks to ensure their smooth integration into the framework of the ESCB. It is also aimed at familiarising the central banks with the functional and operational framework of the

ESCB. The technical dialogue takes various forms: expert seminars and workshops, bilateral meetings at expert level, training courses, internships and specific technical assistance activities. In this context, the ECB has put particular emphasis on multilateral activities involving all accession countries' central banks (e.g. in seminars), while NCBs have mostly focused on bilateral, tailor-made technical co-operation with individual central banks. All NCBs are involved in the technical dialogue. Some of them take part in highly resource-intensive multi-year “Twinning programmes” with a few counterpart central banks, while others conduct a large number of workshops and training programmes.

The technical dialogue covers a wide range of operational issues, such as payment systems, the legal framework, statistics, monetary policy and the operational framework, euro banknotes and information technology. In several cases, experts from the Eurosystem and accession countries' central banks have conducted joint analyses of important subjects, including the status of legal preparations for EU membership, issues related to payment systems and the statistical framework.

In addition to its own dialogue, the Eurosystem is involved in the “Economic Dialogue” between the EU and the accession countries, established in early 2001 by the ECOFIN Council and co-ordinated by the European Commission. Although the Economic Dialogue is not part of the negotiation process for EU membership, it aims to help the accession process move forward through an exchange of views between EU institutions and accession countries on macroeconomic policy and financial stability issues in the pre-accession phase. It is also intended to familiarise accession countries with the EU procedures of mutual surveillance as these countries will also become subject to this exercise upon EU entry. The EU Economic Dialogue takes place at ministerial and Economic and Financial Committee levels with respective meetings twice a year.

3 Selected issues from the dialogue

In the dialogue with the accession countries, a wide range of policy and technical issues have been discussed extensively. Of greatest importance have been: (i) real macroeconomic convergence, (ii) inflation developments, (iii) monetary policy and exchange rate strategies, (iv) financial structure and functioning, (v) central bank independence and (vi) technical co-operation. These issues are explored in the following sections.

Real macroeconomic convergence

Although large in terms of overall population (over 100 million altogether), the economic weight of the accession countries is small relative to the euro area (see Table I). In 2001, the combined nominal GDP reached about €460 billion, amounting to just under 7% of the euro area's GDP. Likewise, average

GDP per capita stood at around €4,400 when measured at current exchange rates and around €9,100 in purchasing power parity standards, which corresponds to about 20% and 40% of the euro area average respectively. As a comparison, the income levels of Greece, Portugal and Spain in purchasing power parity standards amounted to around 60-70% of the EU average at the time of their accession.

Considering the large income gap between the accession countries and the euro area, issues related to real macroeconomic convergence have been a key focus of the policy dialogue. Although different income levels as well as different economic structures can, in principle, be compatible with eventual participation in Monetary Union, advancing real macroeconomic convergence with the euro area – in terms of both per capita income levels and economic structures – is

Table I
Accession country key data (2001)

	Population (millions)	Area (1,000 km ²)	Nominal GDP (EUR billions)	GDP per capita ¹⁾ (EUR)	GDP per capita (% of euro area average) ¹⁾²⁾ 1995	GDP per capita (% of euro area average) ¹⁾ 2001
Bulgaria	8.5	111	15	6,087	25	26
Cyprus	0.6	9	10	20,028	83	88
Czech Republic	10.3	79	63	14,016	62	60
Estonia	1.4	45	6	9,406	30	40
Hungary	10.0	93	57	12,208	45	53
Latvia	2.4	65	8	7,021	24	30
Lithuania	3.7	65	13	7,517	27	32
Malta	0.4	0	4	13,372	49	58
Poland	38.6	323	197	8,905	36	38
Romania	22.4	238	44	6,050	32	26
Slovakia	5.4	49	22	10,995	46	47
Slovenia	2.0	20	21	16,240	64	70
All ³⁾	105.6	1,097	461	9,126	38	39
Greece	10.6	132	130	16,432	62	71
Portugal	10.4	92	123	16,622	57	72
Spain	40.0	506	650	19,964	70	86
Euro area ³⁾	303.0	2,508	6,811	23,227	100	100

Sources: ECB, European Commission, Eurostat, World Bank and IMF World Economic Outlook.

1) In purchasing power parity (PPP) standards.

2) For Greece, Portugal and Spain, the figure refers to the year of their EU accession, i.e. 1981 for Greece and 1986 for Portugal and Spain.

3) Weighted average, except for columns 1, 2 and 3.

Table 2
GDP growth rates

(in percentages)

	Bulgaria	Cyprus	Czech R.	Estonia	Hungary	Latvia	Lithuania
1995	2.9	6.1	5.9	4.6	1.5	-0.8	3.3
1996	-10.1	1.9	4.3	4.0	1.3	3.3	4.7
1997	-7.0	2.4	-0.8	10.4	4.6	8.6	7.3
1998	3.5	5.0	-1.2	5.0	4.9	3.9	5.1
1999	2.4	4.5	-0.4	-0.7	4.2	1.1	-3.9
2000	5.8	5.1	2.9	6.9	5.2	6.8	3.8
2001	4.2	3.7	3.6	5.4	4.6	7.6	5.9
Av. 1995-2001	0.2	4.1	2.0	5.1	3.7	4.4	3.7
2002 ²⁾	4.0	2.5	3.4	4.0	3.5	5.0	4.0
	Malta	Poland	Romania	Slovakia	Slovenia	All ¹⁾	Euro area
1995	6.2	7.6	7.1	6.7	4.1	5.6	2.2
1996	4.0	6.0	3.9	6.2	3.5	3.9	1.4
1997	4.9	6.8	-6.1	6.2	4.6	3.2	2.3
1998	3.4	4.8	-4.8	4.1	3.8	2.7	2.9
1999	4.1	4.1	-1.2	1.9	5.2	2.5	2.7
2000	5.2	4.0	1.8	2.2	4.6	3.9	3.5
2001	-1.0	1.1	5.3	3.3	3.0	3.0	1.5
Av. 1995-2001	3.8	4.8	0.9	4.4	4.1	3.5	2.4
2002 ²⁾	3.9	1.4	4.2	3.6	3.1	2.8	0.9-1.5

Sources: European Commission, Eurostat and ECB.

1) Weighted average (weighted by 1995 GDP).

2) Projections (European Commission for accession countries and ECB for euro area).

desirable. This will foster economic cohesion within EMU, promote integration among Member States, and help in reducing the risks and effects of asymmetric shocks.

In this context, the Eurosystem has emphasised that advancing real convergence should be done in parallel with – and not at the expense of – nominal convergence, understood as the gradual lowering of inflation rates towards levels compatible with price stability. Indeed, by fostering real convergence through structural reforms – which improves growth prospects and the supply side of the economies through enhanced flexibility in goods and labour markets – the accession countries can support the nominal convergence process. Likewise, by further advancing nominal convergence, anchoring inflation expectations and reducing the inflation bias, the countries would improve prospects for economic growth and thus real convergence.

The process of real income convergence, however, has been rather slow in recent years. Since 1995 annual real GDP growth rates in the accession countries as a group have normally been higher than in the euro area, but the difference has typically been small (see Table 2). For example, in 2000 and 2001, it amounted to 0.4 and 1.5 percentage points respectively (and was even slightly negative in the two preceding years). This development reflects the unfinished reform agenda in some countries, such as Bulgaria and Romania, as well as the effects of domestic and external crises such as those in Bulgaria, the Czech Republic and Romania between 1996 and 1999 or the Russian crisis of 1998. The sheer size of the income gap suggests that even with wider growth differentials, the process of convergence in income levels may extend well beyond the date of EU accession or euro area membership.

It should be noted that the overall picture of income convergence masks considerable differences between the accession countries. The per capita income level in purchasing power parity terms ranges from 26% of the euro area average in Bulgaria to 88% in Cyprus in 2001 (see Table 1). Also, the pace of convergence varies substantially among the countries: Estonia, Hungary and Malta, for example, have narrowed the income gap with the euro area by around 10 percentage points since 1995, while other countries have not progressed in this regard, or even regressed.

However, real macroeconomic convergence means more than a catching-up of income levels. It also includes adjusting the structure of the accession countries' economies to bring them more into line with those in the euro area as well as setting up the appropriate institutions and adopting international best practices in a number of areas (competition policies, corporate governance, financial laws, etc). Encouragingly, the accession countries have made considerable progress in these areas. For example, the transition indicator of the European Bank for Reconstruction and Development (EBRD) shows that they have, by and large, come close to being well-functioning market economies (see

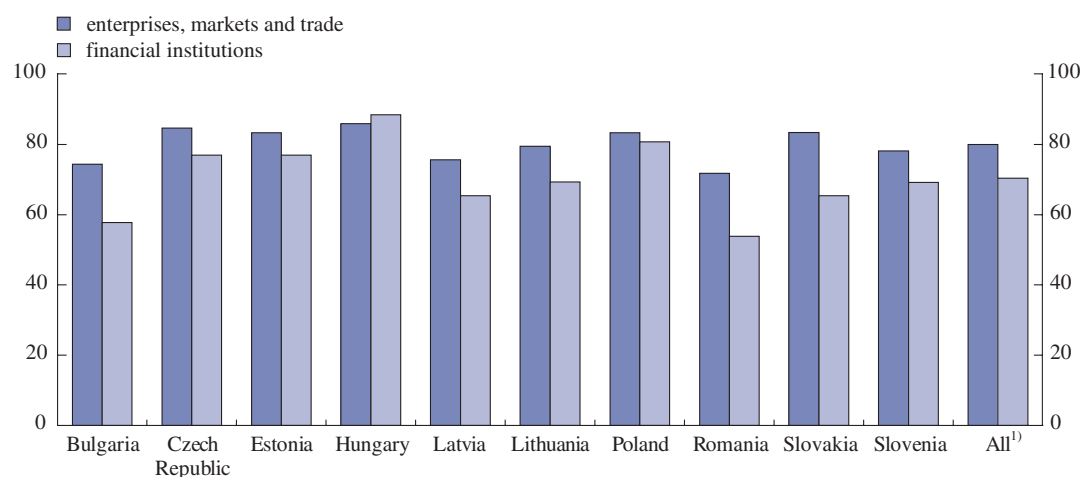
Chart 1). This indicator summarises the state of reforms in enterprise privatisation and restructuring, adjustments in markets and trade systems and financial institution upgrading. Accession countries are particularly advanced in the first two areas, as a result of privatisation, price liberalisation and reforms in the trade and foreign exchange system. In contrast, a reform agenda remains with regard to financial institutions, mainly on account of reform backlogs in the field of securities markets and non-bank financial institutions.

Moreover, real convergence also implies a stronger integration of the economies with the euro area. Here too, progress has been greater than the income gaps suggest: through trade and financial linkages as well as macroeconomic and financial stability, the economies are significantly more integrated with the euro area than they were just a few years ago. Partly for this reason, the accession countries were, for instance, largely unaffected by the recent emerging market crises in Argentina and Turkey.

However, further progress in structural reforms is still needed to complete transition and foster economic growth and

Chart 1
EBRD transition indicators – 2001

(index: 100 = well-functioning market economy)



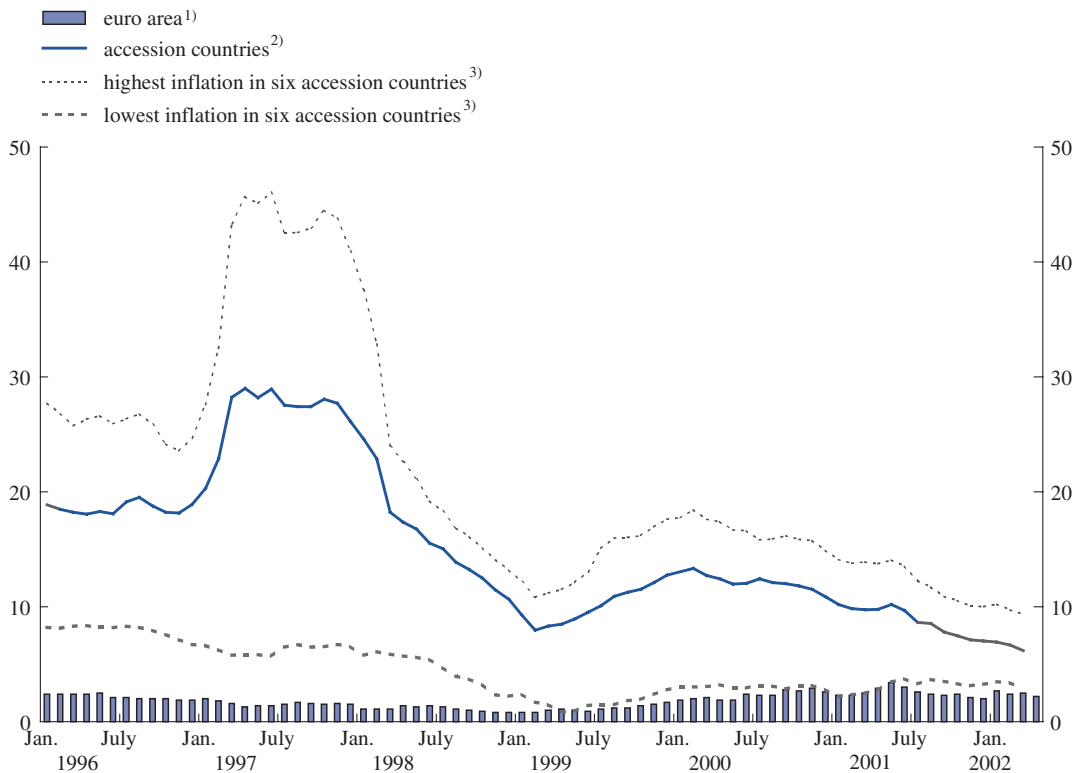
Sources: EBRD and ECB staff calculations.

1) Unweighted average.

Chart 2

CPI inflation

(percentage changes, year-on-year)



Sources: ECB, Eurostat and IMF International Financial Statistics.

1) HICP inflation.

2) Weighted average (weighted by 1996 GDP). Bulgaria excluded from January 1996 to January 1998.

3) Unweighted average of the six accession countries with highest and lowest inflation, respectively. Bulgaria excluded from January 1996 to January 1998.

convergence. In particular, the accession countries need to continue liberalising prices, guaranteeing property rights, improving corporate governance and enabling the transfer of decision-making responsibilities from government bodies to market participants. In addition, structural reforms in the corporate and financial sectors are instrumental in improving the investment climate, fostering sound business practices and entrenching financial stability. Finally, reforms in the labour market are needed to improve supply-side conditions, especially in light of the sharp increase in unemployment rates that has occurred in some countries during the past few years.

Inflation developments

The accession countries have made significant progress in disinflation over the past few years while the dispersion in inflation rates among countries has also markedly declined (see Chart 2). In some cases, inflation has come down from double-digit rates or even hyperinflation to relatively low levels, as macroeconomic stabilisation programmes – often involving the use of external anchors – have been successfully implemented. All accession countries except Romania managed to bring inflation down to single-digit levels in 2001 (see Table 3). Despite this progress, inflation rates – on average about 9% – remained significantly higher than in the euro area in 2001, although a further decline is projected for this year.

Since the beginning of the policy dialogue, price dynamics have been at the centre of the discussion. In view of the ultimate goal of adopting the euro and the need to fulfil the Maastricht criteria beforehand, inflation developments and nominal convergence with the euro area continue to be key issues.

Gradually reducing inflation towards rates closer to those prevailing in the euro area remains crucial, in particular as a way to entrench an economic environment of price stability. However, moving from moderate to low inflation rates remains a challenge, as exemplified by the brief interruption to the disinflation path in 2000. A number of factors have contributed to the persistent inflation differentials between the accession countries and the euro area. Several of these factors are related to the transition process, mainly stemming from the effects of ongoing price liberalisation and deregulation. In addition, nominal wage growth based on backward-looking indexation, stubborn inflation expectations as well as expansionary monetary and fiscal policies have at times also contributed to inflationary pressures. In

this respect, fiscal slippages recently recorded in the Czech Republic, Hungary, Poland and Slovakia give rise to concern, as they could put the hard-won stabilisation achievements at risk.

In addition to the effects mentioned above, the Balassa-Samuelson effect has often been cited as an important reason for the inflation differentials, as relatively higher productivity growth in the accession countries than in the euro area has translated into higher inflation, especially in the countries with fixed exchange rates.¹ There is indeed evidence that such an effect operates in accession countries and its significance could increase if future productivity growth were to rise, aided, for example, by EU accession. However, most empirical studies indicate that the Balassa-

1 The Balassa-Samuelson effect occurs if productivity growth is faster in the tradable than in the non-tradable sector, as is usually the case, resulting in a rise in the relative price of non-tradables. A rise in productivity in the tradable goods sector will tend to drive up wages in this sector and, as labour is assumed to be mobile across sectors, push up wages in the non-tradable sector. As the latter increase is not matched by a productivity increase, it will raise costs and prices in the non-tradable goods sector and thereby lead to a rise in the overall price index.

Table 3
CPI inflation

(percentage changes, period average)

	Bulgaria	Cyprus	Czech R.	Estonia	Hungary	Latvia	Lithuania
1995	62.1	2.6	9.2	28.8	28.3	25.0	39.7
1996	121.6	3.0	8.8	23.1	23.4	17.6	24.6
1997	1,058.4	3.6	8.5	10.6	18.3	8.4	8.9
1998	18.7	2.2	10.6	8.2	14.2	4.7	5.1
1999	2.6	1.6	2.1	3.3	10.0	2.4	0.8
2000	10.3	4.1	3.9	4.0	9.8	2.7	1.0
2001	7.4	2.0	4.7	5.7	9.2	2.5	1.2
2002 ²⁾	7.5	3.1	3.9	4.1	5.2	3.0	2.7
	Malta	Poland	Romania	Slovakia	Slovenia	All ¹⁾	Euro area ³⁾
1995	4.0	28.1	32.2	9.9	12.6	24.3	2.4
1996	2.5	19.8	38.8	5.8	9.7	22.7	2.2
1997	3.1	15.1	154.8	6.1	9.1	68.5	1.6
1998	2.4	11.7	59.1	6.7	8.6	16.1	1.1
1999	2.1	7.3	45.8	10.6	6.6	10.5	1.1
2000	2.4	10.1	45.7	12.0	10.8	12.5	2.3
2001	2.9	5.5	34.5	7.3	9.4	9.1	2.5
2002 ²⁾	2.6	4.0	26.0	4.1	7.5	6.7	2.1-2.5

Sources: ECB, IMF International Financial Statistics and European Commission.

1) Weighted average (weighted by 1995 GDP).

2) Projections (European Commission for accession countries and ECB for euro area).

3) HICP inflation.

Samuelson effect can only account for a limited share of inflation differentials vis-à-vis the euro area in recent years.²

Monetary policy and exchange rate strategies

Monetary policy and exchange rate strategies are regular subjects in the dialogue between the Eurosystem and accession countries' central banks. The discussions focus on, for example, the role of monetary and exchange rate policies in achieving macroeconomic stability and the handling of large and volatile capital flows. The dialogue also centres on issues related to future participation in the exchange rate mechanism (ERM II), including the compatibility of current exchange rate regimes with ERM II.

As all the accession countries can be regarded as small open economies, the dialogue has largely focused on exchange rate strategies. In general, exchange rate strategies have taken into account the overall economic policy framework and economic conditions prevailing in the respective country. Most transition economies opted for a fixed or tightly managed external anchor in the early stages of the transition process, as fixed regimes were regarded as an effective device to anchor inflation expectations. Since the mid-1990s, a number of countries have gradually moved towards greater exchange rate flexibility. With the exceptions of the Czech Republic and Slovakia in 1997/98, these regime shifts have not been related to currency crises, but have rather been the result of a forward-looking policy approach, taking account of changes in economic conditions and circumstances, including rising capital flows.

At present, the accession countries are following a variety of exchange rate strategies, covering the full spectrum from currency boards to free floats (see Table 4). Bulgaria, Estonia and Lithuania have a currency board pegged to the euro, Latvia and Malta maintain a conventional peg to a currency basket, Cyprus and Hungary unilaterally shadow

ERM II (with an officially announced central rate and fluctuation bands of $\pm 15\%$), while Romania, Slovakia and Slovenia follow a managed float, and the Czech Republic and Poland a free float regime.

Over the past few years, the euro has increasingly gained importance as the main reference currency in both the pegged and managed floating regimes, either because the pegs have shifted to the euro or because of shifts towards managed floating regimes with the euro as the predominant reference currency. These shifts have been in line with the accession countries' rising trade and financial integration with the euro area as well as with the institutional requirements associated with the ultimate objective of adopting the euro. The most recent example of a greater role for the euro was given by Lithuania, which re-pegged its currency board from the US dollar to the euro in February 2002.

The accession countries' monetary policy strategies also differ widely. Countries with fixed exchange rate regimes obviously have to gear monetary policy towards the exchange rate target. Other countries operate fully-fledged inflation targeting frameworks (Poland and the Czech Republic), while Hungary combines an inflation targeting framework with an exchange rate regime that shadows ERM II. Slovenia's monetary policy strategy includes targets for monetary aggregates.

In general, the accession countries' monetary and exchange rate policies have significantly contributed to macroeconomic stability and disinflation, anchored inflation expectations and thereby provided the necessary conditions

² See, for example, O. Arratibel, D. Rodriguez Palenzuela and C. Thimann (2002), "Inflation dynamics and dual inflation in accession countries: a new Keynesian perspective", ECB Working Paper 132; M. De Broeck and T. Slok (2001), "Interpreting real exchange rate movements in transition countries", IMF Working Paper WPI01/56; R. Corker and R. van Elkan (2000), "Exchange rate regimes in selected advanced transition economies", IMF, SMI/00/43; A. Simon and M. Kovacs (1998), "Components of the real exchange rate in Hungary", National Bank of Hungary Working Paper 1998/3.

Table 4**Monetary and exchange rate strategies in accession countries**

	Exchange rate regime ¹⁾	Currency	Features
Currency board			
Bulgaria	Currency board to the euro	Bulgarian lev	Introduced in 1997
Estonia	Currency board to the euro	Estonian kroon	Introduced in 1992
Lithuania	Currency board to the euro	Lithuanian litas	Introduced in 1994; re-pegged from the US dollar to the euro in February 2002
Conventional fixed peg			
Latvia	Peg to the SDR	Latvian lats	Exchange rate band $\pm 1\%$
Malta	Peg to a basket	Maltese lira	Currency basket (euro, US dollar, pound sterling): exchange rate band $\pm 0.25\%$
Unilateral shadowing of ERM II			
Cyprus	Peg to the euro, with $\pm 15\%$ fluctuation bands	Cypriot pound	
Hungary	Peg to the euro, with $\pm 15\%$ fluctuation bands	Hungarian forint	Exchange rate regime combined with inflation targeting: 2.5-4.5% by end-2003
Managed float			
Romania	Managed float	Romanian leu	Currency basket (US dollar, euro) is used informally as reference
Slovakia	Managed float	Slovakian koruna	
Slovenia	Managed float	Slovenian tolar	Monetary targeting: the euro is used informally as reference currency
Independent float			
Czech Republic	Free float	Czech koruna	Inflation targeting: 2-4% by end-2005
Poland	Free float	Polish zloty	Inflation targeting: 2-4% by end-2003

Sources: IMF and national central banks.

1) IMF classification.

for sustainable economic growth. Nevertheless, all strategies have had their drawbacks, including risks to external competitiveness, difficulties in managing rising and volatile capital flows and meeting inflation targets. In this context, structural shocks have further complicated the conduct of monetary policy, including the operating of inflation-targeting frameworks.

Moreover, some accession countries have experienced difficulties in finding the appropriate balance between monetary, fiscal and structural policies. For example, the Czech Republic, Hungary, Poland and Slovakia experienced serious fiscal slippages in recent years, and several of these countries also incurred setbacks in their structural reform programmes. These episodes have at times called for a more restrictive monetary policy

stance than would otherwise have been warranted.

Most countries have already adjusted their exchange rate regimes ahead of their future participation in ERM II, which has the euro as its sole reference currency. Crawling pegs, free floats and pegs to currencies other than the euro are incompatible with ERM II. With regard to currency boards, the ECB does not consider them to be a substitute for participation in ERM II, implying that countries operating a currency board will be required to participate in ERM II for two years before adopting the euro. However, countries that operate a euro-based currency board deemed to be sustainable might not be required to go through a double regime shift, i.e. of floating the currency within ERM II and then re-

pegging it to the euro later. Thus, such countries may participate in ERM II with a currency board as a unilateral commitment, enhancing the discipline within ERM II. However, the ECB has stressed that such an arrangement will be assessed on a case-by-case basis and that a *common accord* on the central parity against the euro will have to be reached.

Financial sector structure and functioning

Although the financial sectors of the accession countries have undergone major changes during the last decade, they are still less than fully developed. With the exception of Cyprus and Malta, which are not transition countries, most countries started from monobank systems and practically non-existent capital markets. Even today, most financial systems are characterised by low levels of financial intermediation, a dominance of the banking sector over capital markets, a high degree of foreign ownership, and a limited degree of liquidity in many market segments.

The flip side of the dominant banking sector is an underdeveloped non-bank financial sector in most accession countries. Domestic capital and equity markets are often limited, with low levels of liquidity and secondary market activity. For example, stock market capitalisation amounted to about 16% of GDP in 2001 in the accession countries, compared with 72% of GDP in the euro area (see Table 5). The banking sector is, in turn, predominantly foreign-owned in most countries and, for example, in Bulgaria, the Czech Republic and Estonia almost entirely so. Foreign investors also play a key role in other market segments, including foreign exchange, stock and bond markets, and large domestic firms often resort to foreign banks and capital markets abroad for their financing.

While the banking sector in most countries can be considered as generally stable and well capitalised, the level of financial intermediation remains quite low, even in those countries with the most developed financial markets (the Czech Republic, Hungary and Poland). The ratio of bank assets to GDP and domestic credit to GDP are only about one-quarter and one-third respectively of that in the euro area. The

Table 5
Financial sector structure in accession countries

	Banking assets ¹⁾	Domestic credit ²⁾	Credit to public sector ²⁾	Credit to private sector ²⁾	Stock market capitalisation ¹⁾
	% of GDP	% of GDP	% of domestic credit	% of domestic credit	% of GDP
Bulgaria	44	21	29	71	4
Cyprus	249	137	13	87	69
Czech Republic	126	61	20	80	16
Estonia	72	43	4	96	27
Hungary	61	42	22	78	19
Latvia	77	25	21	79	9
Lithuania	32	18	34	66	10
Malta	224	147	20	80	37
Poland	66	39	34	66	14
Romania	30	13	40	60	3
Slovakia	96	67	54	46	19
Slovenia	79	56	30	70	30
All	76	44	29	71	16
Euro area	265	135	21	79	72

Sources: ECB, IMF International Financial Statistics, national authorities and International Federation of Stock Exchanges.

1) Data as at end-2001.

2) Data as at end-2000.

liquidity levels in other market segments, such as the foreign exchange, money, bond and stock markets, are also relatively low.

The dialogue with accession countries' central banks has focused on the importance of further developing the financial sectors, including payment systems, without jeopardising the achievement of financial stability. Sound and well-functioning banking sectors, capital markets and payment systems are crucial for the effectiveness of monetary policy, as they help to strengthen the monetary policy transmission process. Further development of the financial sector could also contribute to the real convergence process, as the availability and efficient allocation of a broad range of financing instruments could facilitate economic development and structural change. In particular, small and medium-sized enterprises – which are often the main engine of economic growth and job creation – typically depend on the domestic financial markets for raising capital, and may therefore benefit most from the enhanced development and efficiency of the financial sectors.

Issues related to the financial sector structure and functioning are expected to remain at the core of the policy dialogue with the accession countries. With a view to their eventual entry into the euro area, it will also be important to develop the banking sector and money markets so as to improve the transmission of monetary impulses. Moreover, to ensure the preservation of financial sector stability, it will be crucial to further strengthen the institutional and legal frameworks and foster corporate governance. Finally, it will be essential to establish cross-border co-operation among supervisory institutions of the euro area and the accession countries.

Central bank independence

Central bank independence is an essential component of a sound economic policy framework for the achievement and maintenance of price stability. Indeed,

membership of the EU requires the accession countries to ensure that central bank legislation is in compliance with the Treaty, implying full institutional, personal, functional and financial independence for the central banks.

The ECB has been regularly consulted by accession countries' central banks on the compatibility of their respective draft laws with EU requirements. All the accession countries have either revised their central bank acts in the past few years or are amending them so as to meet the EU requirements. So far, progress has been considerable. In particular, Cyprus, the Czech Republic, Latvia, Lithuania, Slovakia and Slovenia are well advanced with their legal preparations. Most other countries have also made progress in this regard, although they still have to refine some parts of their central bank laws or constitutions – often in the area of personal and financial independence – to fully comply with the Treaty. In addition to the revision of the respective central bank statutes, it is also important to ensure that the revised laws are indeed fully implemented and that central bank independence is not only ensured formally but also respected in the day-to-day conduct of policy.

The process of adjusting the central bank statutes has not been smooth in all cases. Amendments to the Czech National Bank Act were initially resisted in Parliament in 2001, before the matter was finally resolved in early 2002. More recently, the parliaments in Hungary and Poland have discussed draft amendments to their respective central bank statutes that could de facto limit the degree of central bank independence. The passage of amendments that, in substance, weaken central banks in their pursuit of price stability would cause serious concerns in the accession process.

Technical preparation

Future membership of accession countries' central banks in the ESCB and the Eurosystem requires not only a strengthening of central banking policies but also needs significant

technical preparation. As the lead time covers a period of several years, accession countries' central banks have already started their preparatory work in many areas. The ECB and the NCBs have assisted in this process by familiarising accession countries' central banks with the functional and operational framework of the ESCB and the Eurosystem, and by providing expert-level support in various fields. Technical preparations and central banking co-operation between the Eurosystem and accession countries' central banks are extensive, covering the whole range of central banking functions, and also draw heavily on NCB resources. Since 2000, some 800 co-operation activities have taken place. An overview of some of the main technical co-operation activities conducted in recent years is given below.

In the area of payment and security settlement systems, infrastructures and procedures have been or are being adapted to ensure a seamless entry into the EU environment. To identify priorities for preparation, the ECB published a report in 1999 entitled "Payment and settlement systems in countries that have applied for membership of the European Union". Significant progress has been made since then in upgrading these areas. Most infrastructures and procedures – including the underlying regulatory framework – have been or are being brought into line with EU requirements, often requiring substantial investments. As for payment systems, real-time gross settlement systems are being introduced, and in the field of securities settlement progress has been made with procedures allowing the introduction of delivery versus payment mechanisms and the effective management of collateral. A follow-up report on the progress made in these areas will be published in the second half of 2002.

In the legal domain, the most important preparation from a Eurosystem point of view – in addition to the implementation of central bank independence – has been the amendment of financial laws in line with the *acquis communautaire*. This includes, for

example, legislation on the free movement of capital and freedom of payments, the provision of banking, securities trade and investment services, collateral rules, and legislation aiming at an internal market for financial services. In order to establish a regular exchange of views on these areas, the Eurosystem has organised several seminars for officials of the national central banks of the accession countries. In addition, country rapporteurs have been appointed within the Eurosystem (both at the ECB and NCBs) to closely monitor legal developments, provide advice and prepare informal opinions on draft laws.

In the field of statistics, the focus of co-operation has been on areas for which the ECB is responsible or shares responsibility with the European Commission and Eurostat, in particular relating to money and banking statistics and balance of payments statistics. Activities have centred on preparations that allow the accession countries to ultimately produce high-quality data in a manner consistent with that of the euro area Member States. As part of the co-operation, the ECB has published several technical manuals regarding the development of statistics in accession countries. These countries have made considerable progress towards aligning their statistics with ESCB requirements. The current situation varies from area to area depending on the required lead times and respective priorities. Regarding balance of payments statistics, all countries have adopted the standards of the relevant IMF Balance of Payments Manual. Most of them compile a monthly balance of payments, all of them compile international reserves at least on a monthly basis, and all but one compile a regular full international investment position. Regarding money and banking statistics, work is currently under way relating to data on Monetary Financial Institutions (MFIs) and some non-monetary financial intermediaries. Several accession countries are already well prepared regarding MFI balance sheet statistics, and preparations are also far advanced for the exchange of statistical information in ESCB-compatible formats.

As regards operational issues in support of monetary policy – including monetary policy instruments and the operational framework – co-operation activities have intensified markedly in the recent past. Some accession countries have already adopted monetary policy instruments and procedures similar to those of the Eurosystem, and the harmonisation of open market operations, standing facilities and minimum reserve systems in line with Eurosystem practices is taking place in many countries. Concerning the investment of foreign reserve assets, accession countries have started to actively familiarise themselves with the Eurosystem practices.

Until recently, co-operation on banknotes issues mainly focused on the cash changeover, including technical preparations as well as communication aspects. This issue was of particular interest to many accession countries because of their substantial holdings

of euro legacy currencies. Intensive discussions, which were held both bilaterally and at seminars organised by the ECB, contributed to a smooth cash changeover in these countries. In parallel, co-operation work in the field of preventing and combating euro counterfeiting is taking place.

Finally, preparatory work has started on information technology in order to make accession countries' central banks familiar with the technical adaptations required to eventually connect their central banks to the information technology (IT) infrastructure of the ESCB. Of particular importance at this preparatory stage is the need to establish a secure electronic communication infrastructure so that, by the time of accession, data and confidential documents can be exchanged between the ECB and accession countries' central banks. The relevant technical preparations are already under way.

4 Concluding remarks

The accession countries have made remarkable progress over the past few years in macroeconomic stabilisation, in transforming their economies into market economies and in integrating them through trade and financial relations with the euro area. The prospect of EU accession and future euro adoption has thereby already served as a powerful anchor for economic, monetary and exchange rate policies and has guided policy-makers as well as market participants.

In particular, progress has been made with regard to disinflation and financial stability. The economic structures are continuously being brought closer to those prevailing in the EU through transformation, privatisation and liberalisation, and trade and financial integration are also well advanced. However, progress has been more hesitant in the area of real income convergence. Nevertheless, the achievements in the areas of macroeconomic stabilisation and

structural reforms have been important steps towards laying the foundation for sustainable non-inflationary growth. The challenges ahead include further inflation convergence, entrenchment of macroeconomic stability even amid possibly stronger and more volatile capital flows, and further economic and financial development. In this context, it is important that remaining structural reforms are implemented and that regressive steps – such as those concerning central bank independence – are avoided.

For the ECB and the Eurosystem, managing the accession process from a central banking point of view has become an institutional priority, and significant resources are committed to this task. In the period ahead, preparations will be intensified to ensure the smooth integration of accession countries' central banks into the ESCB and, at a later stage, into the Eurosystem.

Developments in the external direct and portfolio investment flows of the euro area

Direct and portfolio investment flows between the euro area and abroad have risen substantially since the end of the 1990s. Merger and acquisition (M&A) activities influenced foreign direct investment, while – notwithstanding interrelationships with direct investments – risk diversification and expectations about relative corporate profitability were among the key factors affecting cross-border portfolio flows. During the period 1998-2001, for which data are available for the euro area as a whole, the euro area experienced sizeable net outflows of combined direct and portfolio investment (averaging €126 billion per annum), in particular vis-à-vis the United States. However, the net outflows gradually declined during this period and large fluctuations took place in the composition of euro area financial flows, particularly between investment in equity securities and debt instruments. Movements in portfolio investments seem to have been influenced by several factors: expectations in 1998 related to the formation of Economic and Monetary Union (EMU); the large increase in bond issuance by euro area residents from 1999 onwards; the optimistic market sentiment regarding US corporate profitability, particularly in the New Economy sector up to 2000; the narrowing of the interest rate differential between the United States and the euro area in 1999 and 2000; and the increased uncertainty regarding the global economic outlook at the end of 2000 and in 2001.

I Introduction

The 1990s were characterised by sustained and extensive integration of financial markets worldwide and most notably in the euro area. The liberalisation of financial markets and technical progress in communication technologies have allowed investors to trade more easily on global markets, leading to sizeable cross-border portfolio investment flows. In addition, global competition has triggered M&A activities between euro area and non-euro area companies, which are behind the sharp increase in foreign direct investment.

The aim of this article is to highlight trends in and determinants of direct and portfolio investment flows between the euro area and abroad. Data for the aggregate flows come from the financial account of the euro area balance of payments (b.o.p.), which includes direct and portfolio investment transactions involving euro area residents and non-residents (see box) and excludes transactions between euro area countries. These data are available from 1998 onwards. More detailed bilateral data between the euro area and the United States and Japan are taken from the respective national statistical sources.

2 Recent developments in euro area direct and portfolio investment flows

M&A activities were a key determinant of developments in foreign direct investment at the end of the 1990s. Euro area companies have often strengthened their position in international markets and gained access to local technology and expertise by forming partnerships with foreign firms and by investing in them. Over the period 1998-2001, for which data are available for the euro area as a whole, euro area companies made an average yearly amount of foreign direct investment of €275 billion, mostly in the form

of acquisitions of equity capital (see Table I as well as Table 8.4 in the “Euro area statistics” section of this Bulletin), particularly in US companies. Foreign companies also considered the euro area to be an important region in which to invest and locate. Over the same period, the amount of direct investment inflows into the euro area averaged €203 billion per annum. The euro area, therefore, experienced net outflows of direct investment throughout the period, except in 2000, when there was a particularly

Table I
Euro area net external financial flows
(EUR billions)

	1998	1999	2000	2001	Average
Combined net direct and portfolio investment	-191	-159	-88	-68	-126
A. Direct investment	-81	-118	15	-105	-72
<i>Assets</i>	-173	-317	-385	-228	-275
<i>Liabilities</i>	92	198	400	123	203
B. Portfolio investment	-110	-40	-103	37	-54
<i>Assets</i>	-363	-302	-400	-267	-333
<i>Liabilities</i>	253	262	297	303	279
1. Equities	-12	-67	-243	143	-45
<i>Assets</i>	-116	-157	-289	-95	-164
<i>Liabilities</i>	104	90	46	238	120
2. Debt instruments	-98	26	140	-106	-10
<i>Assets</i>	-247	-145	-111	-171	-169
<i>Liabilities</i>	149	171	251	65	159
2.1 Bonds and notes	-117	-29	135	-75	-22
<i>Assets</i>	-239	-147	-92	-153	-157
<i>Liabilities</i>	122	117	226	78	136
2.2 Money market instruments	20	55	5	-32	12
<i>Assets</i>	-8	1	-19	-18	-11
<i>Liabilities</i>	28	54	24	-13	23

Source: ECB.

Note: A minus sign indicates financial outflows from the euro area. Greece is not included in the 1998 figures.

large inward investment of this type. Owing primarily to this M&A transaction in February 2000, the euro area b.o.p. registered an inflow in the category of equity capital of €158 billion from non-residents in that month alone.

As regards portfolio investment, net outflows amounting to a yearly average of €54 billion were recorded in this investment category of the euro area b.o.p. in the period under consideration. Moreover, investment in equity securities and debt instruments was characterised by high volatility and shifts in the direction of flows. In this context, the identification of the determinants of such flows becomes a rather complex task. However, risk diversification and expectations about relative corporate profitability worldwide, and particularly in the United States, appeared to be among the key factors affecting euro area portfolio flows between 1998 and 2001.

Turning to the individual components of portfolio investment, the euro area

experienced average net outflows in equity securities of €45 billion during the reference period. However, behind this average figure, there are somewhat contrasting developments with regard to the direction of equity flows, as the net outflows recorded in the period 1998-2000 turned into sizeable net inflows in

Chart I
Real GDP growth differential between the United States and the euro area

(in percentage points)



Sources: BIS, Eurostat and ECB calculations.

Note: The difference between US and euro area real GDP growth rates is measured against the same quarter in the previous year.

Box

Description of the financial account of the euro area balance of payments

The financial account of the euro area b.o.p. is divided into five main sub-components: direct investment, portfolio investment, financial derivatives, other investment and reserve assets.

Direct investment reflects the objective of a resident entity in one economy to obtain a lasting interest in an enterprise resident in another economy. In line with international standards, a "10% ownership criterion" is used to infer such a relationship. Direct investment comprises three categories, i.e. "equity capital" which includes in particular many M&A transactions, "reinvested earnings" (earnings of the "direct investor" not distributed as dividends) and "other capital" which mainly consists of inter-company loans.

The portfolio investment account shows transactions in securities, except those included in direct investment and reserve assets. It includes equity securities and debt securities in the form of bonds and notes and money market instruments. Euro area asset flows refer to the transactions by resident investors in securities issued by non-resident entities, while liability flows reflect the transactions between residents and non-residents in securities issued by residents of the euro area.

Financial derivatives are financial instruments linked to a specific financial instrument, indicator or commodity, and through which specific financial risks can be traded in financial markets in their own right.

The other investment account includes transactions in loans, deposits and repurchase agreements, while reserve assets comprise holdings of foreign liquid and creditworthy assets by the Eurosystem.

For the time being, the euro area b.o.p. does not include a geographical breakdown. It is planned to compile and publish this information as from end-2004. This article, therefore, uses statistics published by some counterpart countries, i.e. the United States and Japan, even though there may be some methodological differences between these data and the euro area b.o.p. statistics.

2001 (see Table 1). Given that a significant proportion of equity outflows was seemingly directed to the United States (see Section 3 below), a likely explanation for the 1998-2000 development is the strong performance of the US economy in the second half of the 1990s (see Chart 1). The sizeable increase in US real GDP growth made investors optimistic about the long-run profitability of US companies, especially in the New Economy sector. In addition, it should be noted that the particularly large net outflows of euro area equity portfolio investment in 2000 were also influenced by the settling of M&A transactions via the exchange of shares, highlighting the interrelationship between the flows recorded under both direct and portfolio investment.

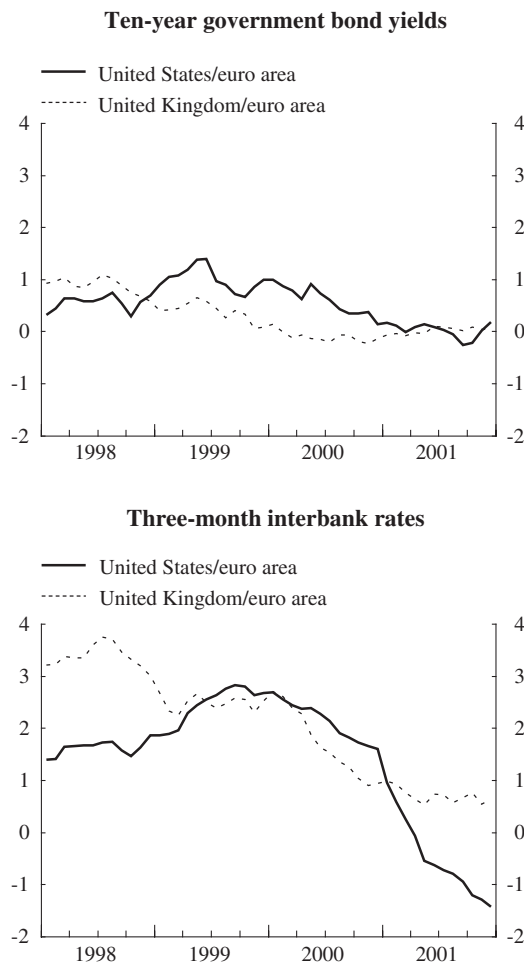
In 2001 the uncertainty generated by the economic slowdown in the United States and

its effects on other regions of the world affected equity investment flows; the euro area experienced large equity inflows on the liabilities side amounting to €238 billion in 2001, while investment in equity securities abroad by euro area residents declined. As a result, the euro area registered net inflows of €143 billion in 2001, compared with significant net outflows in previous years, particularly in 2000.

Investment in debt instruments was broadly balanced, as it recorded an average net outflow of €10 billion during the period 1998-2001. However, while net outflows were registered in 1998 and 2001, net inflows marked developments in both 1999 and 2000. Expectations in 1998 that the start of Stage Three of EMU would make the returns on euro area bonds highly correlated might have led to portfolio diversification and hedging,

Chart 2
Interest rate differential between the United States, the United Kingdom and the euro area

(monthly averages, percentage points)



Sources: BIS, national data and ECB calculations.

thereby explaining, at least in part, the observed net outflows from the euro area in bonds and notes. From mid-1999 to the end of 2000, the fall in the ten-year government bond yield differential between the United States, the United Kingdom and the euro area (see Chart 2) and the rapid increase in bond issuance by euro area residents (see Chart 3) – driven partially by the introduction of the euro, the corporate restructuring within the euro area and the creation of a deeper and more liquid market for debt securities in Europe – might have caused a

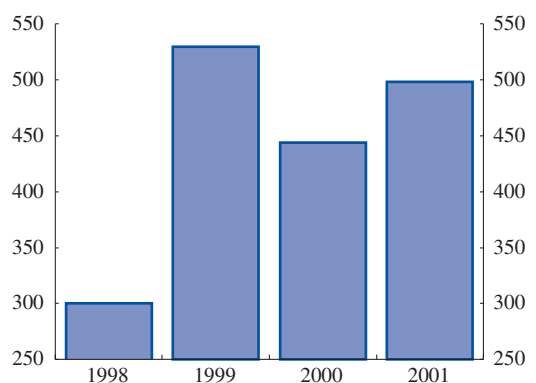
reduction in net outflows in bonds and notes in 1999 and a shift to net inflows in 2000. Transactions in money market instruments have been volatile on the assets and liabilities sides of the euro area financial account. The purchase of euro area money market instruments by non-residents has, however, declined since March 2000. Expected developments in the short-term interest rate differential between the United States, the United Kingdom and the euro area as well as the depreciation of the euro relative to the US dollar and pound sterling probably accounted for the decline in investment flows related to money market instruments on the liabilities side in 2000 and 2001.

In 2001, the net outflows recorded in both categories of debt instruments may be associated with expectations by non-residents of capital gains in the US bond markets induced by monetary easing in that year.

Overall, the euro area experienced a net outflow of combined direct and portfolio investment during the 1998-2001 period. Since 1999, however, the combined net outflow has been declining, which more recently reflects a shift from net outflows to net inflows of equity portfolio investment.

Chart 3
Net issuance of debt securities by euro area residents

(EUR billions)



Source: ECB.

3 Geographical destination and origin of euro area financial flows

The euro area b.o.p. does not yet record the geographical breakdown of financial flows. However, it is possible to form an impression of the size and direction of bilateral direct and portfolio investment with the United States and Japan from data taken from the national statistical sources of these countries.

The United States appears to have been the main destination for financial flows from the euro area over the 1998-2001 period. According to the US Bureau of Economic Analysis and the US Treasury International Capital (TIC) reporting system, bilateral financial flows between the euro area and the United States rose significantly in 1999 and 2000, seemingly reflecting the strength of the US economy and market expectations about US corporate profitability.

Table 2 shows in more detail that, during the 1998-2001 period, euro area direct investment in the United States averaged €107 billion, compared with €35 billion of US direct investment in the euro area. This has resulted in average annual net outflows in this item of €71 billion from the euro area to the United States during this period. Similarly,

net outflows from the euro area to the United States were recorded in portfolio investment (averaging €79 billion in the 1998-2001 period), as euro area residents' portfolio investment in the United States averaged €67 billion and the United States disinvested an average of €11 billion in the euro area over the same period. The bilateral euro area/US flows in this category contain information enabling a better understanding of developments in euro area equity portfolio investment. More specifically, the shift in euro area equity portfolio investment from net outflows in 2000 to net inflows in 2001 (see Table 1) is apparently associated with the decline in euro area investment in US equity securities; the latter fell from €91 billion in 2000 to €35 billion in 2001 (see Table 2).¹

The euro area also has financial links with Japan, albeit weaker than with the United States. The Japanese Ministry of Finance has

¹ As a note of caution, the US portfolio investment data are not directly comparable with those of the euro area b.o.p., as they rely on different data collection methods and definitions. The US TIC reporting system, in particular, identifies the first counterpart, thus tracking the place of transactions and not the ultimate owners of securities.

Table 2
Net bilateral direct and portfolio investment between the euro area and the United States

(EUR billions)

	1998	1999	2000	2001	Average
Bilateral direct investment	-34	-89	-93	-70	-71
- in the United States	-74	-113	-131	-109	-107
- in the euro area	40	24	38	39	35
Bilateral portfolio investment	-65	-67	-133	-50	-79
- in the United States	-59	-53	-119	-39	-67
- in the euro area	-6	-15	-14	-11	-11
1. Equities	-39	-62	-110	-38	-62
- in the United States	-33	-43	-91	-35	-51
- in the euro area	-5	-19	-19	-3	-12
2. Bonds and notes	-26	-5	-23	-11	-16
- in the United States	-26	-9	-28	-3	-17
- in the euro area	0	4	5	-8	0

Sources: US Bureau of Economic Analysis, US Department of the Treasury and ECB calculations.

Note: A minus sign indicates financial outflows from the euro area and inflows into the United States.

Table 3**Net bilateral direct and portfolio investment between the euro area and Japan***(EUR billions)*

	1998	1999	2000	Average	2000 first half	2001 first half
Bilateral direct investment	1	-2	-3	-1	0	1
- in Japan	0	-9	-7	-5	-2	-1
- in the euro area 7	1	6	4	4	2	3
Bilateral portfolio investment	63	73	60	65	32	8
- in Japan	16	18	8	14	2	-2
- in the euro area 7	47	55	52	51	30	10

Sources: Japanese Ministry of Finance and ECB calculations.

Note: A minus sign indicates financial outflows from the euro area and inflows into Japan. The seven euro area countries are Belgium, Germany, Spain, France, Italy, Luxembourg and the Netherlands.

published direct and portfolio investment flows for seven euro area countries – Belgium, Germany, Spain, France, Italy, Luxembourg and the Netherlands – since 1995. According to these data, direct investment flows are relatively small between the two economic areas (see Table 3).

Conversely, portfolio investment experienced a yearly average net inflow of €65 billion during the period 1998-2000. Japanese residents invested an average amount of €51

billion in debt instruments and equity securities issued by euro area residents, particularly in bonds and notes. By contrast, euro area residents disinvested an average amount of €14 billion of Japanese securities between 1998 and 2000. A comparison of the data relating to the first halves of 2000 and 2001 (the most recently published data refer to the first half of 2001) suggests that bilateral direct and portfolio investment may have been subdued in 2001 as a whole.

4 Conclusions

Financial flows between the euro area and abroad rose rapidly at the end of the 1990s. M&A activities, perhaps reflecting competitive forces in world markets, were mainly behind the sharp increase in cross-border direct investment flows, while – notwithstanding interrelationships with direct investments – risk diversification and expectations about corporate profitability, particularly with respect to the US corporate sector, were among the key factors affecting cross-border portfolio investment flows.

The euro area recorded net outflows of direct investment during the period 1998-2001, except for 2000, when there was a particularly large inward investment. By contrast, portfolio investments in equity securities registered net outflows during the

period 1998-2000 and net inflows in 2001, mainly owing to expectations about relative profitability of US and euro area companies.

The euro area b.o.p. was also characterised by shifts in debt instrument flows. The net outflows from the euro area in 1998 may have been a response to expectations that the start of Stage Three of EMU would make the returns on euro area bonds highly correlated, while those recorded in 2001 probably reflected expectations of capital gains by non-residents on US debt instruments. Conversely, the net inflows into the euro area in 1999 and 2000 were influenced by a combination of factors, in particular the rapid increase in bond issuance by euro area residents and the narrowing of the long-term interest rate differential

between the United States and the euro area, especially in 2000.

Overall, combined direct and portfolio investment recorded a net outflow from the

euro area in the reference period, the level of which, however, has been on the decline since 1999.



Euro area statistics



Contents ¹

	Euro area overview table	5*
1	Monetary policy statistics	
	1.1 Consolidated financial statement of the Eurosystem	6*
	1.2 Key ECB interest rates	8*
	1.3 Eurosystem monetary policy operations allotted through tenders	8*
	1.4 Minimum reserve statistics	10*
	1.5 Banking system's liquidity position	11*
2	Monetary developments in the euro area	
	2.1 Aggregated balance sheet of the Eurosystem	12*
	2.2 Aggregated balance sheet of the euro area MFIs, excluding the Eurosystem	13*
	2.3 Consolidated balance sheet of the euro area MFIs, including the Eurosystem	14*
	2.4 Monetary aggregates and counterparts	16*
	2.5 MFI loans by counterpart, type and original maturity	21*
	2.6 Deposits held with MFIs, by counterpart and instrument	24*
	2.7 Main MFI claims on and liabilities to non-residents of the euro area	26*
	2.8 Currency analysis of certain liabilities and assets of the euro area MFIs	28*
3	Financial markets and interest rates in the euro area	
	3.1 Money market interest rates	30*
	3.2 Government bond yields	31*
	3.3 Stock market indices	32*
	3.4 Retail bank interest rates	33*
	3.5 Securities issues other than shares by original maturity, residency of the issuer and currency denomination	34*
	3.6 Euro-denominated securities other than shares by original maturity, residency and sector of the issuer	36*
4	HICP and other prices in the euro area	
	4.1 Harmonised Index of Consumer Prices	42*
	4.2 Selected other price indicators	43*
5	Real economy indicators in the euro area	
	5.1 National accounts	44*
	5.2 Selected other real economy indicators	46*
	5.3 European Commission Business and Consumer Surveys	47*
	5.4 Labour market indicators	48*
6	Saving, investment and financing in the euro area	
	6.1 Financial investment and financing of non-financial sectors	49*
	6.2 Saving, investment and financing	53*
7	General government fiscal position in the euro area and in the euro area countries	
	7.1 Revenue, expenditure and deficit / surplus	54*
	7.2 Debt	55*
	7.3 Change in debt	56*

¹ See the ECB's website (www.ecb.int) for longer runs and more detailed data.

8	Balance of payments and international investment position of the euro area (including reserves)	
8.1	Summary balance of payments	57*
8.2	Balance of payments: current and capital accounts	58*
8.3	Balance of payments: income account	59*
8.4	Balance of payments: direct investment account	60*
8.5	Balance of payments: portfolio investment account	61*
8.6	Balance of payments: other investment account and reserve assets	62*
8.7	International investment position and reserve assets outstanding	64*
9	External trade in goods of the euro area	66*
10	Exchange rates	68*
11	Economic and financial developments in the other EU Member States	70*
12	Economic and financial developments outside the EU	
12.1	Economic and financial developments	71*
12.2	Saving, investment and financing	72*
	Technical notes	73*
	General notes	75*

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.

Data for the euro area plus Greece up to end-2000 are available in a downloadable format (csv files) on the ECB's website (www.ecb.int).

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⁾
	1	2	3	3-month moving average (centred) ⁴⁾				
2000	8.0	4.5	4.9	-	9.6	21.1	4.40	5.44
<i>Euro area enlargement</i>								
2001	3.6	4.2	5.5	-	7.8	26.2	4.26	5.03
2001 Q3	3.8	4.4	5.9	-	7.4	27.2	4.28	5.12
2001 Q4	5.5	5.7	7.6	-	6.5	27.3	3.45	4.81
2002 Q1	6.2	6.4	7.7	-	5.7	28.7	3.36	5.13
2002 Q2	.	.	.	-	.	.	3.45	5.26
2002 Feb.	6.2	6.3	7.4	7.5	5.6	28.6	3.36	5.07
2002 Mar.	5.9	6.2	7.3	7.4	5.5	25.3	3.39	5.32
2002 Apr.	6.8	6.4	7.4	7.5	5.5	25.6	3.41	5.30
2002 May	7.0	6.8	7.8	.	5.8	.	3.46	5.30
2002 June	.	.	.	.	.	.	3.46	5.16

2. Price and real economy developments

	HICP ⁹⁾	Industrial producer prices ¹⁰⁾	Hourly labour costs (whole economy) ¹¹⁾	Real GDP ¹²⁾	Industrial production (excluding construction) ¹³⁾	Capacity utilisation in manufacturing (percentages) ¹⁴⁾	Employment (whole economy) ¹⁵⁾	Unemployment (% of labour force) ¹⁶⁾
2000	2.3	5.5	3.2	3.5	5.5	83.8	2.1	8.4
<i>Euro area enlargement</i>								
2001	2.5	2.1	3.4	1.5	0.2	83.2	1.4	8.0
2001 Q3	2.4	1.4	3.7	1.3	-0.4	83.0	1.2	8.0
2001 Q4	2.1	-1.0	3.3	0.3	-3.8	81.8	1.0	8.1
2002 Q1	2.6	-0.9	3.7	0.1	-2.8	80.8	0.8	8.2
2002 Q2	.	.	.	.	.	80.7	.	.
2002 Feb.	2.5	-1.1	-	-	-3.3	-	-	8.2
2002 Mar.	2.5	-0.8	-	-	-2.3	-	-	8.2
2002 Apr.	2.4	-0.8	-	-	-1.2	-	-	8.3
2002 May	2.0	-0.9	-	-	.	-	-	8.3
2002 June	1.7	.	-	-	.	-	-	.

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) ²¹⁾	Effective exchange rate of the euro: broad group (1999 Q1 = 100)		USD/EUR exchange rate ²⁴⁾
	Current and capital accounts ¹⁷⁾	Goods ¹⁸⁾	Direct investment ¹⁹⁾	Portfolio investment ²⁰⁾		Nominal ²²⁾	Real (CPI) ²³⁾	
2000	-50.2	35.6	17.6	-111.5	378.0	88.2	86.3	0.924
<i>Euro area enlargement</i>								
2001	10.4	81.8	-104.6	36.5	392.4	91.0	88.0	0.896
2001 Q3	8.4	24.8	-22.4	49.6	393.4	91.2	88.0	0.890
2001 Q4	15.9	35.6	10.1	-0.3	392.4	92.0	88.6	0.896
2002 Q1	7.3	21.1	-11.5	-43.0	409.0	91.3	88.0	0.877
2002 Q2	.	.	.	.	.	93.9	90.4	0.919
2002 Feb.	2.3	8.2	-9.9	-9.9	411.4	91.1	87.7	0.870
2002 Mar.	3.9	10.8	-5.9	8.1	409.0	91.2	88.1	0.876
2002 Apr.	-4.5	8.2	7.7	11.5	394.2	91.7	88.4	0.886
2002 May	.	.	.	.	386.7	93.7	90.2	0.917
2002 June	.	.	.	.	.	96.4	92.6	0.955

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. Growth rates for M1, M2, M3 and loans are calculated on the basis of seasonally adjusted monthly stocks and flows.

2) M3 and its components exclude holdings by non-residents of the euro area of money market fund shares/units, money market paper and debt securities up to 2 years.

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
2002	1 Feb.	126,801	267,766	21,901	6,498	201,055	141,000	60,000	0
	8	126,801	267,929	20,878	6,150	189,033	128,998	60,000	0
	15	126,801	269,623	21,550	5,948	186,017	126,000	60,000	0
	22	126,801	267,712	21,037	5,330	169,730	107,000	60,000	0
	1 Mar.	126,801	266,023	21,985	5,448	183,030	123,001	60,001	0
	8	126,766	267,945	21,210	5,133	178,014	117,999	60,001	0
	15	126,869	269,552	22,201	5,229	168,094	108,085	60,001	0
	22	126,814	269,425	22,411	5,050	170,646	110,087	60,001	0
	29	139,808	267,653	21,845	5,198	192,716	132,000	60,000	0
	5 Apr.	139,808	269,459	20,703	5,322	178,008	117,999	60,000	0
	12	139,808	266,663	21,218	5,162	163,109	103,000	60,000	0
	19	139,808	267,964	21,492	5,053	157,009	96,999	60,000	0
	26	139,502	264,366	23,330	4,854	169,028	108,999	59,999	0
	3 May	139,502	260,581	23,971	5,223	169,031	109,001	59,999	0
	10	139,502	261,627	23,914	4,970	174,946	114,923	59,999	0
	17	139,502	262,163	22,923	5,043	169,022	108,999	59,999	0
	24	139,458	261,125	23,086	4,983	173,028	113,000	59,999	0
	31	139,419	259,372	24,085	5,087	178,381	118,002	60,000	0
	7 June	139,414	260,127	23,583	5,079	173,309	113,000	60,000	0
	14	139,414	261,837	22,944	5,135	167,022	106,999	60,000	0
	21	139,378	263,172	22,001	4,985	175,937	111,999	60,000	0
	28	128,323	237,959	19,742	4,491	200,958	140,000	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
2002	1 Feb.	312,923	134,033	133,974	59	0	0	0	2,116	2,939
	8	305,434	128,443	128,397	46	0	0	0	2,172	2,939
	15	296,361	138,276	138,204	72	0	0	0	2,269	2,939
	22	287,727	132,339	131,839	500	0	0	0	2,119	2,939
	1 Mar.	285,800	134,936	134,872	52	0	0	12	2,636	2,939
	8	284,562	132,856	132,795	46	0	0	15	2,610	2,939
	15	281,713	134,298	134,226	55	0	0	17	2,443	2,939
	22	280,237	133,942	133,081	844	0	0	17	2,188	2,939
	29	287,483	131,372	131,315	53	0	0	4	2,221	2,939
	5 Apr.	287,729	132,421	132,396	24	0	0	1	2,264	2,939
	12	285,822	134,011	133,008	1,002	0	0	1	2,306	2,939
	19	284,884	134,321	134,307	13	0	0	1	2,166	2,939
	26	286,516	132,223	132,104	119	0	0	0	2,250	2,939
	3 May	294,502	129,859	128,775	1,083	0	0	1	2,185	2,939
	10	297,335	134,275	134,083	191	0	0	1	2,304	2,939
	17	297,223	133,262	133,231	29	0	0	2	2,195	2,939
	24	295,202	128,581	128,540	41	0	0	0	2,189	2,939
	31	299,030	130,158	130,091	55	0	0	12	2,351	2,939
	7 June	302,923	132,931	132,859	60	0	0	12	2,472	2,939
	14	303,602	128,245	128,202	30	0	0	13	2,432	2,939
	21	304,536	135,049	132,344	2,693	0	0	12	2,249	2,939
	28	308,753	134,893	134,781	100	0	0	12	2,034	2,939

Source: ECB.

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	Total		
							9	10	11	12	13	14	15	16
0	11	44	531	27,601	68,575	89,397	810,126	2002	1 Feb.
0	15	20	526	27,922	68,577	89,107	796,924		8
0	16	1	346	28,163	68,576	89,769	796,794		15
0	2,727	3	233	29,048	68,572	88,938	777,402		22
0	23	5	391	29,172	68,577	88,743	790,171		1 Mar.
0	11	3	374	29,479	68,580	88,823	786,325		8
0	5	3	375	29,367	68,590	88,696	778,974		15
0	547	11	256	29,312	68,622	89,303	781,840		22
0	704	12	296	29,153	68,639	89,592	814,901		29
0	1	8	253	29,100	68,611	88,877	800,142		5 Apr.
0	105	4	230	30,051	67,733	88,941	782,916		12
0	6	4	238	30,288	67,702	89,249	778,804		19
0	21	9	237	30,463	67,706	89,348	788,835		26
0	14	17	259	30,135	67,708	87,422	783,833		3 May
0	14	10	253	30,330	67,708	88,366	791,617		10
0	20	4	287	29,933	67,710	88,926	785,510		17
0	17	12	235	30,161	67,705	89,030	788,812		24
0	366	13	209	29,930	67,701	89,148	793,333		31
0	305	4	213	29,944	67,701	89,062	788,433		7 June
0	5	18	231	30,087	67,701	89,192	783,564		14
0	3,925	13	205	30,220	67,698	90,077	793,674		21
0	930	29	512	30,481	67,687	90,691	780,845		28

Liabilities to other euro area residents in euro	Liabilities to non-euro area residents in euro	Liabilities to euro area residents in foreign currency	Liabilities to non-euro area residents in foreign currency	Counterpart of special drawing rights allocated by the IMF	Other liabilities	Revaluation accounts	Capital and reserves	Total		
								10	11	12	13	14	15	16	17	18
54,483	8,738	2,713	21,300	6,967	75,480	125,316	63,119	810,126	2002	1 Feb.
55,608	8,508	2,589	20,545	6,967	75,324	125,316	63,080	796,924		8
52,811	8,524	2,623	21,454	6,967	76,198	125,316	63,057	796,794		15
49,650	8,633	2,599	18,987	6,967	77,016	125,316	63,111	777,402		22
62,731	8,365	2,847	17,926	6,967	76,560	125,320	63,145	790,171		1 Mar.
61,818	8,294	2,616	19,587	6,967	75,625	125,320	63,132	786,325		8
52,802	8,691	2,684	22,407	6,967	75,588	125,320	63,123	778,974		15
57,084	8,489	2,558	22,938	6,967	75,886	125,320	63,293	781,840		22
74,560	8,675	1,833	22,061	6,990	76,515	136,887	63,365	814,901		29
59,263	8,500	1,477	22,153	6,990	75,797	136,887	63,722	800,142		5 Apr.
55,955	8,518	1,489	20,024	6,990	64,246	136,887	63,729	782,916		12
50,964	8,302	1,441	21,003	6,990	65,173	136,887	63,734	778,804		19
63,552	8,430	1,398	19,124	6,990	64,792	136,887	63,734	788,835		26
53,269	9,597	1,428	17,841	6,990	64,561	136,887	63,775	783,833		3 May
53,628	8,515	1,405	18,929	6,990	64,635	136,887	63,775	791,617		10
47,272	8,649	1,479	19,441	6,990	65,398	136,887	63,775	785,510		17
60,721	8,433	1,405	18,757	6,990	62,611	136,887	64,097	788,812		24
59,922	8,476	1,376	18,216	6,990	62,886	136,887	64,102	793,333		31
47,953	8,561	1,377	18,619	6,990	62,519	136,887	64,262	788,433		7 June
46,035	8,318	1,423	20,020	6,990	62,407	136,887	64,266	783,564		14
48,337	8,932	1,423	19,135	6,990	62,934	136,887	64,263	793,674		21
70,880	8,437	1,641	16,944	6,521	64,431	99,114	64,258	780,845		28

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			
			Fixed rate	Minimum bid rate			
	Level 1	Change 2	Level 3	Level 4	Change 5	Level 6	Change 7
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
31 Aug.	3.25	-0.25	-	4.25	-0.25	5.25	-0.25
18 Sep.	2.75	-0.50	-	3.75	-0.50	4.75	-0.50
9 Nov.	2.25	-0.50	-	3.25	-0.50	4.25	-0.50

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. The change on 18 September 2001 was effective on that same day.
- 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
2002 2 Jan.	88,696	31,000	-	3.25	3.28	3.29	14
9	155,890	83,000	-	3.25	3.30	3.32	14
16	116,846	22,000	-	3.25	3.31	3.32	14
23	146,286	103,000	-	3.25	3.29	3.30	14
30	108,013	38,000	-	3.25	3.31	3.32	13
6 Feb.	156,977	91,000	-	3.25	3.30	3.31	14
12	90,332	35,000	-	3.25	3.29	3.30	15
20	135,530	72,000	-	3.25	3.28	3.29	14
27	127,024	51,000	-	3.25	3.29	3.30	14
6 Mar.	127,212	67,000	-	3.25	3.29	3.30	12
13	90,424	41,000	-	3.25	3.27	3.28	14
18	107,575	69,000	-	3.25	3.28	3.29	17
27	121,842	63,000	-	3.25	3.33	3.34	14
4 Apr.	112,796	55,000	-	3.25	3.30	3.31	13
10	112,847	48,000	-	3.25	3.29	3.29	14
17	102,694	49,000	-	3.25	3.27	3.28	13
24	115,604	60,000	-	3.25	3.30	3.31	14
30	106,166	49,000	-	3.25	3.30	3.31	15
8 May	108,472	66,000	-	3.25	3.29	3.30	14
15	108,733	43,000	-	3.25	3.30	3.30	14
22	112,438	70,000	-	3.25	3.33	3.34	14
29	114,221	48,000	-	3.25	3.34	3.35	14
5 June	114,258	65,000	-	3.25	3.33	3.34	14
12	97,462	42,000	-	3.25	3.31	3.32	14
19	112,227	70,000	-	3.25	3.32	3.33	14
26	111,439	70,000	-	3.25	3.35	3.36	14
3 July	108,626	57,000	-	3.25	3.33	3.33	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
2000 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
26 July	39,369	20,000	-	4.39	4.42	91
30 Aug.	37,855	20,000	-	4.20	4.23	91
27 Sep.	28,269	20,000	-	3.55	3.58	85
25 Oct.	42,308	20,000	-	3.50	3.52	98
29 Nov.	49,135	20,000	-	3.32	3.34	91
21 Dec.	38,178	20,000	-	3.29	3.31	97
2002 31 Jan.	44,547	20,000	-	3.31	3.33	84
28 Feb.	47,001	20,000	-	3.32	3.33	91
28 Mar.	39,976	20,000	-	3.40	3.42	91
25 Apr.	40,580	20,000	-	3.35	3.36	91
30 May	37,602	20,000	-	3.45	3.47	91
27 June	27,670	20,000	-	3.38	3.41	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	Minimum bid rate	Marginal rate ³⁾	Weighted average rate	
	1	2	3	4	5	6	7	8
2000 5 Jan. ⁴⁾	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	-	4.75	4.77	4.79	7
12 Sep.	Reverse transaction	69,281	69,281	4.25	-	-	-	1
13	Reverse transaction	40,495	40,495	4.25	-	-	-	1
28 Nov.	Reverse transaction	73,096	53,000	-	3.25	3.28	3.29	7
2002 4 Jan.	Reverse transaction	57,644	25,000	-	3.25	3.30	3.32	3
10	Reverse transaction	59,377	40,000	-	3.25	3.28	3.30	1

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) In liquidity providing (absorbing) operations, the marginal rate refers to the lowest (highest) rate at which bids were accepted.

4) This operation was conducted with a maximum rate of 3.00%.

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

Reserve base as at:	Total	Liabilities to which a 2% reserve coefficient is applied			Liabilities to which a 0% reserve coefficient is applied		
		Deposits (overnight, up to 2 years' agreed maturity and notice period)	Debt securities up to 2 years' agreed maturity	Money market paper	Deposits (over 2 years' agreed maturity and notice period)	Repos	Debt securities over 2 years' agreed maturity
	1	2	3	4	5	6	7
2001 May	10,687.3	5,984.7	166.6	198.9	1,307.5	693.2	2,336.4
June	10,705.3	6,015.6	175.7	198.7	1,314.2	656.6	2,344.5
July	10,590.4	5,912.2	183.4	199.1	1,312.5	636.2	2,346.9
Aug.	10,551.6	5,872.7	187.8	190.2	1,309.3	654.1	2,337.6
Sep.	10,627.3	5,956.0	188.2	191.3	1,315.7	631.6	2,344.6
Oct.	10,687.8	5,962.3	190.8	196.5	1,313.7	672.4	2,352.2
Nov.	10,798.1	6,073.4	199.0	191.3	1,300.9	656.5	2,376.9
Dec.	10,910.1	6,226.1	204.7	185.0	1,315.2	605.1	2,374.0
2002 Jan.	10,952.8	6,195.2	194.7	202.2	1,350.7	610.8	2,399.0
Feb.	10,964.1	6,164.7	196.8	196.0	1,337.1	653.2	2,416.3
Mar.	11,031.8	6,178.0	202.2	198.4	1,349.9	663.1	2,440.1
Apr.	11,076.4	6,176.1	205.1	199.8	1,355.1	699.1	2,441.2
May ^(p)	11,113.1	6,150.6	204.3	206.2	1,355.7	743.1	2,453.2

Source: ECB.

- 1) Liabilities vis-à-vis other credit institutions subject to the ESCB's minimum reserve system, the ECB and participating national central banks, are excluded from the reserve base. If a credit institution cannot provide evidence of the amount of its issues of debt securities with a maturity of up to two years and of money market paper held by the institutions mentioned above, it may deduct a certain percentage of these liabilities from its reserve base. This percentage was 10% for calculating the reserve base until November 1999, and 30% thereafter.
- 2) Maintenance periods start on the 24th of the month and run to the 23rd of the following month; the required reserve is calculated from the reserve base as at the end of the preceding month.

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

Maintenance period ending in:	Required reserves ²⁾	Actual reserves ³⁾	Excess reserves ⁴⁾	Deficiencies ⁵⁾	Interest rate on minimum reserves ⁶⁾
	1	2	3	4	5
2001 July	126.4	127.0	0.6	0.0	4.51
Aug.	127.2	127.7	0.5	0.0	4.50
Sep.	125.3	126.0	0.7	0.0	4.27
Oct.	124.4	125.0	0.6	0.0	3.76
Nov.	126.1	126.6	0.5	0.0	3.62
Dec.	126.4	127.3	0.9	0.0	3.30
2002 Jan.	128.7	130.1	1.4	0.0	3.34
Feb.	131.7	132.4	0.7	0.0	3.30
Mar.	131.3	132.0	0.7	0.0	3.28
Apr.	130.6	131.1	0.5	0.0	3.30
May	131.0	131.5	0.5	0.0	3.30
June	131.0	131.7	0.7	0.0	3.33
July ^(p)	130.7	.	.	.	.

Source: ECB.

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

Table 1.5
Banking system's liquidity position 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	
2001 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
July	397.6	161.9	59.9	0.2	0.0	0.4	0.0	350.8	42.5	98.8	127.1	478.3
Aug.	402.1	164.0	60.0	0.1	0.0	0.2	0.0	347.6	48.8	101.8	127.8	475.6
Sep.	401.3	147.1	60.0	0.5	3.5	0.4	0.0	335.4	45.2	105.4	126.1	461.9
Oct.	389.9	136.7	60.0	1.1	0.0	0.1	0.0	325.2	43.6	93.6	125.1	450.4
Nov.	385.0	132.3	60.0	0.2	0.0	0.3	0.0	311.3	46.1	93.1	126.7	438.3
Dec.	383.7	122.5	60.0	0.5	12.4	0.8	0.0	298.0	43.5	109.3	127.4	426.2
2002 Jan.	385.2	118.5	60.0	0.4	3.7	0.6	0.0	344.3	38.3	54.2	130.4	475.2
Feb.	386.0	127.3	60.0	0.2	0.0	0.1	0.0	306.2	49.6	85.2	132.6	438.8
Mar.	386.7	114.6	60.0	0.2	0.0	0.1	0.0	283.3	54.2	91.8	132.1	415.6
Apr.	395.4	112.7	60.0	0.4	0.0	0.2	0.0	285.9	55.9	95.3	131.2	417.3
May	397.7	110.6	60.0	0.1	0.0	0.3	0.0	293.7	49.2	93.5	131.7	425.6
June ⁶⁾	396.2	112.6	60.0	0.5	0.0	0.4	0.0	300.8	45.1	91.2	131.8	433.0

Source: ECB.

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

2) Excludes the issuance of debt certificates initiated by national central banks in Stage Two.

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	MFIs ¹⁾		General	Other	Holdings of securities other than shares issued by euro area residents	MFIs		General	Other	Holdings of shares/ other equity issued by euro area residents	MFIs		Other	External assets ¹⁾	Fixed assets	Re-remaining assets	Total
	euro area residents			government	euro area residents				government	euro area residents								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
1999	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 Q2	580.7	561.8	18.4	0.5	97.4	2.6	93.6	1.2	14.7	4.4	10.4	454.8	10.0	51.8	1,209.3			
Q3	493.1	474.4	18.2	0.5	98.5	2.9	94.6	1.0	14.6	4.4	10.2	459.1	10.2	54.4	1,129.8			
Q4	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 Q1	401.7	373.9	27.2	0.6	105.0	2.7	101.2	1.1	14.7	4.6	10.1	396.7	11.3	54.4	983.9			
2001 May	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			
June	426.0	398.2	27.2	0.6	105.8	3.1	101.5	1.2	14.2	4.6	9.6	414.7	11.9	54.5	1,027.2			
July	424.4	396.6	27.2	0.6	106.9	3.3	102.4	1.2	14.3	4.7	9.7	404.9	12.0	57.3	1,019.9			
Aug.	391.1	363.3	27.2	0.6	107.6	3.5	102.9	1.2	14.0	4.6	9.4	396.8	12.0	54.6	976.0			
Sep.	388.2	360.4	27.2	0.6	106.6	3.7	101.9	1.1	13.1	4.8	8.3	397.1	11.9	54.9	971.8			
Oct.	356.7	328.9	27.2	0.6	107.8	3.9	102.8	1.2	13.4	4.8	8.7	400.0	12.0	55.6	945.6			
Nov.	370.0	342.4	27.1	0.6	107.3	3.8	102.2	1.2	13.6	4.7	8.9	400.5	12.1	55.1	958.5			
Dec.	412.7	386.4	25.7	0.6	107.0	3.8	101.8	1.3	13.8	4.6	9.2	399.0	11.9	54.4	998.7			
2002 Jan.	400.1	373.7	25.7	0.6	104.1	3.8	99.0	1.3	13.8	4.7	9.1	409.0	12.0	102.7	1,041.7			
Feb.	373.4	347.1	25.7	0.6	105.9	4.1	100.6	1.2	13.7	4.7	9.0	413.4	12.0	103.6	1,022.0			
Mar.	381.3	354.9	25.8	0.6	106.5	4.2	101.0	1.4	13.8	4.7	9.1	414.3	11.9	106.4	1,034.3			
Apr.	344.2	317.8	25.8	0.6	107.5	5.0	101.4	1.1	13.5	4.7	8.8	401.3	12.0	108.3	986.8			
May ^(p)	356.1	329.7	25.7	0.6	107.0	4.9	101.0	1.0	13.3	4.7	8.6	394.5	12.0	110.3	993.3			

2. Liabilities

	Currency in circulation	Deposits of euro area residents	MFIs ¹⁾	Central government	Other general government/ other euro area residents	Money market paper and debt securities issued	Capital and reserves	External liabilities ¹⁾	Remaining liabilities	Total
	1	2	3	4	5	6	7	8	9	10
1999	393.3	341.5	279.3	53.4	8.8	7.9	174.3	49.8	47.6	1,014.5
2000 Q2	374.3	497.9	432.8	52.6	12.5	6.3	193.4	92.0	45.4	1,209.3
Q3	373.5	404.2	346.1	45.6	12.5	4.6	221.2	75.0	51.4	1,129.8
Q4	390.2	327.3	270.4	47.1	9.8	3.8	197.5	29.9	57.0	1,005.7
<i>Euro area enlargement</i>										
2001 Q1	370.6	312.6	253.4	46.8	12.4	5.5	204.6	26.8	63.8	983.9
2001 May	369.6	317.5	266.5	36.0	15.1	5.5	212.1	27.6	50.9	983.1
June	368.9	342.2	274.1	51.8	16.3	5.6	223.7	32.6	54.2	1,027.2
July	366.9	343.5	282.7	46.9	14.0	5.6	214.7	31.9	57.3	1,019.9
Aug.	356.1	320.4	259.2	46.6	14.7	5.6	211.6	28.4	53.9	976.0
Sep.	346.2	323.6	269.4	37.6	16.6	5.5	209.2	30.0	57.3	971.8
Oct.	333.9	302.8	244.7	40.0	18.1	5.5	210.6	34.3	58.5	945.6
Nov.	317.5	330.4	277.5	35.2	17.6	4.7	210.1	35.3	60.6	958.5
Dec.	285.9	391.9	342.4	35.1	14.4	4.6	209.8	35.6	70.8	998.7
2002 Jan.	340.0	345.2	285.1	44.9	15.2	4.6	214.5	37.4	100.0	1,041.7
Feb.	308.5	349.6	282.7	52.1	14.7	4.6	219.8	33.9	105.7	1,022.0
Mar.	309.5	355.1	282.4	56.3	16.4	4.6	217.8	36.8	110.5	1,034.3
Apr.	311.6	323.5	254.8	50.8	17.9	4.6	212.8	32.4	101.9	986.8
May ^(p)	319.7	326.6	268.4	40.7	17.4	4.6	208.0	31.6	102.7	993.3

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

											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
2000 Nov.	6,884.1	827.1	6,057.0	1,376.4	1,112.3	264.2	515.8	2,489.1	167.7	1,068.9	12,502.1
Dec.	6,927.0	835.0	6,092.0	1,355.0	1,089.5	265.5	521.7	2,406.9	169.9	1,029.6	12,410.1
<i>Euro area enlargement</i>											
2001 1 Jan.	7,007.9	853.9	6,154.0	1,423.6	1,156.0	267.6	530.4	2,402.7	172.9	1,008.9	12,533.7
2001 Jan.	7,043.5	857.2	6,186.3	1,416.7	1,145.7	271.0	542.9	2,463.6	171.8	1,083.8	12,722.3
Feb.	7,056.4	848.9	6,207.4	1,436.2	1,156.2	280.0	549.8	2,484.2	172.3	1,072.8	12,771.7
Mar.	7,126.0	851.7	6,274.3	1,453.2	1,165.2	288.0	567.0	2,636.9	172.0	1,117.3	13,072.4
Apr.	7,157.1	843.5	6,313.6	1,465.3	1,171.4	293.9	586.8	2,614.3	173.3	1,128.1	13,124.9
May	7,172.5	838.4	6,334.1	1,492.2	1,191.4	300.8	587.2	2,675.6	174.6	1,148.3	13,250.4
June	7,223.5	835.7	6,387.9	1,507.0	1,205.3	301.7	557.5	2,702.9	175.4	1,147.0	13,313.3
July	7,226.9	832.9	6,394.0	1,514.9	1,200.4	314.5	552.2	2,619.0	176.5	1,092.2	13,181.8
Aug.	7,198.0	828.8	6,369.3	1,515.1	1,191.9	323.3	545.1	2,622.9	176.9	1,082.6	13,140.6
Sep.	7,251.4	829.8	6,421.5	1,521.3	1,194.3	327.0	534.7	2,696.0	177.6	1,134.1	13,315.1
Oct.	7,278.5	827.2	6,451.2	1,515.2	1,185.8	329.4	543.7	2,741.0	178.3	1,164.2	13,420.8
Nov.	7,344.8	843.3	6,501.5	1,522.8	1,190.1	332.7	544.6	2,827.3	179.1	1,153.6	13,572.3
Dec.	7,366.7	847.7	6,519.0	1,515.2	1,178.4	336.8	567.7	2,805.7	180.0	1,137.3	13,572.7
2002 Jan.	7,378.8	844.8	6,534.0	1,547.2	1,205.7	341.5	567.7	2,829.2	177.5	1,168.9	13,669.2
Feb.	7,395.9	847.5	6,548.4	1,556.6	1,207.1	349.6	566.3	2,832.8	176.6	1,131.1	13,659.3
Mar.	7,456.9	854.5	6,602.4	1,576.6	1,229.9	346.7	558.8	2,845.6	176.3	1,077.5	13,691.7
Apr.	7,471.4	834.6	6,636.9	1,574.8	1,230.4	344.5	565.3	2,828.1	175.9	1,065.0	13,680.6
May ^(p)	7,487.0	831.4	6,655.7	1,589.6	1,243.3	346.3	567.9	2,845.5	176.0	1,047.5	13,713.6

2. Liabilities: levels

														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 ³⁾	Money market paper and debt securities issued ³⁾	Capital and reserves	External liabilities ²⁾	Re-maining liabilities	Excess of inter-MFI liabilities	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000 Nov.	337.7	168.8	5,187.4	1,609.0	2,148.7	1,256.3	173.5	319.8	1,670.2	920.8	2,420.0	1,477.1	0.4	12,502.1
Dec.	348.4	164.5	5,270.3	1,658.7	2,159.8	1,276.9	174.9	300.1	1,662.8	894.6	2,329.4	1,428.2	11.9	12,410.1
<i>Euro area enlargement</i>														
2001 1 Jan.	355.3	166.2	5,395.1	1,673.3	2,198.4	1,328.2	195.2	300.1	1,663.7	912.1	2,219.4	1,455.2	12.1	12,533.7
2001 Jan.	336.1	147.1	5,379.6	1,623.8	2,212.2	1,329.8	213.8	313.2	1,696.8	909.0	2,445.7	1,473.7	21.1	12,722.3
Feb.	335.1	155.6	5,388.4	1,625.6	2,223.6	1,323.5	215.8	322.3	1,711.6	911.4	2,475.2	1,491.3	-19.2	12,771.7
Mar.	336.3	150.3	5,427.9	1,636.1	2,243.0	1,322.8	225.9	333.2	1,719.5	927.0	2,663.0	1,536.7	-21.6	13,072.4
Apr.	336.2	152.5	5,457.3	1,666.9	2,241.6	1,323.9	224.9	341.8	1,720.3	928.1	2,676.4	1,524.5	-12.2	13,124.9
May	332.9	146.9	5,495.0	1,691.8	2,243.3	1,322.5	237.4	351.3	1,722.1	940.1	2,754.9	1,520.5	-13.2	13,250.4
June	333.0	165.5	5,528.3	1,731.8	2,241.2	1,330.8	224.5	349.3	1,740.7	965.9	2,743.2	1,504.1	-16.8	13,313.3
July	328.0	155.5	5,515.1	1,712.7	2,242.4	1,333.6	226.4	358.4	1,737.3	955.3	2,643.0	1,494.6	-5.7	13,181.8
Aug.	319.2	152.4	5,507.1	1,681.2	2,254.7	1,337.3	233.9	369.9	1,731.3	960.0	2,620.0	1,489.2	-8.6	13,140.6
Sep.	309.6	147.8	5,559.0	1,749.9	2,238.2	1,342.6	228.2	374.4	1,754.1	970.4	2,639.9	1,541.2	18.7	13,315.1
Oct.	295.5	153.3	5,580.6	1,750.3	2,241.6	1,351.9	236.9	386.4	1,768.1	981.4	2,661.6	1,588.6	5.4	13,420.8
Nov.	279.7	150.2	5,635.1	1,798.1	2,242.5	1,365.0	229.5	395.2	1,760.4	982.9	2,726.2	1,632.2	10.3	13,572.3
Dec.	239.7	139.0	5,783.3	1,896.3	2,261.6	1,405.0	220.4	391.9	1,761.0	996.5	2,719.1	1,550.7	-8.5	13,572.7
2002 Jan.	246.4	148.9	5,744.5	1,847.9	2,258.0	1,418.8	219.7	410.8	1,776.1	1,007.5	2,755.2	1,577.5	2.4	13,669.2
Feb.	240.2	155.7	5,743.9	1,843.5	2,255.0	1,420.9	224.5	422.0	1,778.4	1,011.4	2,763.2	1,542.8	1.5	13,659.3
Mar.	254.4	157.5	5,771.3	1,843.7	2,271.9	1,422.9	232.9	427.0	1,797.1	1,008.0	2,784.5	1,504.4	-12.7	13,691.7
Apr.	262.0	157.6	5,792.7	1,874.0	2,273.4	1,414.5	230.7	433.8	1,790.6	1,002.5	2,767.3	1,493.7	-19.6	13,680.6
May ^(p)	274.4	149.0	5,809.9	1,874.3	2,282.7	1,415.4	237.5	439.4	1,810.0	1,006.3	2,750.1	1,496.0	-21.6	13,713.6

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) Amounts held by residents of the euro area. Amounts held by non-residents of the euro area are included in external liabilities.

3. Assets: flows ¹⁾

	Loans to euro area residents		Other euro area residents	Holdings of securities other than shares issued by euro area residents	General government		Holdings of shares/ other equity issued by other euro area residents	External assets ²⁾	Fixed assets	Remaining assets	Total
	1	2			3	4						5	6
2000 Dec.	61.4	8.9	52.5	-15.6	-19.0	3.4	4.8	8.9	1.2	-29.5	31.3
<i>Euro area enlargement</i>											
2001 Jan.	35.1	2.9	32.2	-12.1	-15.6	3.5	12.5	63.6	-1.0	29.5	127.6
Feb.	14.0	-8.2	22.2	13.4	4.5	8.9	7.4	16.8	0.5	-11.9	40.2
Mar.	60.8	2.4	58.5	11.7	4.2	7.6	17.2	97.2	0.1	46.0	233.0
Apr.	33.2	-8.2	41.4	12.1	6.7	5.4	18.4	-17.8	1.2	10.0	57.1
May	4.1	-5.6	9.7	26.3	21.3	5.0	1.0	-1.1	1.4	18.7	50.3
June	57.3	-2.6	59.9	14.3	13.7	0.6	-32.4	27.5	0.9	-1.4	66.2
July	12.7	-2.5	15.1	9.6	-3.1	12.6	-8.4	-39.6	1.1	-50.5	-75.2
Aug.	-18.9	-3.7	-15.2	5.0	-4.2	9.3	-6.0	55.6	0.3	-10.6	25.4
Sep.	48.6	1.0	47.5	-1.2	-4.2	2.9	-5.0	49.2	0.7	51.9	144.1
Oct.	25.7	-2.7	28.4	-7.0	-9.5	2.5	5.7	43.9	0.7	30.1	99.1
Nov.	65.7	16.0	49.7	10.0	7.9	2.1	-3.2	67.3	1.1	5.7	146.8
Dec.	27.8	3.7	24.1	-8.0	-10.2	2.1	22.2	-28.1	1.1	-17.2	-2.1
2002 Jan.	9.5	-3.1	12.7	26.9	22.0	5.0	-0.2	1.7	-2.5	31.0	66.4
Feb.	19.3	2.7	16.5	9.3	1.3	8.0	0.6	0.3	-0.9	-39.1	-10.5
Mar.	62.9	7.1	55.9	15.8	18.2	-2.4	-8.8	20.5	-0.3	-53.7	36.3
Apr.	21.6	-19.7	41.3	-0.7	1.7	-2.4	6.7	20.0	-0.4	-13.0	34.3
May ^(p)	25.8	-2.8	28.6	13.3	10.4	2.9	1.7	71.9	0.2	-17.6	95.1

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 ³⁾	Money market paper and debt securities issued ³⁾	Capital and reserves	External liabilities ²⁾	Re-maining liabilities	Excess of inter-MFI liabilities	Total
2000 Dec.	10.7	-4.3	96.3	53.7	20.3	20.9	1.5	-9.4	-3.7	-21.9	-8.1	-33.8	5.4	31.3
<i>Euro area enlargement</i>														
2001 Jan.	-20.0	-19.0	-14.8	-49.2	14.2	1.6	18.6	14.6	28.4	-4.3	119.3	17.0	6.6	127.6
Feb.	-1.0	8.7	8.3	1.5	11.2	-6.3	1.9	9.3	14.3	2.8	26.5	11.1	-39.8	40.2
Mar.	1.3	-5.2	32.6	8.3	14.9	-0.8	10.1	12.4	2.7	16.5	133.7	47.2	-8.1	233.0
Apr.	-0.1	2.2	29.8	30.8	-1.0	1.1	-1.1	9.3	-2.4	1.3	18.5	-11.7	10.3	57.1
May	-3.3	-5.6	28.9	21.7	-3.5	-1.7	12.4	10.4	-11.6	8.4	11.8	12.7	-1.4	50.3
June	0.1	18.6	34.6	40.4	-1.3	8.3	-12.8	-0.9	20.6	19.0	-5.3	-18.3	-2.3	66.2
July	-5.0	-10.0	-8.2	-17.4	4.3	3.0	1.9	9.5	3.0	-6.4	-58.0	-11.6	11.5	-75.2
Aug.	-8.8	-3.1	-2.0	-29.6	16.3	3.9	7.5	10.8	1.4	7.3	30.1	-7.4	-2.9	25.4
Sep.	-9.6	-4.6	51.1	68.4	-17.0	5.3	-5.6	4.1	15.8	8.9	18.0	41.3	19.1	144.1
Oct.	-14.2	5.4	21.6	0.9	2.6	9.2	8.9	12.4	13.0	8.2	18.4	46.0	-11.8	99.1
Nov.	-15.7	-3.0	52.5	47.2	-0.3	13.1	-7.4	10.1	23.8	2.9	38.6	33.0	4.6	146.8
Dec.	-40.0	-11.2	148.1	98.5	18.8	40.0	-9.2	-1.4	-0.5	14.7	-17.8	-74.5	-19.5	-2.1
2002 Jan.	6.7	10.4	-40.6	-49.4	-2.9	12.4	-0.6	19.8	10.4	13.3	13.8	20.9	11.7	66.4
Feb.	-6.2	6.9	-0.1	-4.3	-2.8	2.1	4.8	11.3	4.8	-0.6	10.7	-36.6	-0.7	-10.5
Mar.	14.2	1.8	28.4	0.5	17.7	2.0	8.2	4.0	21.4	-0.4	30.6	-49.5	-14.2	36.3
Apr.	7.6	0.0	25.6	31.8	4.1	-8.2	-2.1	8.5	-0.5	-4.5	20.8	-16.9	-6.4	34.3
May ^(p)	12.4	-8.5	24.3	2.4	13.9	1.2	6.8	4.5	29.5	3.6	36.7	-5.3	-2.1	95.1

Table 2.4

Monetary aggregates ¹⁾ and counterparts

(EUR billions (not seasonally adjusted) and percentage 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⁾				
					1	2	3	4	5	6	7	8
2000 Nov.	337.7	1,675.3	2,013.0	112.37	986.4	1,202.1	4,201.4	106.63
Dec.	348.4	1,728.8	2,077.1	116.18	991.8	1,221.1	4,290.0	109.13
<i>Euro area enlargement</i>								
2001 1 Jan.	355.3	1,743.4	2,098.7	-	1,028.6	1,271.1	4,398.5	-
2001 Jan.	336.1	1,692.8	2,028.8	112.28	1,042.2	1,275.1	4,346.1	107.83
Feb.	335.1	1,692.9	2,028.0	112.22	1,054.7	1,269.7	4,352.3	107.97
Mar.	336.3	1,703.2	2,039.5	112.74	1,070.7	1,269.8	4,380.0	108.53
Apr.	336.2	1,735.9	2,072.1	114.54	1,072.1	1,273.4	4,417.6	109.47
May	332.9	1,759.2	2,092.1	115.47	1,072.9	1,273.2	4,438.3	109.78
June	333.0	1,798.4	2,131.4	117.66	1,070.4	1,283.0	4,484.8	110.96
July	328.0	1,780.3	2,108.3	116.48	1,077.2	1,287.2	4,472.8	110.77
Aug.	319.2	1,747.5	2,066.7	114.28	1,092.8	1,292.9	4,452.4	110.38
Sep.	309.6	1,815.1	2,124.7	117.48	1,075.2	1,299.7	4,499.7	111.54
Oct.	295.5	1,816.1	2,111.6	116.78	1,078.9	1,311.6	4,502.1	111.60
Nov.	279.7	1,864.6	2,144.3	118.55	1,081.0	1,326.4	4,551.7	112.79
Dec.	239.7	1,967.1	2,206.8	122.02	1,092.7	1,367.9	4,667.4	115.66
2002 Jan.	246.4	1,921.2	2,167.6	119.80	1,084.8	1,390.4	4,642.9	115.02
Feb.	240.2	1,917.2	2,157.4	119.24	1,080.3	1,394.5	4,632.2	114.77
Mar.	254.4	1,916.8	2,171.2	120.02	1,091.7	1,397.8	4,660.7	115.49
Apr.	262.0	1,950.4	2,212.4	122.38	1,095.2	1,391.8	4,699.4	116.54
May ⁴⁾	274.4	1,951.1	2,225.5	123.23	1,102.7	1,393.9	4,722.1	117.25

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⁾ (%)				
					1	2	3	4	5	6	7	8
2000 Dec.	10.7	57.5	68.2	5.7	11.2	19.3	98.6	3.7
<i>Euro area enlargement</i>								
2001 Jan.	-20.0	-50.4	-70.4	1.6	14.0	3.9	-52.5	2.6
Feb.	-1.0	-0.1	-1.1	2.1	12.3	-5.4	5.8	2.9
Mar.	1.3	8.1	9.3	2.0	13.4	-0.1	22.7	3.2
Apr.	-0.1	32.6	32.5	1.6	1.6	3.7	37.8	3.2
May	-3.3	20.1	16.8	3.2	-3.7	-0.5	12.7	3.6
June	0.1	39.6	39.7	4.3	-1.8	9.8	47.7	4.4
July	-5.0	-16.4	-21.4	3.3	9.0	4.4	-7.9	4.3
Aug.	-8.8	-30.9	-39.7	3.2	18.3	5.9	-15.5	4.2
Sep.	-9.6	67.4	57.7	5.5	-17.9	6.8	46.6	5.2
Oct.	-14.2	1.6	-12.6	5.0	3.2	11.8	2.4	5.4
Nov.	-15.7	47.8	32.1	5.5	1.2	14.8	48.1	5.8
Dec.	-40.0	102.7	62.7	5.0	11.6	41.5	115.8	6.0
2002 Jan.	6.7	-46.9	-40.2	6.7	-6.8	21.1	-25.9	6.7
Feb.	-6.2	-3.8	-10.0	6.3	-4.3	4.1	-10.2	6.3
Mar.	14.2	-0.1	14.1	6.5	12.0	3.2	29.4	6.4
Apr.	7.6	35.1	42.7	6.9	5.4	-5.9	42.2	6.5
May ⁴⁾	12.4	2.9	15.3	6.7	10.9	2.4	28.6	6.8

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) M3 and its components exclude holdings by non-residents of the euro area of money market fund shares/units, money market paper and debt securities up to 2 years.

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total	Index Dec. 98=100 ³⁾		
9	10	11	12	13		
173.5	319.8	128.2	4,823.1	107.91		2000 Nov.
174.9	300.1	135.7	4,900.7	110.00		Dec.
<i>Euro area enlargement</i>						
195.2	300.1	135.0	5,028.8	-		2001 1 Jan.
213.8	313.2	138.9	5,012.1	109.64		2001 Jan.
215.8	322.3	145.4	5,035.9	110.15		Feb.
225.9	333.2	139.3	5,078.4	110.98		Mar.
224.9	341.8	139.9	5,124.2	111.95		Apr.
237.4	351.3	134.9	5,161.8	112.59		May
224.5	349.3	145.2	5,203.8	113.53		June
226.4	358.4	140.8	5,198.5	113.51		July
233.9	369.9	142.4	5,198.6	113.62		Aug.
228.2	374.4	147.5	5,249.8	114.59		Sep.
236.9	386.4	149.8	5,275.2	115.13		Oct.
229.5	395.2	152.1	5,328.6	116.33		Nov.
220.4	391.9	145.8	5,425.5	118.46		Dec.
219.7	410.8	141.7	5,415.1	118.30		2002 Jan.
224.5	422.0	138.6	5,417.3	118.34		Feb.
232.9	427.0	139.7	5,460.2	119.28		Mar.
230.7	433.8	136.8	5,500.7	120.26		Apr.
237.5	439.4	146.0	5,545.0	121.35		May ⁴⁾

M3 ²⁾						
Repurchase agreements	Money market fund shares/units	Money market paper and debt securities up to 2 years	Total	Annual growth rate ³⁾ (%)		
9	10	11	12	13		
1.5	-9.4	2.6	93.3	4.2		2000 Dec.
<i>Euro area enlargement</i>						
18.6	14.6	3.1	-16.2	3.7		2001 Jan.
1.9	9.3	6.2	23.3	3.8		Feb.
10.1	12.4	-7.2	38.0	4.0		Mar.
-1.1	9.3	-1.6	44.5	4.0		Apr.
12.4	10.4	-6.5	28.9	4.5		May
-12.8	-0.9	9.2	43.2	5.6		June
1.9	9.5	-4.5	-1.0	5.7		July
7.5	10.8	2.3	5.1	6.0		Aug.
-5.6	4.1	-0.9	44.2	7.0		Sep.
8.9	12.4	0.9	24.7	7.4		Oct.
-7.4	10.1	4.6	55.3	7.8		Nov.
-9.2	-1.4	-8.0	97.2	7.7		Dec.
-0.6	19.8	-0.5	-7.2	7.9		2002 Jan.
4.8	11.3	-4.0	1.9	7.4		Feb.
8.2	4.0	1.6	43.1	7.5		Mar.
-2.1	8.5	-3.7	44.9	7.4		Apr.
6.8	4.5	10.0	49.9	7.8		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 and percentage growth rates, unless otherwise indicated)
3. Seasonally adjusted levels at the end of the period

	M2							
	M1				Other short-term deposits ⁵⁾		Total	Index Dec. 98=100 ⁴⁾
	Currency in circulation 1	Overnight deposits 2	Total	Index	Total	Index		
			3	Dec. 98=100 ⁴⁾		4	Dec. 98=100 ⁴⁾	
5	6	7	8					
2000 Nov.	338.6	1,678.4	2,017.0	112.59	2,210.1	102.84	4,227.1	107.28
Dec.	337.9	1,684.1	2,022.0	113.09	2,199.0	102.60	4,221.0	107.37
<i>Euro area enlargement</i>								
2001 1 Jan.	342.3	1,692.5	2,034.8	-	2,285.6	-	4,320.3	-
2001 Jan.	341.8	1,700.5	2,042.3	113.03	2,295.9	103.09	4,338.2	107.63
Feb.	340.9	1,706.0	2,046.8	113.26	2,310.7	103.75	4,357.5	108.10
Mar.	338.3	1,710.6	2,048.9	113.26	2,329.8	104.48	4,378.8	108.50
Apr.	337.0	1,723.4	2,060.3	113.89	2,340.1	104.95	4,400.4	109.04
May	333.2	1,749.3	2,082.5	114.94	2,345.8	104.99	4,428.3	109.54
June	330.5	1,763.5	2,093.9	115.59	2,361.6	105.73	4,455.5	110.24
July	325.2	1,767.8	2,093.0	115.63	2,374.3	106.41	4,467.3	110.63
Aug.	318.8	1,789.8	2,108.6	116.60	2,378.7	106.74	4,487.4	111.25
Sep.	309.8	1,822.1	2,131.9	117.87	2,392.3	107.34	4,524.2	112.15
Oct.	297.6	1,845.0	2,142.6	118.49	2,406.3	107.94	4,548.9	112.76
Nov.	279.0	1,878.0	2,157.0	119.25	2,425.8	108.77	4,582.8	113.56
Dec.	233.5	1,924.9	2,158.4	119.34	2,450.6	109.88	4,609.0	114.21
2002 Jan.	250.3	1,930.1	2,180.3	120.50	2,456.0	110.11	4,636.4	114.86
Feb.	243.9	1,931.4	2,175.4	120.24	2,461.8	110.38	4,637.1	114.89
Mar.	253.0	1,916.7	2,169.7	119.94	2,481.1	111.27	4,650.7	115.25
Apr.	263.4	1,935.7	2,199.1	121.65	2,479.6	111.29	4,678.6	116.03
May ⁶⁾	273.2	1,948.5	2,221.7	123.02	2,491.4	111.99	4,713.1	117.02

4. Seasonally adjusted flows ⁷⁾

	M2										
	M1					Other short-term deposits ⁵⁾			Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)
	Currency in circulation 1	Overnight deposits 2	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)			
			3	4	5		6	7	8		
9	10	11									
2000 Dec.	-0.7	9.7	8.9	0.4	5.3	-5.1	-0.2	2.1	3.8	0.1	3.6
<i>Euro area enlargement</i>											
2001 Jan.	-3.9	2.0	-1.9	-0.1	1.9	11.2	0.5	3.5	9.3	0.2	2.8
Feb.	-1.0	5.2	4.3	0.2	2.3	14.6	0.6	3.5	18.9	0.4	2.9
Mar.	-2.5	2.4	-0.1	0.0	1.7	16.4	0.7	4.3	16.3	0.4	3.0
Apr.	-1.4	12.7	11.3	0.6	1.7	10.5	0.4	4.8	21.8	0.5	3.3
May	-3.8	22.8	19.1	0.9	3.0	0.9	0.0	4.0	20.0	0.5	3.5
June	-2.7	14.6	11.8	0.6	4.0	16.6	0.7	4.5	28.4	0.6	4.3
July	-5.3	6.0	0.7	0.0	3.3	15.1	0.6	5.1	15.8	0.4	4.3
Aug.	-6.4	23.9	17.5	0.8	3.6	7.5	0.3	4.9	25.0	0.6	4.3
Sep.	-9.0	32.0	23.0	1.1	5.0	13.2	0.6	5.1	36.2	0.8	5.0
Oct.	-12.2	23.5	11.3	0.5	5.2	13.5	0.6	5.6	24.7	0.5	5.4
Nov.	-18.6	32.4	13.7	0.6	5.9	18.5	0.8	5.8	32.2	0.7	5.9
Dec.	-45.4	47.1	1.6	0.1	5.5	24.8	1.0	7.1	26.4	0.6	6.4
2002 Jan.	16.7	4.2	20.9	1.0	6.6	5.1	0.2	6.8	26.0	0.6	6.7
Feb.	-6.3	1.5	-4.8	-0.2	6.2	6.0	0.2	6.4	1.2	0.0	6.3
Mar.	9.1	-14.4	-5.3	-0.2	5.9	19.9	0.8	6.5	14.6	0.3	6.2
Apr.	10.4	20.5	30.9	1.4	6.8	0.5	0.0	6.0	31.4	0.7	6.4
May ⁶⁾	9.8	15.0	24.8	1.1	7.0	15.5	0.6	6.7	40.3	0.9	6.8

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) M3 and its components exclude holdings by non-residents of the euro area of money market fund shares/units, money market paper and debt securities up to 2 years.
- 3) Loans, with other components of credit, are shown without seasonal adjustment on page 20*.
- 4) For the calculations of the index and the growth rates, see the technical notes.

M3 ²⁾				Loans to other euro area residents (excluding government) ³⁾		
Marketable instruments ⁶⁾		Total	Index Dec. 98=100 ⁴⁾	Total	Index Dec. 98=100 ⁴⁾	
Total	Index Dec. 98=100 ⁴⁾					
9	10	11	12	13	14	
628.4	118.99	4,855.5	108.63	6,067.9	119.09	2000 Nov.
637.2	121.78	4,858.2	109.04	6,076.5	119.61	Dec.
<i>Euro area enlargement</i>						
657.8	-	4,978.1	-	6,130.0	-	2001 1 Jan.
673.2	124.75	5,011.4	109.63	6,181.0	120.43	2001 Jan.
676.3	125.32	5,033.8	110.11	6,213.9	121.10	Feb.
684.8	126.96	5,063.5	110.66	6,264.7	121.92	Mar.
690.3	127.71	5,090.6	111.22	6,305.0	122.75	Apr.
703.5	130.03	5,131.8	111.93	6,342.1	123.26	May
714.6	132.09	5,170.1	112.79	6,362.6	123.78	June
727.7	134.59	5,195.0	113.43	6,378.5	124.26	July
744.3	137.68	5,231.7	114.34	6,397.0	124.81	Aug.
761.1	139.58	5,285.3	115.36	6,433.5	125.43	Sep.
782.4	143.35	5,331.3	116.35	6,466.4	126.05	Oct.
786.2	144.72	5,369.0	117.21	6,512.4	126.93	Nov.
791.8	145.78	5,400.8	117.92	6,503.9	126.90	Dec.
778.3	144.14	5,414.7	118.29	6,528.9	127.34	2002 Jan.
776.8	143.73	5,413.9	118.27	6,556.1	127.91	Feb.
783.0	144.74	5,433.8	118.70	6,591.9	128.65	Mar.
783.3	144.96	5,462.0	119.42	6,626.6	129.46	Apr.
799.9	147.99	5,513.0	120.65	6,662.6	130.35	May ^(p)

M3 ²⁾							Loans to other euro area residents (excluding government) ³⁾			
Marketable instruments ⁶⁾			Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	3-month moving average (centred) (%)	Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)	
Total	Monthly growth rate ⁴⁾ (%)	Annual growth rate ⁴⁾ (%)								
12	13	14	15	16	17	18	19	20	21	
14.7	2.3	7.8	18.5	0.4	4.1	4.0	8.8	0.4	9.6	2000 Dec.
<i>Euro area enlargement</i>										
16.8	2.4	10.4	26.0	0.5	3.7	3.9	104.5	0.7	9.3	2001 Jan.
3.0	0.5	10.1	21.9	0.4	3.8	3.8	32.9	0.6	9.0	Feb.
8.9	1.3	8.8	25.2	0.5	3.8	3.9	50.7	0.7	8.7	Mar.
4.1	0.6	9.2	25.9	0.5	4.1	4.1	40.4	0.7	8.4	Apr.
12.5	1.8	10.8	32.5	0.6	4.5	4.7	36.8	0.4	8.0	May
11.1	1.6	14.0	39.5	0.8	5.5	5.2	20.5	0.4	7.9	June
13.5	1.9	15.1	29.3	0.6	5.7	5.7	16.1	0.4	7.8	July
16.7	2.3	17.6	41.7	0.8	6.0	6.2	18.6	0.4	7.2	Aug.
10.3	1.4	19.1	46.5	0.9	6.8	6.8	36.4	0.5	6.7	Sep.
20.5	2.7	21.0	45.2	0.9	7.4	7.4	32.9	0.5	6.5	Oct.
7.5	1.0	21.6	39.7	0.7	7.9	7.8	46.0	0.7	6.6	Nov.
5.8	0.7	19.7	32.2	0.6	8.1	8.0	-8.5	0.0	6.1	Dec.
-8.9	-1.1	15.5	17.1	0.3	7.9	7.8	25.0	0.3	5.7	2002 Jan.
-2.3	-0.3	14.7	-1.1	0.0	7.4	7.5	27.2	0.5	5.6	Feb.
5.5	0.7	14.0	20.1	0.4	7.3	7.4	35.8	0.6	5.5	Mar.
1.2	0.2	13.5	32.6	0.6	7.4	7.5	34.9	0.6	5.5	Apr.
16.3	2.1	13.8	56.6	1.0	7.8	.	36.2	0.7	5.8	May ^(p)

5) 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.

6) Marketable instruments comprise repurchase agreements, money market fund shares/units, money market paper and debt securities up to two years.

7) 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 percentage growth rates, unless otherwise indicated)
5. 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
2000 Nov.	1,162.6	122.9	1,537.2	920.8	1,939.3	6,837.1	6,057.0	118.88	69.1	167.7
Dec.	1,168.3	125.4	1,525.3	894.6	1,924.5	6,879.2	6,092.0	119.91	77.5	169.9
<i>Euro area enlargement</i>										
2001 1 Jan.	1,170.0	126.7	1,526.9	912.1	2,009.9	6,952.0	6,154.0	-	183.3	172.9
2001 Jan.	1,170.2	126.8	1,555.4	909.0	2,002.8	7,000.2	6,186.3	120.54	17.9	171.8
Feb.	1,169.2	126.9	1,564.2	911.4	2,005.1	7,037.3	6,207.4	120.97	9.0	172.3
Mar.	1,172.5	126.4	1,576.9	927.0	2,016.9	7,129.3	6,274.3	122.11	-26.1	172.0
Apr.	1,169.7	124.6	1,577.9	928.1	2,014.9	7,194.3	6,313.6	122.92	-62.0	173.3
May	1,170.6	123.2	1,584.7	940.1	2,029.8	7,222.1	6,334.1	123.11	-79.4	174.6
June	1,170.9	122.0	1,593.3	965.9	2,041.0	7,247.0	6,387.9	124.27	-40.3	175.4
July	1,165.2	120.7	1,593.9	955.3	2,033.3	7,260.7	6,394.0	124.57	-24.0	176.5
Aug.	1,161.9	119.5	1,586.4	960.0	2,020.6	7,237.6	6,369.3	124.27	2.8	176.9
Sep.	1,163.0	118.6	1,604.9	970.4	2,024.1	7,283.3	6,421.5	125.20	56.1	177.6
Oct.	1,162.7	116.9	1,616.9	981.4	2,013.1	7,324.3	6,451.2	125.75	79.4	178.3
Nov.	1,161.5	115.8	1,606.8	982.9	2,033.5	7,378.8	6,501.5	126.72	101.2	179.1
Dec.	1,168.9	115.8	1,613.8	996.5	2,026.2	7,423.5	6,519.0	127.19	86.7	180.0
2002 Jan.	1,173.2	112.3	1,633.2	1,007.5	2,050.4	7,443.2	6,534.0	127.44	74.1	177.5
Feb.	1,174.7	111.2	1,639.2	1,011.4	2,054.6	7,464.2	6,548.4	127.76	69.6	176.6
Mar.	1,180.2	109.9	1,657.3	1,008.0	2,084.4	7,507.9	6,602.4	128.85	61.1	176.3
Apr.	1,178.2	108.0	1,653.3	1,002.5	2,064.9	7,546.7	6,636.9	129.66	60.8	175.9
May ⁴⁾	1,179.9	106.8	1,663.5	1,006.3	2,074.6	7,569.9	6,655.7	130.21	95.4	176.0

6. 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
2000 Dec.	9.1	2.5	-3.4	-21.9	-10.0	60.7	52.5	9.5	16.9	1.2
<i>Euro area enlargement</i>										
2001 Jan.	0.2	0.1	24.7	-4.3	-12.7	48.3	32.2	9.3	-55.7	-1.0
Feb.	-1.1	0.1	8.6	2.8	-3.7	38.6	22.2	9.0	-9.7	0.5
Mar.	1.5	-0.5	8.5	16.5	6.5	83.3	58.5	8.7	-36.5	0.1
Apr.	-2.7	-1.9	-0.1	1.3	-1.5	65.3	41.4	8.4	-36.3	1.2
May	0.1	-1.4	-5.0	8.4	15.6	15.7	9.7	8.0	-12.9	1.4
June	0.5	-1.1	11.6	19.0	11.1	28.1	59.9	7.9	32.7	0.9
July	-4.8	-1.4	7.1	-6.4	-5.5	19.3	15.1	7.7	18.4	1.1
Aug.	-2.1	-1.2	-0.8	7.3	-8.0	-11.9	-15.2	7.2	25.4	0.3
Sep.	0.8	-0.9	17.5	8.9	-3.2	45.5	47.5	6.7	31.2	0.7
Oct.	-0.5	-1.7	12.3	8.2	-12.2	36.7	28.4	6.5	25.4	0.7
Nov.	-1.5	-1.1	19.0	2.9	23.9	48.7	49.7	6.6	28.8	1.1
Dec.	7.3	0.1	7.7	14.7	-6.5	48.5	24.1	6.1	-10.3	1.1
2002 Jan.	3.8	-3.6	11.0	13.3	18.8	17.4	12.7	5.7	-12.1	-2.5
Feb.	1.6	-1.0	9.4	-0.6	4.0	25.2	16.5	5.6	-10.4	-0.9
Mar.	5.6	-1.3	20.4	-0.4	25.2	44.6	55.9	5.5	-10.1	-0.3
Apr.	-1.3	-1.9	2.7	-4.5	-18.0	45.6	41.3	5.5	-0.8	-0.4
May ⁴⁾	3.0	-1.2	19.6	3.6	7.6	33.1	28.6	5.8	35.2	0.2

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) 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) 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 2.5
MFI loans by counterpart, type and original maturity ¹⁾
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
1. Loans to non-monetary financial corporations and to government: levels at the end of the period

	Non-monetary financial intermediaries except insurance corporations and pension funds			Insurance corporations and pension funds			General government							
	Total		Index Dec.98 =100 ²⁾	Total		Index Dec.98 =100 ²⁾	Central government ³⁾	Other general government					Total	Index Dec.98 =100 ²⁾
	1	Up to 1 year		4	Up to 1 year			5	8	State government		Local government			Social security funds
			Over 5 years			Over 5 years	10			11				
13	14													
2000 Q3	385.6	247.2	138.8	33.1	25.3	120.4	173.3	288.4	252.4	337.9	305.3	18.5	818.1	97.3
Q4	394.8	252.9	142.8	31.5	21.8	114.8	173.1	297.3	255.4	350.9	315.8	14.6	835.9	99.5
<i>Euro area enlargement</i>														
2001 1 Jan.	395.4	253.4	-	31.6	21.8	-	185.6	297.3	255.4	351.5	316.4	15.2	849.6	-
2001 Q1	418.0	273.0	153.0	35.9	26.8	130.6	189.3	295.3	255.3	352.4	314.0	15.6	852.6	99.1
Q2	425.3	280.7	155.7	35.8	26.7	130.2	175.1	294.0	254.9	350.4	312.4	17.2	836.6	97.2
Q3	408.4	256.3	149.4	36.6	26.9	133.9	168.2	293.9	254.1	349.7	312.0	18.9	830.8	96.6
Q4	433.8	275.7	159.6	34.1	24.8	124.8	170.1	298.3	252.0	362.9	322.3	16.4	847.7	98.5
2002 Q1 ⁴⁾	459.4	301.6	169.3	39.5	28.0	144.7	180.1	294.0	248.2	364.4	322.0	15.9	854.5	99.3

2. Loans to non-monetary financial corporations and to government: flows ⁴⁾

	Non-monetary financial intermediaries except insurance corporations and pension funds			Insurance corporations and pension funds			General government							
	Total		Annual growth rate ²⁾ (%)	Total		Annual growth rate ²⁾ (%)	Central government ³⁾	Other general government					Total	Annual growth rate ²⁾ (%)
	1	Up to 1 year		4	Up to 1 year			5	6	7	State government				Local government		Social security funds
			Over 5 years			Over 5 years	10				11			
13	14													
2000 Q4	11.1	6.8	18.2	-1.6	-3.5	6.6	0.3	8.8	3.0	12.8	10.3	-3.9	18.0	-0.9
<i>Euro area enlargement</i>														
2001 Q1	28.0	22.7	19.6	4.3	5.0	-3.4	-0.6	-2.0	-0.1	-0.7	-3.7	0.4	-2.9	-0.4
Q2	7.5	7.6	14.7	-0.1	-0.1	-7.9	-14.7	-1.3	-0.4	-2.0	-1.7	1.6	-16.4	-1.8
Q3	-17.2	-24.4	7.6	1.0	0.2	11.2	-6.2	0.0	-0.7	-0.7	-0.4	1.7	-5.2	-0.7
Q4	27.9	21.5	11.8	-2.5	-2.1	8.7	0.9	4.3	-2.1	13.2	10.3	-2.5	15.9	-1.0
2002 Q1 ⁴⁾	26.2	26.5	10.7	5.4	3.2	10.8	9.9	-4.2	-3.8	1.5	-0.3	-0.4	6.7	0.1

Source: ECB.

1) 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.

2) For the calculation of the index and the growth rates, see the technical notes.

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

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

Table 2.5 (cont'd)
MFI loans by counterpart, type and original maturity ¹⁾
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
3. Loans to non-financial sectors other than government: levels at the end of the period

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾
	1	2	3	4	5	6	7	8	9	10
2000 Q3	953.5	423.5	1,256.9	2,633.9	115.6	96.4	164.9	208.3	469.6	114.4
Q4	968.0	429.3	1,287.9	2,685.1	118.6	97.5	165.2	212.9	475.7	115.9
<i>Euro area enlargement</i>										
2001 1 Jan.	996.6	436.6	1,293.6	2,726.9	-	102.1	166.1	213.0	481.2	-
2001 Q1	1,034.2	445.4	1,313.6	2,793.2	120.9	98.7	168.4	212.7	479.8	115.0
Q2	1,051.7	455.8	1,343.4	2,851.0	123.1	100.1	171.1	217.6	488.7	117.5
Q3	1,027.6	466.8	1,371.8	2,866.2	124.3	100.6	170.7	221.7	493.1	118.6
Q4	1,018.4	489.7	1,394.6	2,902.8	125.9	102.6	170.4	226.7	499.6	120.0
2002 Q1 ^(p)	1,008.1	499.4	1,421.2	2,928.7	126.8	100.3	170.8	229.0	500.1	120.1

4. Loans to non-financial sectors other than government: flows ⁴⁾

	Non-financial corporations					Consumer credit ³⁾				
	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)
	1	2	3	4	5	6	7	8	9	10
2000 Q4	20.5	10.0	36.9	67.4	10.9	1.1	0.4	4.6	6.1	7.8
<i>Euro area enlargement</i>										
2001 Q1	32.7	5.4	13.2	51.3	10.1	-4.4	0.1	0.4	-3.9	4.5
Q2	13.6	12.1	25.7	51.4	9.0	1.3	3.9	5.2	10.4	5.2
Q3	-18.8	14.3	32.2	27.7	7.5	0.9	-0.5	4.1	4.5	3.6
Q4	-10.0	24.4	22.9	37.2	6.2	1.9	-0.7	4.9	6.1	3.5
2002 Q1 ^(p)	-12.3	9.6	22.6	19.9	4.9	-2.3	0.5	2.3	0.5	4.5

Source: ECB.

1) 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.

2) For the calculation of the index and the growth rates, see the technical notes.

Households											Non-profit institutions serving households			
Lending for house purchase ³⁾					Other lending					Total	Index Dec.98 =100 ²⁾	Total	Index Dec.98 =100 ²⁾	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Index Dec.98 =100 ²⁾					
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
21.9	62.9	1,749.3	1,834.1	119.0	143.3	101.0	342.1	586.4	111.6	2,890.1	116.7	37.6	107.7	2000 Q3
22.2	62.4	1,792.7	1,877.3	121.7	147.4	101.0	340.0	588.4	112.7	2,941.4	118.8	38.2	109.3	Q4
<i>Euro area enlargement</i>														
22.2	62.9	1,803.4	1,888.5	-	147.6	101.0	340.0	588.5	-	2,958.2	-	38.2	-	2001 1 Jan.
21.8	61.9	1,832.2	1,916.0	123.6	146.9	104.2	342.1	593.2	113.7	2,989.0	120.0	37.3	106.5	2001 Q1
22.3	62.4	1,868.5	1,953.3	125.7	148.8	100.6	342.7	592.1	114.8	3,034.2	122.0	40.7	116.5	Q2
22.5	61.0	1,906.9	1,990.5	128.2	144.3	100.5	342.1	586.9	113.9	3,070.4	123.5	39.0	111.6	Q3
22.7	61.0	1,936.1	2,019.7	130.0	144.6	101.9	343.6	590.0	115.1	3,109.3	125.2	39.0	111.7	Q4
24.0	62.0	1,966.0	2,052.0	132.1	142.9	101.7	339.5	584.0	115.1	3,136.0	126.5	38.7	110.8	2002 Q1 ^(p)

Households											Non-profit institutions serving households			
Lending for house purchase ³⁾					Other lending					Total	Annual growth rate ²⁾ (%)	Total	Annual growth rate ²⁾ (%)	
Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total	Annual growth rate ²⁾ (%)					
11	12	13	14	15	16	17	18	19	20	21	22	23	24	
0.3	-0.5	42.1	41.9	8.5	4.4	1.1	0.3	5.8	3.5	53.9	7.4	0.6	2.0	2000 Q4
<i>Euro area enlargement</i>														
-0.5	-0.9	30.1	28.7	8.2	0.4	3.1	2.0	5.5	3.1	30.3	6.5	-1.0	-4.8	2001 Q1
0.5	0.5	32.1	33.1	7.6	2.0	-1.8	5.1	5.3	2.7	48.9	6.2	3.5	8.1	Q2
0.2	-1.4	38.9	37.7	7.7	-4.5	0.0	0.1	-4.4	2.1	37.8	5.9	-1.7	3.7	Q3
0.1	-0.1	28.9	28.9	6.8	0.3	3.8	2.1	6.2	2.1	41.2	5.4	0.0	2.2	Q4
1.4	1.0	30.1	32.4	6.9	-1.3	0.4	0.7	-0.2	1.2	32.7	5.4	-0.3	4.0	2002 Q1 ^(p)

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

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

Table 2.6

Deposits held with MFIs, by counterpart and instrument ¹⁾

(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)

1. Deposits held by non-monetary financial corporations and by government: levels at the end of the period

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Index Dec.98 =100 ³⁾	Total ²⁾				Index Dec.98 =100 ³⁾	Central government	Other general government			Total	Index Dec.98 =100 ³⁾
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q3	431.7	158.6	191.4	76.6	131.1	464.6	34.1	413.8	12.9	111.7	159.2	30.3	63.2	57.9	310.6	117.8
Q4	431.1	153.6	198.9	74.0	130.9	477.6	40.6	418.5	15.3	114.8	164.5	30.6	68.2	53.2	316.5	120.1
<i>Euro area enlargement</i>																
2001 1 Jan.	434.1	154.1	200.2	75.2	-	479.9	40.7	418.5	17.5	-	166.2	30.6	69.1	55.1	321.0	-
2001 Q1	441.9	151.8	194.2	91.2	133.3	483.6	38.2	423.1	18.8	115.7	150.3	30.9	65.0	57.2	303.5	113.4
Q2	455.4	164.3	195.9	89.3	136.2	486.1	41.4	424.0	16.9	116.4	165.5	31.4	66.8	60.8	324.6	121.3
Q3	455.2	162.7	201.7	85.6	133.7	487.6	39.3	426.7	17.9	116.7	147.8	33.3	67.4	60.4	308.9	115.5
Q4	467.8	157.9	217.9	86.7	136.2	495.3	48.0	427.4	16.4	118.5	139.0	30.0	68.9	61.0	299.0	111.7
2002 Q1 ⁴⁾	492.5	162.2	233.1	91.2	142.8	497.9	43.1	433.1	17.7	119.1	157.5	30.9	64.6	61.2	314.3	117.7

2. Deposits held by non-monetary financial corporations and by government: flows ⁴⁾

	Non-monetary financial intermediaries except insurance corporations and pension funds					Insurance corporations and pension funds					General government					
	Total ²⁾				Annual growth rate ³⁾ (%)	Total ²⁾				Annual growth rate ³⁾ (%)	Central government	Other general government			Total	Annual growth rate ³⁾ (%)
	Over-night	With agreed maturity	Repos			Over-night	With agreed maturity	Repos				State government	Local government	Social security funds		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q4	-0.5	-4.9	7.5	-2.6	8.9	13.0	6.5	4.6	2.4	6.1	5.3	0.3	5.0	-4.7	5.9	12.5
<i>Euro area enlargement</i>																
2001 Q1	7.7	-2.5	-5.9	16.0	1.7	3.7	-2.5	4.5	1.3	4.3	-15.6	0.1	-4.1	2.1	-17.5	10.6
Q2	9.6	12.4	-2.1	-1.8	4.2	2.8	3.4	1.0	-1.9	4.5	15.1	0.5	1.9	3.6	21.1	6.5
Q3	-8.2	-1.6	-2.2	-3.7	2.0	1.5	-2.1	2.7	1.0	4.5	-17.7	1.9	0.5	-0.5	-15.7	-2.0
Q4	8.2	-4.6	11.5	1.2	4.0	7.6	8.8	0.6	-1.4	3.3	-8.8	-3.4	1.5	0.7	-10.0	-6.9
2002 Q1 ⁴⁾	22.7	4.3	13.2	4.4	7.1	2.5	-4.9	5.6	1.2	3.0	19.1	1.0	-4.3	0.1	15.9	3.7

Source: ECB.

1) 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.

2) Including deposits redeemable at notice.

3) For the calculation of the index and the growth rates, see the technical notes.

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

Table 2.6 (cont'd)
Deposits held with MFIs, by counterpart and instrument ¹⁾
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
3. Deposits held by non-financial sectors other than government: levels at the end of the period

	Non-financial corporations						Households ²⁾					
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.98 =100 ³⁾	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Index Dec.98 =100 ³⁾
	1	2	3	4	5	6	7	8	9	10	11	12
2000 Q3	464.3	331.9	24.7	25.0	845.8	106.4	874.4	1,107.8	1,235.5	51.6	3,269.3	101.4
Q4	497.5	324.7	24.1	26.3	872.5	111.3	906.9	1,131.5	1,241.5	57.1	3,337.0	103.5
<i>Euro area enlargement</i>												
2001 1 Jan.	504.5	337.9	24.2	30.5	897.2	-	910.4	1,154.0	1,292.3	69.6	3,426.4	-
2001 Q1	479.0	349.3	24.1	32.4	884.7	108.7	906.1	1,192.4	1,287.1	78.9	3,464.5	104.6
Q2	514.6	335.7	24.4	32.1	906.8	111.0	947.2	1,198.8	1,293.5	81.3	3,520.8	106.3
Q3	514.8	322.8	25.4	34.5	897.5	112.1	963.6	1,203.8	1,305.3	84.6	3,557.3	107.5
Q4	577.1	337.3	27.5	36.5	978.4	121.8	1,042.8	1,195.8	1,365.7	76.8	3,681.2	111.4
2002 Q1 ⁴⁾	530.4	346.3	27.5	35.3	939.6	116.9	1,038.8	1,183.5	1,380.7	81.7	3,684.6	111.5

4. Deposits held by non-financial sectors other than government: flows ⁴⁾

	Non-financial corporations						Households ²⁾					
	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Annual growth rate ³⁾ (%)	Overnight	With agreed maturity	Redeemable at notice	Repos	Total	Annual growth rate ³⁾ (%)
	1	2	3	4	5	6	7	8	9	10	11	12
2000 Q4	37.1	1.1	-0.6	1.3	38.9	11.1	32.6	24.4	6.3	5.5	68.7	1.0
<i>Euro area enlargement</i>												
2001 Q1	-28.5	6.8	-0.1	1.8	-20.0	7.5	-4.6	37.8	-5.8	9.3	36.7	2.4
Q2	32.7	-13.8	0.3	-0.4	18.8	6.3	41.1	6.4	6.3	2.3	56.2	4.4
Q3	3.9	1.6	0.4	2.5	8.4	5.3	16.2	5.2	12.7	3.4	37.4	6.0
Q4	62.1	11.9	2.0	2.0	78.1	9.5	79.4	-2.9	60.3	-7.8	129.1	7.6
2002 Q1 ⁴⁾	-47.2	8.7	0.1	-1.2	-39.6	7.5	-4.1	-9.7	14.9	4.8	6.0	6.6

Source: ECB.

1) 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.

2) Comprises households (S.14) and non-profit institutions serving households (S.15).

3) For the calculation of the index and the growth rates, see the technical notes.

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

Table 2.7
Main MFI claims on and liabilities to non-residents of the euro area
(EUR billions (not seasonally adjusted) and percentage growth rates, unless otherwise indicated)
1. Levels at the end of the period

	Loans to non-residents								Holdings of securities other than shares issued by non-residents							
	Banks ¹⁾²⁾		Non-banks				Total	Index Dec.98 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.98 =100 ³⁾
	Total	Index Dec.98 =100 ³⁾	General government	Other	Total	Index Dec.98 =100 ³⁾			Total	Index Dec.98 =100 ³⁾	General government	Other	Total	Index Dec.98 =100 ³⁾		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q3	979.5	93.6	79.3	441.4	520.7	122.0	1,500.3	101.7	168.2	159.7	321.5	175.4	496.9	109.7	665.1	119.0
Q4	945.4	92.9	78.9	445.6	524.5	127.0	1,469.9	102.7	171.1	171.7	290.6	183.7	474.3	108.8	645.4	120.5
<i>Euro area enlargement</i>																
2001 1 Jan.	964.1	-	78.9	449.3	528.2	-	1,492.3	-	171.3	-	296.2	184.0	480.2	-	651.5	-
2001 Q1	1,051.6	99.8	76.3	518.0	594.2	142.1	1,645.8	111.9	188.8	187.1	285.9	204.5	490.4	112.6	679.3	126.4
Q2	1,071.4	99.9	78.9	519.3	598.2	139.7	1,669.6	111.3	210.5	204.2	294.6	208.7	503.2	113.5	713.7	130.4
Q3	1,081.7	103.0	74.9	527.8	602.6	145.9	1,684.4	115.3	206.6	207.0	273.8	213.0	486.8	113.4	693.4	130.8
Q4	1,116.0	105.8	75.2	543.7	618.8	147.4	1,734.9	117.7	236.4	233.0	290.2	217.6	507.8	116.8	744.2	138.4
2002 Q1 ^(p)	1,114.1	105.3	76.4	546.1	622.5	148.5	1,736.6	117.7	259.4	254.9	276.9	218.7	495.7	114.1	755.1	140.4

2. Flows ⁴⁾

	Loans to non-residents								Holdings of securities other than shares issued by non-residents							
	Banks ¹⁾²⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)
	Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
2000 Q4	-7.6	3.7	-0.7	22.2	21.5	10.5	13.9	6.0	12.7	26.8	-32.3	28.1	-4.2	6.9	8.5	11.5
<i>Euro area enlargement</i>																
2001 Q1	70.3	7.0	3.7	58.4	62.1	20.5	132.5	11.6	15.3	27.8	4.9	11.6	16.5	6.1	31.8	11.3
Q2	1.3	3.4	2.6	-12.6	-10.0	18.3	-8.7	8.3	17.3	34.1	9.2	-5.2	4.0	5.4	21.3	12.5
Q3	33.5	10.1	-4.0	30.5	26.5	19.6	60.1	13.4	2.9	29.7	-22.3	21.9	-0.4	3.4	2.6	10.0
Q4	28.5	13.9	0.3	6.0	6.3	16.0	34.8	14.7	25.9	35.7	16.7	-2.4	14.3	7.3	40.2	14.9
2002 Q1 ^(p)	-4.4	5.6	3.2	1.5	4.8	4.5	0.3	5.2	22.2	36.3	-9.9	-1.5	-11.4	1.4	10.8	11.1

Source: ECB.
1) The term "banks" is used in this table to indicate institutions of a similar type to MFIs resident outside the euro area.
2) Deposits placed by MFIs with banks located outside the euro area are included.

Table 2.7 (cont'd)

Holdings of shares and other equity issued by non-residents						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Index Dec.98 =100 ³⁾	Banks ¹⁾		Non-banks				Total	Index Dec.98 =100 ³⁾	
Total	Index Dec.98 =100 ³⁾	Total	Index Dec.98 =100 ³⁾			Total	Index Dec.98 =100 ³⁾	General government	Other	Total	Index Dec.98 =100 ³⁾			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
58.1	226.4	81.4	190.0	139.5	202.8	1,578.5	122.1	81.6	526.5	608.1	138.6	2,186.6	126.3	2000 Q3
61.6	241.9	80.0	192.7	141.6	210.2	1,550.9	124.1	84.6	504.0	588.7	138.0	2,139.6	127.6	Q4
<i>Euro area enlargement</i>														
62.3	-	80.2	-	142.5	-	1,560.8	-	85.6	507.9	593.4	-	2,154.3	-	2001 1 Jan.
65.1	252.2	94.3	227.3	159.4	235.4	1,781.7	139.6	89.3	577.1	666.4	152.7	2,448.2	143.0	2001 Q1
61.1	236.4	97.2	233.7	158.3	233.3	1,817.5	139.3	94.9	587.1	681.9	153.4	2,499.4	142.9	Q2
63.6	245.8	89.9	215.6	153.5	225.8	1,710.8	135.8	93.0	588.5	681.5	158.0	2,392.3	141.5	Q3
73.0	269.9	89.8	217.4	162.8	236.1	1,718.4	134.9	95.3	615.0	710.3	162.6	2,428.8	142.0	Q4
76.2	279.0	100.6	245.9	176.7	256.7	1,739.4	136.0	99.2	635.4	734.6	167.6	2,474.0	144.0	2002 Q1 ⁴⁾

Holdings of shares and other equity issued by non-residents						Deposits held by non-residents								
Banks ¹⁾		Other		Total	Annual growth rate ³⁾ (%)	Banks ¹⁾		Non-banks				Total	Annual growth rate ³⁾ (%)	
Total	Annual growth rate ³⁾ (%)	Total	Annual growth rate ³⁾ (%)			Total	Annual growth rate ³⁾ (%)	General government	Other	Total	Annual growth rate ³⁾ (%)			
17	18	19	20	21	22	23	24	25	26	27	28	29	30	
4.0	47.8	1.1	46.2	5.1	46.8	26.1	12.5	3.0	-6.0	-3.0	17.8	23.1	13.9	2000 Q4
<i>Euro area enlargement</i>														
2.6	27.0	14.4	46.7	17.0	38.1	193.5	13.3	3.5	59.6	63.1	21.1	256.6	15.3	2001 Q1
-4.1	15.3	2.7	45.4	-1.4	32.2	-3.6	14.6	5.6	-2.7	2.8	18.2	-0.8	15.6	Q2
2.4	8.5	-7.5	13.5	-5.1	11.4	-45.2	11.3	-1.9	22.4	20.6	14.0	-24.6	12.0	Q3
6.2	11.6	0.7	12.8	7.0	12.3	-12.0	8.7	2.3	17.5	19.8	17.9	7.8	11.2	Q4
2.5	10.6	11.8	8.2	14.3	9.1	13.6	-2.6	4.3	17.6	21.9	9.8	35.6	0.8	2002 Q1 ⁴⁾

3) For the calculation of the index and the growth rates, see the technical notes.

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

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
2000 Q3	3,941.6	3,481.5	57.9	402.2	279.2	38.1	64.9	19.9	5,322.1	5,133.0	29.1	160.0	121.0	16.5	12.5	10.1
Q4	3,949.7	3,526.3	47.5	376.0	265.0	34.4	61.0	15.6	5,434.7	5,256.5	27.3	150.9	115.1	14.6	11.3	10.0
<i>Euro area enlargement</i>																
2001 Q1	4,059.6	3,558.9	55.4	445.3	316.6	40.2	67.8	20.7	5,578.2	5,367.8	31.2	179.2	130.8	23.8	12.3	12.2
Q2	4,072.5	3,586.1	52.8	433.6	309.0	40.3	65.4	19.0	5,693.7	5,480.7	30.7	182.3	133.5	24.0	11.6	13.2
Q3	4,101.5	3,624.2	48.9	428.5	300.6	38.9	71.0	17.9	5,706.6	5,507.6	28.2	170.9	125.7	22.1	10.8	12.2
Q4	4,166.0	3,694.1	46.6	425.4	307.6	33.0	67.2	17.6	5,921.6	5,720.3	26.0	175.4	127.4	24.5	10.5	13.0
2002 Q1 ³⁾	4,099.4	3,612.0	49.2	438.3	311.4	39.4	66.6	20.9	5,928.9	5,725.3	28.6	175.0	127.6	22.8	10.4	14.2

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
2000 Q3	1,578.5	611.7	145.6	821.2	662.0	63.3	63.5	32.4	608.1	252.8	61.1	294.3	245.6	23.1	13.8	11.8
Q4	1,550.9	590.9	126.8	833.2	684.3	53.1	65.8	30.1	588.7	254.1	64.1	270.5	225.6	20.5	12.3	12.2
<i>Euro area enlargement</i>																
2001 Q1	1,781.7	698.6	142.6	940.6	776.8	66.4	65.8	31.5	666.4	295.7	70.6	300.2	255.9	17.6	14.2	12.4
Q2	1,817.5	690.1	133.8	993.6	815.4	72.9	73.2	32.2	681.9	286.7	73.2	322.0	274.2	19.3	13.6	14.9
Q3	1,710.8	664.3	140.3	906.2	745.2	53.5	76.3	31.2	681.5	297.7	69.2	314.5	263.0	18.4	17.1	16.0
Q4	1,718.4	631.1	132.3	955.1	799.1	48.5	75.3	32.1	710.3	308.1	60.8	341.4	293.9	16.8	18.1	12.6
2002 Q1 ³⁾	1,739.4	660.5	137.2	941.7	787.5	48.2	72.8	33.2	734.6	314.1	66.8	353.7	298.9	20.2	19.9	14.8

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
2000 Q3	2,555.0	2,226.7	47.7	280.6	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	2,567.1	2,246.1	46.5	274.5	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	2,667.7	2,327.9	48.3	291.4	172.0	61.5	37.5	20.5	278.5	227.8	2.1	48.6	41.6	3.0	2.6	1.5
Q2	2,731.3	2,358.3	53.9	319.1	189.3	69.4	39.6	20.8	275.5	227.0	4.3	44.2	35.8	4.7	2.5	1.1
Q3	2,751.1	2,384.7	52.8	313.6	187.1	68.6	38.4	19.5	265.0	217.9	4.0	43.2	36.0	3.1	2.8	1.2
Q4	2,779.1	2,377.9	67.8	333.3	208.7	63.8	40.6	20.2	254.7	204.8	6.0	43.9	37.9	2.8	2.1	1.1
2002 Q1 ³⁾	2,845.1	2,429.7	69.7	345.7	219.5	60.5	42.7	22.9	275.8	227.2	6.1	42.5	36.4	2.2	2.7	1.1

Source: ECB.

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

2) 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
2000 Q3	3,930.8	-	-	-	-	-	-	-	6,798.3	6,487.1	34.8	276.3	155.8	44.4	72.1	4.0
Q4	3,937.8	-	-	-	-	-	-	-	6,927.0	6,622.8	32.4	271.8	151.6	41.2	74.3	4.7
<i>Euro area enlargement</i>																
2001 Q1	4,081.2	-	-	-	-	-	-	-	7,126.0	6,782.7	35.1	308.1	182.3	45.4	74.9	5.6
Q2	4,089.4	-	-	-	-	-	-	-	7,223.5	6,857.3	29.4	336.9	204.7	51.7	74.0	6.5
Q3	4,082.8	-	-	-	-	-	-	-	7,251.4	6,907.3	30.9	313.1	177.9	52.1	77.3	5.8
Q4	4,174.5	-	-	-	-	-	-	-	7,366.7	7,025.3	29.8	311.7	181.3	47.8	77.5	5.1
2002 Q1 ^(p)	4,112.7	-	-	-	-	-	-	-	7,456.9	7,106.8	30.5	319.6	187.7	48.4	77.4	6.1

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
2000 Q3	943.4	898.7	10.6	34.1	24.5	5.3	2.5	1.9	1,386.7	1,353.4	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	1,320.8	5.6	28.2	16.7	9.7	1.0	0.9
<i>Euro area enlargement</i>																
2001 Q1	971.2	931.2	9.5	30.4	20.6	6.3	1.7	1.8	1,452.8	1,413.1	3.6	36.0	21.2	13.1	1.1	0.6
Q2	994.4	951.3	11.0	32.1	22.1	6.5	1.6	1.8	1,507.0	1,465.2	4.9	36.9	21.7	13.3	1.1	0.8
Q3	999.2	959.7	9.6	29.9	21.0	5.9	1.5	1.5	1,521.3	1,482.3	4.2	34.8	20.4	12.6	1.2	0.6
Q4	1,011.8	966.8	12.4	32.6	23.1	6.3	1.4	1.8	1,515.2	1,477.4	3.7	34.1	20.3	12.1	1.1	0.6
2002 Q1 ^(p)	1,049.5	1,000.9	14.3	34.4	24.3	6.5	1.7	1.8	1,576.6	1,540.3	3.9	32.4	19.1	11.7	1.0	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
2000 Q3	979.5	445.9	90.9	442.7	332.0	42.1	33.8	34.8	520.7	156.1	46.1	318.6	273.9	14.5	23.3	6.9
Q4	945.4	410.0	89.2	446.2	337.8	44.2	32.6	31.7	524.5	163.3	45.3	315.8	271.2	11.5	25.9	7.2
<i>Euro area enlargement</i>																
2001 Q1	1,051.6	468.4	98.7	484.6	365.8	46.3	34.5	37.0	594.2	198.2	48.6	347.4	301.2	11.9	26.2	8.0
Q2	1,071.4	473.5	103.0	494.9	375.9	47.3	36.7	35.0	598.2	184.4	47.7	366.1	318.5	12.1	26.9	8.6
Q3	1,081.7	486.5	101.5	493.7	378.3	41.2	40.3	33.9	602.6	201.3	46.8	354.5	307.9	12.7	24.9	9.0
Q4	1,116.0	449.5	114.7	551.9	434.9	45.2	37.9	33.8	618.8	202.5	46.8	369.6	323.5	12.0	25.7	8.4
2002 Q1 ^(p)	1,114.1	432.3	131.4	550.3	435.9	44.8	35.4	34.2	622.5	197.7	49.3	375.5	323.0	16.5	26.8	9.1

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
2000 Q3	168.2	62.4	15.3	90.4	75.1	8.2	2.7	4.4	496.9	109.1	32.2	355.6	312.1	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	188.8	64.8	22.7	101.3	87.1	7.3	2.3	4.6	490.4	120.8	24.4	345.3	306.8	25.7	2.7	10.1
Q2	210.5	72.4	25.5	112.6	98.4	6.8	2.6	4.8	503.2	121.3	25.8	356.1	316.2	26.9	3.0	9.9
Q3	206.6	76.4	27.0	103.2	93.1	4.7	2.1	3.4	486.8	129.0	27.1	330.7	292.7	27.1	3.9	7.1
Q4	236.4	80.5	27.6	128.3	118.1	4.2	2.7	3.3	507.8	131.4	27.0	349.4	306.2	30.3	4.2	8.7
2002 Q1 ^(p)	259.4	84.8	33.9	140.6	130.1	4.3	2.7	3.5	495.7	129.2	26.6	339.9	299.4	25.5	5.0	10.0

3 Financial markets and interest rates in the euro area

Table 3.1

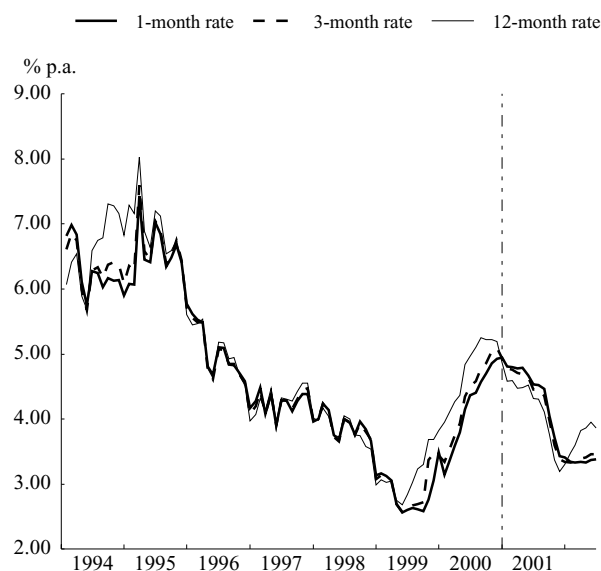
Money market interest rates ¹⁾

(percentages per annum)

	Euro area ⁴⁾					United States ⁶⁾	Japan ⁶⁾
	Overnight deposits ²⁾³⁾ 1	1-month deposits ⁵⁾ 2	3-month deposits ⁵⁾ 3	6-month deposits ⁵⁾ 4	12-month deposits ⁵⁾ 5	3-month deposits ⁶⁾ 6	3-month deposits ⁷⁾ 7
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
<i>Euro area enlargement</i>							
2001	4.39	4.33	4.26	4.16	4.09	3.78	0.15
2001 June	4.54	4.53	4.45	4.35	4.31	3.83	0.07
July	4.51	4.52	4.47	4.39	4.31	3.75	0.08
Aug.	4.49	4.46	4.35	4.22	4.11	3.56	0.08
Sep.	3.99	4.05	3.98	3.88	3.77	3.03	0.06
Oct.	3.97	3.72	3.60	3.46	3.37	2.40	0.08
Nov.	3.51	3.43	3.39	3.26	3.20	2.10	0.08
Dec.	3.34	3.42	3.34	3.26	3.30	1.92	0.08
2002 Jan.	3.29	3.35	3.34	3.34	3.48	1.82	0.09
Feb.	3.28	3.34	3.36	3.40	3.59	1.90	0.10
Mar.	3.26	3.35	3.39	3.50	3.82	1.99	0.10
Apr.	3.32	3.34	3.41	3.54	3.86	1.97	0.08
May	3.31	3.37	3.46	3.62	3.95	1.91	0.08
June	3.35	3.38	3.46	3.59	3.87	1.88	0.07
2002 7 June	3.33	3.38	3.47	3.61	3.92	1.89	0.07
14	3.31	3.37	3.47	3.60	3.86	1.88	0.07
21	3.58	3.39	3.47	3.58	3.82	1.87	0.07
28	3.49	3.39	3.44	3.54	3.77	1.86	0.07

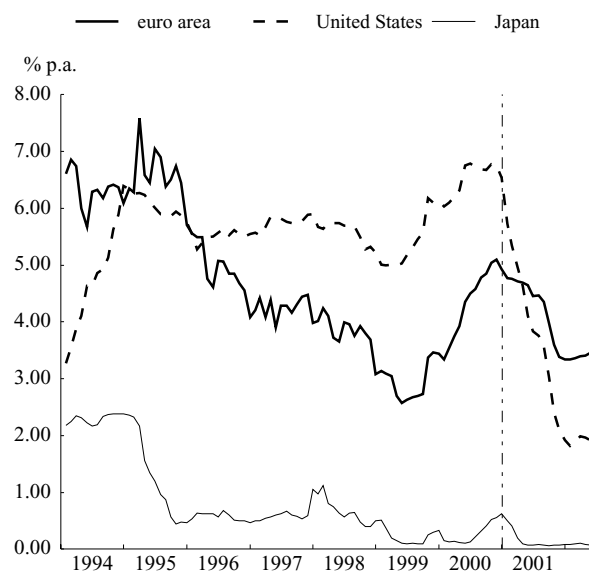
Euro area money market rates

(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

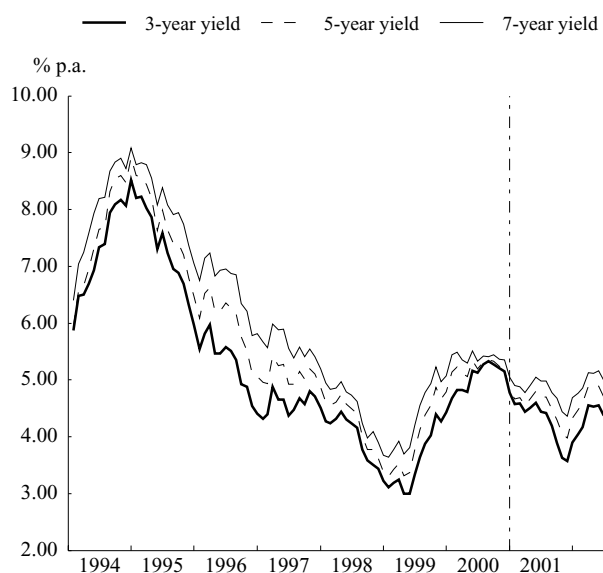
Government bond yields ¹⁾

(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⁾
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
<i>Euro area enlargement</i>							
2001	4.11	4.23	4.49	4.79	5.03	5.01	1.34
2001 June	4.39	4.44	4.70	4.99	5.21	5.26	1.19
July	4.33	4.42	4.70	4.99	5.25	5.23	1.33
Aug.	4.11	4.19	4.49	4.78	5.06	4.97	1.36
Sep.	3.77	3.89	4.29	4.67	5.04	4.76	1.40
Oct.	3.44	3.63	4.05	4.44	4.82	4.55	1.36
Nov.	3.36	3.58	3.98	4.37	4.67	4.61	1.33
Dec.	3.66	3.90	4.33	4.68	4.96	5.07	1.35
2002 Jan.	3.84	4.04	4.48	4.76	5.02	5.00	1.42
Feb.	3.96	4.17	4.60	4.85	5.07	4.90	1.52
Mar.	4.25	4.55	4.90	5.13	5.32	5.28	1.45
Apr.	4.21	4.53	4.86	5.12	5.30	5.21	1.39
May	4.25	4.55	4.89	5.16	5.30	5.15	1.38
June	4.10	4.37	4.70	4.99	5.16	4.90	1.36
2002 7 June	4.20	4.48	4.81	5.11	5.27	5.05	1.36
14	4.05	4.32	4.65	4.95	5.12	4.81	1.37
21	4.04	4.31	4.64	4.94	5.10	4.78	1.32
28	4.00	4.23	4.58	4.91	5.08	4.85	1.31

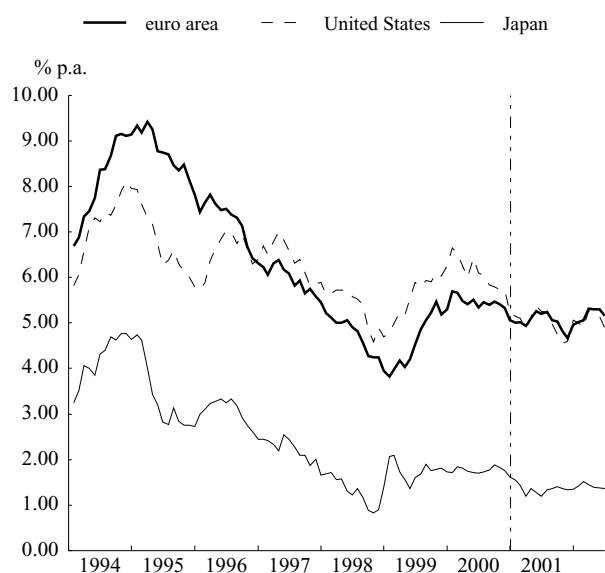
Euro area government bond yields

(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

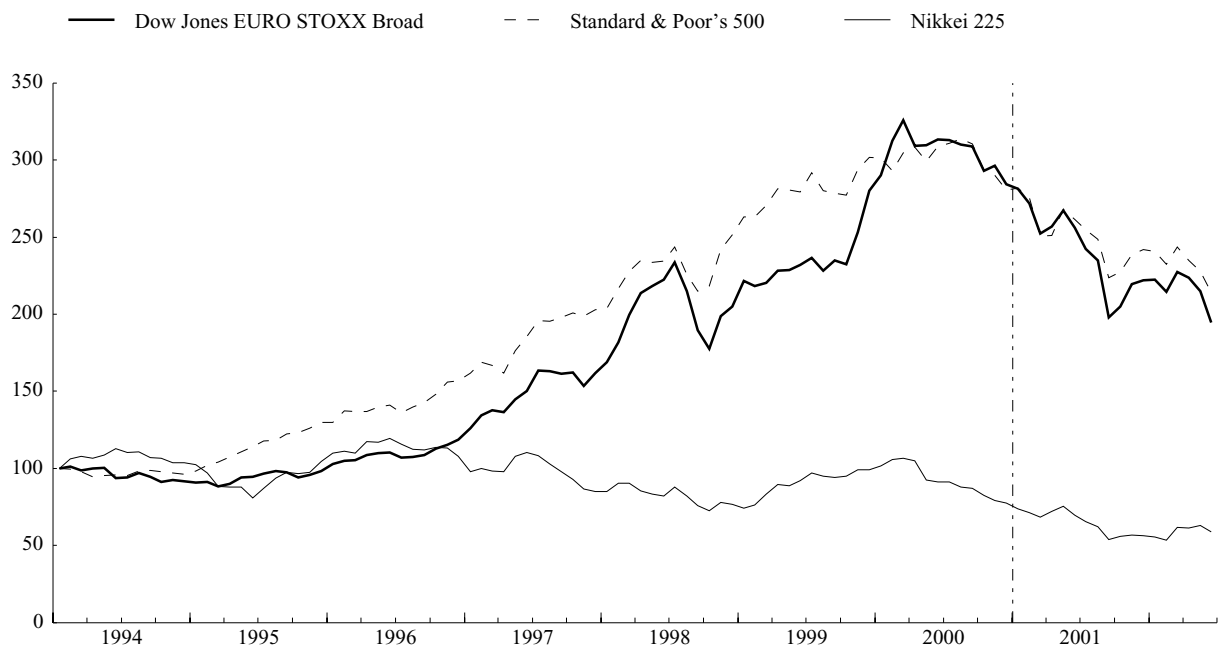
Stock market indices

(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	
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
<i>Euro area enlargement</i>														
2001	336.3	4,049.4	296.0	228.2	303.3	341.4	321.6	310.0	530.5	309.6	541.2	540.1	1,193.8	12,114.8
2001 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
July	336.2	4,037.8	302.7	233.8	316.6	349.9	328.2	306.5	449.5	324.2	512.0	565.7	1,205.9	12,140.1
Aug.	325.8	3,884.7	287.9	226.3	309.0	346.6	322.4	303.6	426.5	324.2	453.6	549.3	1,178.3	11,576.2
Sep.	274.3	3,277.0	253.2	176.7	284.2	315.8	265.9	253.2	325.4	298.7	366.5	509.2	1,058.7	9,974.7
Oct.	284.4	3,440.9	260.5	180.4	281.1	322.5	269.9	253.7	373.4	302.7	418.9	539.7	1,076.6	10,428.8
Nov.	304.2	3,674.4	281.3	202.1	286.7	313.7	287.5	270.6	464.5	297.0	473.2	528.8	1,130.3	10,519.7
Dec.	308.0	3,708.4	286.2	209.9	288.8	313.0	285.6	282.2	496.4	286.4	480.9	520.9	1,144.9	10,490.8
2002 Jan.	308.5	3,690.1	293.2	210.8	287.8	320.2	286.3	281.8	494.5	291.1	459.7	524.8	1,140.5	10,338.5
Feb.	297.9	3,537.6	294.9	198.6	288.5	334.0	275.1	279.3	463.7	291.1	406.3	490.1	1,101.5	9,966.9
Mar.	315.4	3,739.6	312.9	215.5	296.5	355.0	294.8	299.0	494.4	291.2	429.3	486.3	1,153.3	11,452.5
Apr.	310.2	3,657.0	308.6	210.2	302.8	351.5	299.5	299.0	438.6	296.9	409.7	472.1	1,112.0	11,391.6
May	298.2	3,503.5	306.9	204.3	300.7	347.3	293.7	296.7	378.3	290.6	355.9	460.8	1,079.9	11,695.8
June	269.8	3,143.1	293.1	187.5	282.1	324.6	263.8	275.3	312.4	273.0	302.4	408.1	1,014.0	10,965.9
2002 7 June	276.1	3,210.5	298.5	192.9	289.5	327.7	272.8	280.3	317.3	275.4	313.2	409.1	1,027.5	11,438.5
14	263.4	3,054.5	286.4	184.0	278.2	314.0	257.0	270.6	303.5	267.9	296.9	396.0	1,007.3	10,920.6
21	260.6	3,036.3	288.3	177.5	274.4	317.8	254.2	266.8	300.0	270.1	283.2	403.1	989.1	10,354.4
28	266.8	3,133.4	291.7	181.5	279.2	332.2	260.0	269.8	313.3	271.5	284.1	416.9	989.8	10,621.8

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

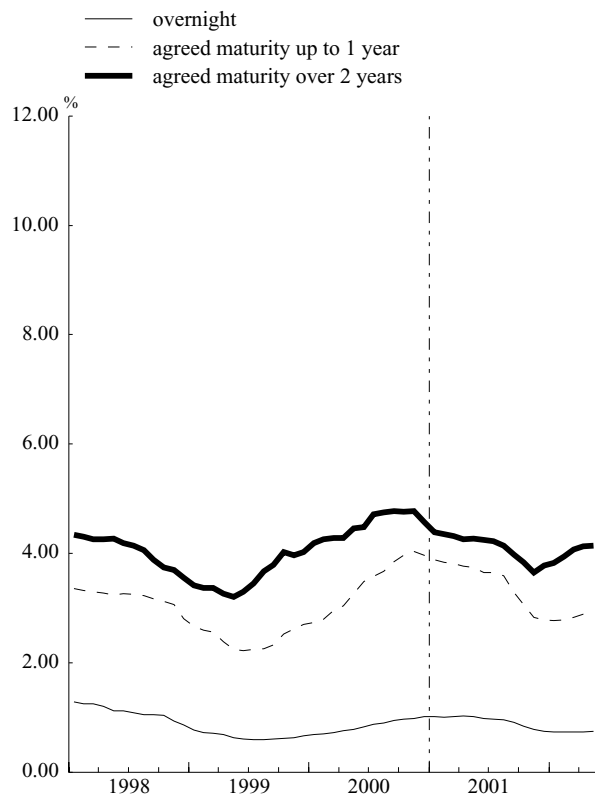
Retail bank interest rates

(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
1999	0.65	2.44	2.45	3.57	2.15	2.76	5.65	5.10	9.40	5.29
2000	0.85	3.45	3.45	4.52	2.25	3.79	6.60	6.23	9.87	6.34
<i>Euro area enlargement</i>										
2001	0.94	3.49	3.49	4.12	2.40	3.59	6.83	6.15	10.12	5.97
2001 May	1.01	3.75	3.74	4.27	2.48	3.91	7.03	6.34	10.22	6.17
June	0.98	3.65	3.65	4.25	2.45	3.85	6.97	6.25	10.17	6.13
July	0.97	3.65	3.65	4.22	2.44	3.80	6.90	6.20	10.11	6.05
Aug.	0.96	3.59	3.59	4.14	2.40	3.68	6.89	6.19	10.16	5.96
Sep.	0.91	3.28	3.28	3.98	2.36	3.33	6.70	6.07	10.08	5.86
Oct.	0.84	3.06	3.06	3.84	2.29	3.01	6.46	5.82	9.99	5.65
Nov.	0.78	2.84	2.83	3.65	2.19	2.75	6.31	5.71	9.87	5.48
Dec.	0.74	2.79	2.78	3.77	2.17	2.79	6.26	5.69	9.81	5.52
2002 Jan.	0.73	2.77	2.77	3.83	2.17	2.80	6.18	5.63	9.78	5.53
Feb.	0.74	2.78	2.79	3.95	2.15	2.91	6.16	5.75	9.81	5.61
Mar.	0.74	2.83	2.84	4.07	2.15	3.00	6.12	5.85	9.76	5.74
Apr.	0.74	2.89	2.90	4.13	2.14	3.07	6.14	5.86	9.76	5.81
May	0.74	2.91	2.92	4.15	2.15	3.08	6.16	5.89	9.80	5.82

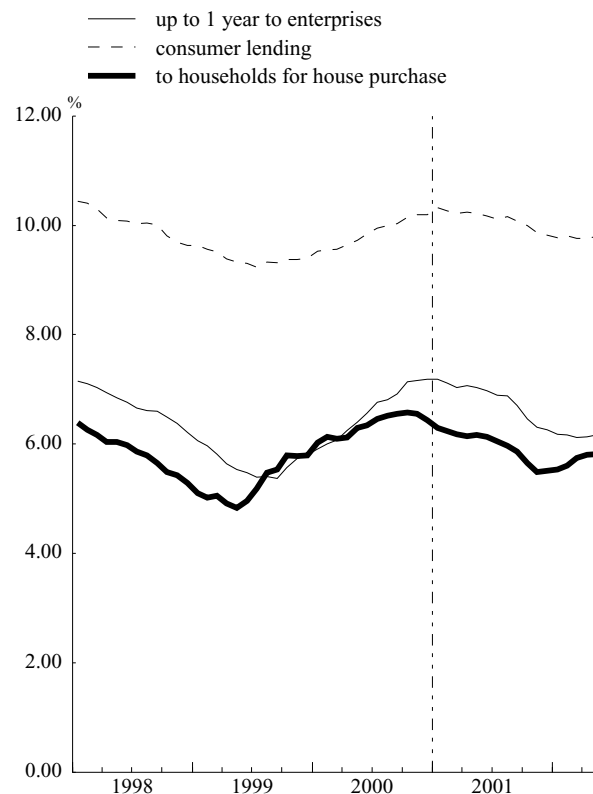
Deposit interest rates

(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 month 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
2001 Apr.	441.8	431.7	10.1	733.2	424.1	412.7	11.4	653.9	17.7	19.0
May	478.0	480.6	-2.7	735.1	456.8	460.1	-3.3	651.8	21.2	20.5
June	410.6	418.6	-8.1	726.3	387.9	395.5	-7.6	642.7	22.7	23.2
July	393.9	385.5	8.4	735.0	370.6	365.2	5.4	649.5	23.3	20.3
Aug.	422.9	418.4	4.5	738.1	404.8	400.2	4.6	654.9	18.2	18.2
Sep.	396.4	399.8	-3.4	734.9	374.1	376.2	-2.1	653.3	22.3	23.7
Oct.	498.2	494.0	4.2	742.3	480.0	470.8	9.3	662.9	18.2	23.2
Nov.	486.0	489.9	-3.9	740.0	459.4	466.7	-7.3	655.4	26.6	23.2
Dec.	332.1	375.9	-43.9	696.1	307.7	353.4	-45.7	610.6	24.4	22.5
2002 Jan.	484.7	453.3	31.5	730.8	464.0	432.6	31.4	643.4	20.7	20.7
Feb.	405.7	408.0	-2.2	726.5	386.4	387.2	-0.8	643.9	19.3	20.8
Mar.	420.4	402.8	17.7	746.1	399.7	383.0	16.7	662.3	20.8	19.8
Apr.	398.9	405.6	-6.7	739.2	375.2	384.1	-8.9	653.5	23.7	21.5

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
2001 Apr.	114.4	74.2	40.2	6,696.2	97.7	64.6	33.1	6,116.6	16.7	9.6
May	132.4	81.9	50.5	6,768.7	118.3	67.9	50.3	6,167.1	14.1	14.0
June	138.9	78.9	60.0	6,823.6	116.9	59.2	57.7	6,223.3	22.0	19.7
July	144.9	98.4	46.5	6,857.8	125.6	85.5	40.1	6,263.6	19.3	13.0
Aug.	93.3	73.9	19.4	6,862.0	77.8	63.5	14.3	6,276.7	15.4	10.4
Sep.	124.3	106.5	17.8	6,882.3	108.9	88.3	20.6	6,297.6	15.4	18.2
Oct.	144.5	108.4	36.1	6,921.1	123.4	91.5	31.9	6,329.8	21.0	16.8
Nov.	142.1	91.9	50.2	6,975.7	115.9	86.5	29.3	6,358.9	26.3	5.4
Dec.	122.7	85.5	37.3	7,012.0	112.2	75.1	37.1	6,395.1	10.5	10.4
2002 Jan.	173.6	111.2	62.4	7,079.1	155.9	105.3	50.7	6,444.0	17.7	6.0
Feb.	141.4	107.3	34.0	7,114.4	129.6	97.4	32.2	6,477.5	11.8	9.9
Mar.	163.9	102.7	61.2	7,174.5	142.3	91.8	50.5	6,527.4	21.5	10.9
Apr.	124.4	78.9	45.5	7,210.4	115.0	71.6	43.4	6,571.4	9.3	7.2

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
2001 Apr.	556.2	505.9	50.3	7,429.3	521.8	477.3	44.5	6,770.5	34.4	28.6
May	610.3	562.5	47.8	7,503.9	575.1	528.0	47.0	6,818.9	35.3	34.4
June	549.5	497.5	52.0	7,549.9	504.8	454.7	50.1	6,865.9	44.7	42.8
July	538.8	483.9	54.9	7,592.8	496.1	450.7	45.5	6,913.1	42.6	33.2
Aug.	516.2	492.3	23.9	7,600.1	482.6	463.7	18.9	6,931.6	33.6	28.6
Sep.	520.7	506.3	14.4	7,617.2	483.0	464.5	18.5	6,951.0	37.7	41.9
Oct.	642.7	602.4	40.3	7,663.4	603.5	562.3	41.2	6,992.7	39.2	40.1
Nov.	628.1	581.8	46.4	7,715.7	575.2	553.3	22.0	7,014.3	52.9	28.5
Dec.	454.8	461.4	-6.6	7,708.1	419.9	428.5	-8.7	7,005.8	34.9	32.9
2002 Jan.	658.3	564.5	93.8	7,809.9	620.0	537.9	82.1	7,087.4	38.4	26.6
Feb.	547.1	515.3	31.8	7,840.8	516.0	484.6	31.4	7,121.4	31.1	30.7
Mar.	584.3	505.5	78.9	7,920.6	542.0	474.8	67.3	7,189.7	42.3	30.7
Apr.	523.3	484.5	38.8	7,949.7	490.2	455.8	34.5	7,224.9	33.0	28.7

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	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
11	12	13	14	15	16	17	18	19	20	
-1.4	79.3	7.2	29.2	-22.0	55.9	431.3	441.9	-10.6	709.8	2001 Apr.
0.7	83.3	11.8	13.5	-1.7	54.2	468.6	473.6	-5.0	706.1	May
-0.5	83.6	25.1	9.8	15.2	69.5	413.0	405.3	7.7	712.1	June
3.0	85.6	6.2	25.5	-19.3	50.2	376.8	390.7	-13.9	699.7	July
-0.1	83.2	9.9	14.7	-4.8	45.4	414.7	415.0	-0.3	700.3	Aug.
-1.3	81.6	22.0	12.0	10.0	55.4	396.1	388.1	8.0	708.8	Sep.
-5.0	79.4	8.8	20.0	-11.1	44.3	488.9	490.8	-1.9	707.2	Oct.
3.5	84.6	16.2	12.9	3.3	47.6	475.5	479.6	-4.1	703.0	Nov.
1.9	85.5	17.1	10.2	6.9	54.5	324.8	363.7	-38.8	665.1	Dec.
0.1	87.4	11.3	24.2	-12.9	41.6	475.3	456.8	18.5	685.0	2002 Jan.
-1.5	82.6	13.4	11.8	1.7	43.3	399.8	399.0	0.9	687.1	Feb.
0.9	83.8	24.3	7.9	16.4	59.7	424.0	390.9	33.1	722.0	Mar.
2.2	85.8	.	.	.	.	.	.	.	.	Apr.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
11	12	13	14	15	16	17	18	19	20	
7.1	579.6	20.0	6.7	13.3	777.9	117.7	71.3	46.4	6,894.5	2001 Apr.
0.1	601.6	27.0	10.4	16.6	794.4	145.2	78.3	66.9	6,961.5	May
2.3	600.3	33.6	8.7	24.9	819.5	150.5	68.0	82.6	7,042.8	June
6.4	594.2	15.1	5.8	9.3	829.0	140.7	91.2	49.4	7,092.6	July
5.1	585.3	12.9	6.0	6.9	836.1	90.7	69.5	21.2	7,112.8	Aug.
-2.8	584.7	8.4	9.0	-0.6	835.5	117.3	97.3	20.0	7,133.2	Sep.
4.2	591.3	19.6	4.6	15.0	850.5	143.0	96.1	46.9	7,180.3	Oct.
20.9	616.8	30.1	7.4	22.7	873.2	145.9	93.9	52.0	7,232.0	Nov.
0.2	616.8	13.6	13.4	0.2	873.4	125.8	88.5	37.3	7,268.5	Dec.
11.7	635.1	20.4	6.8	13.6	886.9	176.3	112.1	64.2	7,330.9	2002 Jan.
1.8	636.9	19.7	13.9	5.8	892.8	149.3	111.2	38.0	7,370.3	Feb.
10.6	647.1	25.4	12.0	13.4	906.2	167.7	103.8	64.0	7,433.6	Mar.
2.1	639.0	.	.	.	.	.	.	.	.	Apr.

currencies		By non-residents of the euro area in euro ¹⁾				Total in euro ¹⁾				
Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	Issues	Redemptions	Net issues	Amounts outstanding	
11	12	13	14	15	16	17	18	19	20	
5.8	658.8	27.2	35.9	-8.7	833.9	549.0	513.2	35.8	7,604.3	2001 Apr.
0.8	684.9	38.8	23.9	14.9	848.6	613.8	551.9	61.9	7,667.6	May
1.9	683.9	58.7	18.6	40.1	889.0	563.5	473.3	90.2	7,754.9	June
9.4	679.7	21.3	31.3	-9.9	879.3	517.5	481.9	35.5	7,792.3	July
5.0	668.5	22.8	20.7	2.1	881.5	505.4	484.5	21.0	7,813.2	Aug.
-4.1	666.3	30.4	21.0	9.4	891.0	513.4	485.5	28.0	7,841.9	Sep.
-0.9	670.7	28.4	24.6	3.9	894.8	631.9	586.9	45.0	7,887.4	Oct.
24.4	701.4	46.2	20.2	26.0	920.8	621.5	573.5	48.0	7,935.1	Nov.
2.1	702.3	30.7	23.7	7.1	927.9	450.6	452.2	-1.6	7,933.6	Dec.
11.7	722.5	31.7	31.0	0.7	928.5	651.7	568.9	82.8	8,015.9	2002 Jan.
0.3	719.5	33.1	25.6	7.5	936.0	549.1	510.2	38.9	8,057.4	Feb.
11.6	730.9	49.7	19.9	29.8	965.9	591.7	494.6	97.1	8,155.6	Mar.
4.3	724.8	.	.	.	.	.	.	.	.	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
2001 Apr.	653.9	268.6	5.5	92.4	285.3	2.2	55.9	26.8	18.5	9.7
May	651.8	260.3	5.5	99.4	284.1	2.4	54.2	26.5	18.0	8.8
June	642.7	261.0	5.3	97.5	276.9	2.0	69.5	32.1	24.7	11.5
July	649.5	258.7	5.1	101.3	280.8	3.6	50.2	25.3	17.3	6.7
Aug.	654.9	254.3	4.4	106.8	285.9	3.6	45.4	23.1	15.7	5.8
Sep.	653.3	251.6	4.1	106.4	287.5	3.7	55.4	27.1	22.2	5.5
Oct.	662.9	261.4	3.8	110.3	284.0	3.4	44.3	23.3	16.4	4.0
Nov.	655.4	250.7	3.9	106.1	291.2	3.6	47.6	23.6	19.4	3.4
Dec.	610.6	240.3	3.4	95.4	267.3	4.1	54.5	23.8	24.4	4.4
2002 Jan.	643.4	257.4	3.7	100.1	278.8	3.5	41.6	18.8	18.9	3.1
Feb.	643.9	251.8	3.9	98.1	286.6	3.5	43.3	19.9	19.0	3.6
Mar.	662.3	258.8	4.3	96.9	299.0	3.3	59.7	26.4	26.2	6.4
Apr.	653.5	256.0	4.2	92.3	298.0	3.0				

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
2001 Apr.	6,116.6	2,247.9	272.2	301.5	3,182.6	112.5	777.9	202.5	244.4	82.7
May	6,167.1	2,255.4	282.5	311.5	3,204.5	113.2	794.4	208.1	250.5	88.0
June	6,223.3	2,270.4	290.1	318.9	3,230.7	113.2	819.5	216.5	256.2	91.2
July	6,263.6	2,291.0	307.5	321.0	3,228.7	115.4	829.0	219.1	261.9	93.2
Aug.	6,276.7	2,291.0	310.3	327.5	3,229.6	118.3	836.1	220.2	268.9	93.9
Sep.	6,297.6	2,297.4	314.6	326.0	3,237.2	122.4	835.5	221.0	269.7	93.3
Oct.	6,329.8	2,313.0	325.0	323.6	3,240.8	127.5	850.5	223.0	276.1	95.3
Nov.	6,358.9	2,315.4	333.3	340.0	3,240.9	129.2	873.2	227.2	287.5	99.7
Dec.	6,395.1	2,317.9	363.3	345.1	3,238.3	130.4	873.4	229.4	287.0	100.3
2002 Jan.	6,444.0	2,322.7	368.5	350.4	3,269.0	133.4	886.9	229.6	291.4	103.7
Feb.	6,477.5	2,343.6	373.1	353.4	3,274.4	133.0	892.8	233.0	294.3	104.5
Mar.	6,527.4	2,365.3	377.7	353.7	3,293.1	137.6	906.2	235.4	305.0	106.2
Apr.	6,571.4	2,373.2	388.3	358.7	3,309.0	142.2				

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
2001 Apr.	6,770.5	2,516.4	277.7	393.9	3,467.9	114.6	833.9	229.3	262.8	92.3
May	6,818.9	2,515.8	288.0	411.0	3,488.6	115.6	848.6	234.6	268.5	96.8
June	6,865.9	2,531.5	295.3	416.4	3,507.6	115.2	889.0	248.6	280.8	102.7
July	6,913.1	2,549.7	312.5	422.2	3,509.6	119.0	879.3	244.4	279.2	99.9
Aug.	6,931.6	2,545.4	314.7	434.3	3,515.5	121.8	881.5	243.3	284.5	99.7
Sep.	6,951.0	2,549.0	318.7	432.4	3,524.7	126.1	891.0	248.1	291.8	98.8
Oct.	6,992.7	2,574.3	328.8	433.9	3,524.8	130.8	894.8	246.3	292.5	99.3
Nov.	7,014.3	2,566.1	337.2	446.0	3,532.1	132.8	920.8	250.7	307.0	103.0
Dec.	7,005.8	2,558.2	366.8	440.6	3,505.6	134.6	927.9	253.3	311.4	104.7
2002 Jan.	7,087.4	2,580.1	372.1	450.5	3,547.8	136.9	928.5	248.4	310.4	106.8
Feb.	7,121.4	2,595.4	377.0	451.4	3,561.0	136.5	936.0	252.9	313.4	108.1
Mar.	7,189.7	2,624.1	382.0	450.6	3,592.1	140.9	965.9	261.8	331.2	112.6
Apr.	7,224.9	2,629.2	392.4	451.0	3,607.0	145.2				

*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	
0.1	0.8	0.1	709.8	295.4	23.9	102.1	285.3	2.9	0.1	2001 Apr.
0.1	0.8	0.1	706.1	286.8	23.5	108.2	284.2	3.2	0.1	May
0.2	0.8	0.2	712.1	293.1	29.9	109.0	277.1	2.8	0.2	June
0.2	0.7	0.0	699.7	284.0	22.3	108.0	281.0	4.3	0.0	July
0.1	0.6	0.0	700.3	277.4	20.1	112.6	286.0	4.2	0.0	Aug.
0.1	0.5	0.1	708.8	278.6	26.3	111.9	287.7	4.2	0.1	Sep.
0.1	0.3	0.2	707.2	284.6	20.2	114.3	284.2	3.7	0.2	Oct.
0.1	0.4	0.6	703.0	274.3	23.3	109.4	291.3	4.0	0.6	Nov.
0.1	0.5	1.3	665.1	264.1	27.8	99.8	267.4	4.7	1.3	Dec.
0.1	0.4	0.2	685.0	276.2	22.6	103.2	278.9	4.0	0.2	2002 Jan.
0.1	0.3	0.4	687.1	271.7	22.9	101.6	286.8	3.8	0.4	Feb.
0.1	0.2	0.4	722.0	285.2	30.5	103.3	299.1	3.5	0.4	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	
91.5	40.0	116.9	6,894.5	2,450.4	516.5	384.1	3,274.1	152.5	116.9	2001 Apr.
92.5	39.6	115.7	6,961.5	2,463.6	533.0	399.5	3,296.9	152.8	115.7	May
94.4	46.1	115.1	7,042.8	2,486.9	546.2	410.0	3,325.1	159.4	115.1	June
94.0	46.1	114.7	7,092.6	2,510.1	569.4	414.1	3,322.7	161.5	114.7	July
93.8	46.0	113.4	7,112.8	2,511.2	579.1	421.4	3,323.4	164.3	113.4	Aug.
92.0	46.0	113.6	7,133.2	2,518.4	584.3	419.3	3,329.1	168.4	113.6	Sep.
91.8	51.3	113.0	7,180.3	2,535.9	601.1	418.9	3,332.6	178.7	113.0	Oct.
91.5	51.7	115.7	7,232.0	2,542.6	620.8	439.6	3,332.4	180.9	115.7	Nov.
92.1	51.7	112.9	7,268.5	2,547.4	650.4	445.4	3,330.4	182.1	112.9	Dec.
91.3	56.5	114.4	7,330.9	2,552.3	659.9	454.1	3,360.3	189.8	114.4	2002 Jan.
92.0	56.3	112.5	7,370.3	2,576.7	667.4	457.9	3,366.5	189.3	112.5	Feb.
92.2	56.3	111.1	7,433.6	2,600.7	682.7	460.0	3,385.3	193.9	111.1	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	
91.6	40.8	117.0	7,604.3	2,745.8	540.5	486.2	3,559.5	155.5	117.0	2001 Apr.
92.6	40.4	115.8	7,667.6	2,750.4	556.5	507.7	3,581.2	156.0	115.8	May
94.6	46.9	115.3	7,754.9	2,780.0	576.1	519.1	3,602.2	162.2	115.3	June
94.2	46.9	114.8	7,792.3	2,794.1	591.7	522.1	3,603.8	165.8	114.8	July
93.9	46.6	113.5	7,813.2	2,788.7	599.2	534.0	3,609.4	168.4	113.5	Aug.
92.1	46.5	113.7	7,841.9	2,797.0	610.6	531.2	3,616.8	172.6	113.7	Sep.
92.0	51.6	113.2	7,887.4	2,820.6	621.2	533.2	3,616.8	182.4	113.2	Oct.
91.6	52.1	116.3	7,935.1	2,816.9	644.2	549.1	3,623.7	185.0	116.3	Nov.
92.2	52.2	114.1	7,933.6	2,811.5	678.2	545.2	3,597.9	186.7	114.1	Dec.
91.4	56.9	114.6	8,015.9	2,828.5	682.5	557.3	3,639.2	193.8	114.6	2002 Jan.
92.2	56.6	112.9	8,057.4	2,848.3	690.3	559.5	3,653.2	193.1	112.9	Feb.
92.3	56.5	111.5	8,155.6	2,885.9	713.2	563.2	3,684.4	197.4	111.5	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; 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
2001 Apr.	424.1	301.6	3.2	69.4	48.5	1.4	7.2	2.7	3.3	1.1
May	456.8	341.5	2.8	71.3	39.2	1.9	11.8	5.7	5.0	0.8
June	387.9	282.0	2.7	64.7	37.4	1.1	25.1	9.8	11.5	3.3
July	370.6	245.1	2.3	75.7	44.9	2.6	6.2	2.8	2.8	0.6
Aug.	404.8	287.4	1.6	69.0	45.3	1.5	9.9	4.8	4.1	0.9
Sep.	374.1	269.5	2.2	66.4	34.3	1.8	22.0	8.0	11.4	2.2
Oct.	480.0	345.9	2.0	85.9	45.1	1.1	8.8	3.0	4.7	0.9
Nov.	459.4	347.2	2.3	66.4	42.2	1.3	16.2	6.4	7.9	1.1
Dec.	307.7	228.5	1.3	52.6	23.4	1.9	17.1	6.6	8.4	1.3
2002 Jan.	464.0	327.5	2.1	71.2	61.3	2.0	11.3	5.0	5.0	1.1
Feb.	386.4	268.1	2.6	66.0	47.9	1.9	13.4	5.0	6.5	1.5
Mar.	399.7	286.5	2.2	60.1	49.0	1.8	24.3	10.7	10.1	3.3
Apr.	375.2	254.7	2.2	63.3	53.2	1.8				

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
2001 Apr.	97.7	41.0	8.7	6.2	39.1	2.6	20.0	5.3	9.1	2.7
May	118.3	38.9	13.6	11.9	52.9	0.9	27.0	8.9	9.7	6.5
June	116.9	44.9	11.0	10.9	49.6	0.5	33.6	11.8	7.7	4.7
July	125.6	53.3	20.9	6.1	42.6	2.7	15.1	4.8	7.3	2.3
Aug.	77.8	29.9	7.5	7.7	29.6	3.1	12.9	3.4	8.5	0.9
Sep.	108.9	35.9	7.3	2.3	58.8	4.6	8.4	4.8	3.0	0.2
Oct.	123.4	58.7	13.6	4.5	40.8	5.8	19.6	3.4	7.9	2.3
Nov.	115.9	48.0	11.9	17.5	35.8	2.7	30.1	6.0	12.7	4.6
Dec.	112.2	43.0	34.9	9.1	23.0	2.2	13.6	6.4	3.9	1.7
2002 Jan.	155.9	47.5	10.8	6.5	88.0	3.2	20.4	4.1	5.3	3.7
Feb.	129.6	54.0	8.7	8.2	57.5	1.1	19.7	8.1	8.2	1.3
Mar.	142.3	56.9	7.9	2.8	69.4	5.3	25.4	8.6	12.1	3.3
Apr.	115.0	43.0	13.9	7.7	45.5	4.9				

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
2001 Apr.	521.8	342.6	12.0	75.6	87.6	4.0	27.2	7.9	12.4	3.8
May	575.1	380.4	16.4	83.2	92.1	2.9	38.8	14.7	14.8	7.3
June	504.8	326.9	13.7	75.6	87.0	1.6	58.7	21.6	19.2	8.0
July	496.1	298.3	23.2	81.9	87.5	5.2	21.3	7.6	10.1	2.9
Aug.	482.6	317.3	9.1	76.6	74.9	4.6	22.8	8.2	12.6	1.7
Sep.	483.0	305.4	9.4	68.7	93.1	6.4	30.4	12.7	14.3	2.4
Oct.	603.5	404.6	15.6	90.3	86.0	6.9	28.4	6.5	12.6	3.2
Nov.	575.2	395.3	14.2	83.9	78.0	4.0	46.2	12.5	20.6	5.7
Dec.	419.9	271.5	36.1	61.7	46.4	4.1	30.7	13.0	12.3	3.1
2002 Jan.	620.0	375.0	12.9	77.6	149.3	5.2	31.7	9.1	10.3	4.8
Feb.	516.0	322.1	11.3	74.2	105.4	3.0	33.1	13.2	14.7	2.9
Mar.	542.0	343.4	10.2	62.9	118.4	7.1	49.7	19.3	22.2	6.6
Apr.	490.2	297.8	16.1	71.0	98.7	6.7				

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	
0.0	0.1	0.0	431.3	304.2	6.5	70.5	48.5	1.5	0.0	2001 Apr.
0.0	0.2	0.0	468.6	347.2	7.9	72.1	39.3	2.1	0.0	May
0.1	0.1	0.2	413.0	291.8	14.3	67.9	37.5	1.2	0.2	June
0.0	0.0	0.0	376.8	247.8	5.1	76.4	44.9	2.6	0.0	July
0.1	0.0	0.0	414.7	292.2	5.7	69.8	45.4	1.5	0.0	Aug.
0.1	0.4	0.0	396.1	277.5	13.5	68.6	34.3	2.1	0.0	Sep.
0.0	0.0	0.2	488.9	349.0	6.7	86.7	45.1	1.2	0.2	Oct.
0.1	0.2	0.4	475.5	353.7	10.2	67.5	42.3	1.5	0.4	Nov.
0.0	0.1	0.7	324.8	235.0	9.7	53.9	23.4	2.0	0.7	Dec.
0.1	0.0	0.1	475.3	332.5	7.1	72.2	61.5	2.0	0.1	2002 Jan.
0.0	0.1	0.2	399.8	273.1	9.1	67.6	47.9	2.0	0.2	Feb.
0.0	0.1	0.1	424.0	297.2	12.4	63.4	49.0	1.9	0.1	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	
1.3	0.4	1.2	117.7	46.3	17.9	8.9	40.4	3.0	1.2	2001 Apr.
1.7	0.0	0.1	145.2	47.8	23.3	18.4	54.6	1.0	0.1	May
2.0	6.7	0.8	150.5	56.7	18.7	15.6	51.6	7.2	0.8	June
0.5	0.1	0.0	140.7	58.1	28.2	8.4	43.2	2.7	0.0	July
0.1	0.0	0.0	90.7	33.3	16.0	8.5	29.7	3.2	0.0	Aug.
0.1	0.0	0.4	117.3	40.7	10.2	2.5	58.9	4.6	0.4	Sep.
0.2	5.4	0.4	143.0	62.1	21.5	6.8	41.1	11.2	0.4	Oct.
1.0	0.5	5.1	145.9	54.1	24.6	22.1	36.8	3.2	5.1	Nov.
1.3	0.1	0.1	125.8	49.4	38.8	10.8	24.3	2.3	0.1	Dec.
0.0	5.1	2.1	176.3	51.7	16.1	10.2	88.0	8.3	2.1	2002 Jan.
1.5	0.3	0.3	149.3	62.2	16.9	9.5	59.0	1.4	0.3	Feb.
0.8	0.5	0.3	167.7	65.5	20.0	6.1	70.2	5.8	0.3	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	
1.3	0.5	1.2	549.0	350.6	24.4	79.5	88.9	4.5	1.2	2001 Apr.
1.7	0.2	0.1	613.8	395.1	31.2	90.6	93.9	3.1	0.1	May
2.1	6.8	1.0	563.5	348.5	32.9	83.6	89.1	8.4	1.0	June
0.6	0.1	0.1	517.5	305.9	33.3	84.8	88.1	5.3	0.1	July
0.2	0.0	0.1	505.4	325.5	21.8	78.4	75.1	4.7	0.1	Aug.
0.2	0.4	0.4	513.4	318.1	23.8	71.1	93.2	6.7	0.4	Sep.
0.2	5.4	0.5	631.9	411.1	28.3	93.5	86.2	12.3	0.5	Oct.
1.1	0.8	5.6	621.5	407.7	34.8	89.6	79.1	4.7	5.6	Nov.
1.3	0.3	0.8	450.6	284.5	48.5	64.8	47.8	4.3	0.8	Dec.
0.1	5.1	2.2	651.7	384.1	23.2	82.4	149.5	10.3	2.2	2002 Jan.
1.5	0.4	0.5	549.1	335.3	26.0	77.1	106.9	3.3	0.5	Feb.
0.8	0.5	0.4	591.7	362.7	32.3	69.5	119.2	7.6	0.4	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; nominal values)
Net 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
2001 Apr.	11.4	4.3	0.4	-2.0	8.8	0.0	-22.0	-11.1	-7.3	-3.0
May	-3.3	-9.5	0.1	7.0	-1.1	0.2	-1.7	-0.4	-0.5	-0.9
June	-7.6	2.2	-0.3	-1.8	-7.3	-0.4	15.2	5.6	6.7	2.7
July	5.4	-3.7	-0.2	3.7	4.0	1.6	-19.3	-6.7	-7.4	-4.8
Aug.	4.6	-5.2	-0.7	5.5	5.0	0.0	-4.8	-2.2	-1.6	-0.9
Sep.	-2.1	-3.2	-0.3	-0.4	1.7	0.1	10.0	4.0	6.5	-0.3
Oct.	9.3	9.6	-0.4	3.8	-3.5	-0.3	-11.1	-3.8	-5.8	-1.5
Nov.	-7.3	-10.7	0.1	-4.1	7.1	0.2	3.3	0.3	3.0	-0.6
Dec.	-45.7	-11.4	-0.5	-10.5	-23.8	0.6	6.9	0.2	5.0	1.0
2002 Jan.	31.4	15.7	0.2	4.6	11.4	-0.6	-12.9	-5.0	-5.5	-1.3
Feb.	-0.8	-6.6	0.2	-2.2	7.8	0.0	1.7	1.1	0.1	0.5
Mar.	16.7	5.4	0.4	-1.2	12.4	-0.2	16.4	6.5	7.2	2.8
Apr.	-8.9	-3.0	-0.1	-4.6	-1.0	-0.3				

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
2001 Apr.	33.1	7.8	5.5	3.1	14.5	2.1	13.3	2.8	7.7	2.5
May	50.3	7.4	10.3	10.1	21.9	0.7	16.6	5.6	6.2	5.4
June	57.7	16.5	7.6	7.4	26.2	0.0	24.9	8.4	5.6	3.1
July	40.1	20.6	17.4	2.1	-2.2	2.1	9.3	2.5	5.6	2.0
Aug.	14.3	1.2	2.8	6.6	0.9	2.9	6.9	1.1	6.8	0.7
Sep.	20.6	6.0	4.4	-1.5	7.5	4.1	-0.6	0.8	0.8	-0.6
Oct.	31.9	15.3	10.4	-2.4	3.7	5.1	15.0	2.0	6.5	2.0
Nov.	29.3	2.1	8.4	16.9	0.1	1.8	22.7	4.2	11.4	4.4
Dec.	37.1	3.4	30.0	5.1	-2.6	1.2	0.2	2.3	-0.5	0.6
2002 Jan.	50.7	6.5	5.1	5.5	30.7	3.0	13.6	0.1	4.4	3.4
Feb.	32.2	19.6	4.6	2.9	5.4	-0.4	5.8	3.5	2.8	0.8
Mar.	50.5	22.3	4.6	0.4	18.7	4.6	13.4	2.4	10.7	1.7
Apr.	43.4	7.3	10.6	5.0	15.9	4.6				

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
2001 Apr.	44.5	12.1	5.9	1.1	23.2	2.1	-8.7	-8.3	0.4	-0.5
May	47.0	-2.1	10.3	17.0	20.7	1.0	14.9	5.3	5.7	4.5
June	50.1	18.6	7.3	5.6	19.0	-0.4	40.1	14.0	12.2	5.9
July	45.5	17.0	17.2	5.8	1.7	3.7	-9.9	-4.2	-1.8	-2.8
Aug.	18.9	-4.0	2.1	12.0	5.9	2.8	2.1	-1.1	5.2	-0.2
Sep.	18.5	2.8	4.1	-1.8	9.2	4.3	9.4	4.7	7.3	-0.9
Oct.	41.2	24.9	10.0	1.4	0.2	4.7	3.9	-1.8	0.7	0.5
Nov.	22.0	-8.5	8.5	12.7	7.2	2.1	26.0	4.5	14.5	3.7
Dec.	-8.7	-8.1	29.5	-5.4	-26.4	1.7	7.1	2.5	4.5	1.6
2002 Jan.	82.1	22.2	5.3	10.1	42.1	2.3	0.7	-4.9	-1.0	2.2
Feb.	31.4	13.0	4.8	0.7	13.2	-0.4	7.5	4.5	2.9	1.3
Mar.	67.3	27.7	5.0	-0.8	31.1	4.3	29.8	8.9	17.9	4.5
Apr.	34.5	4.3	10.5	0.4	14.9	4.3				

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	
-0.1	-0.2	-0.3	-10.6	-6.8	-7.0	-5.0	8.6	-0.2	-0.3	2001 Apr.
0.0	0.0	0.0	-5.0	-9.8	-0.4	6.1	-1.1	0.2	0.0	May
0.1	0.0	0.1	7.7	7.8	6.4	0.9	-7.2	-0.3	0.1	June
0.0	-0.1	-0.2	-13.9	-10.4	-7.6	-1.1	3.9	1.5	-0.2	July
0.0	-0.1	0.0	-0.3	-7.4	-2.2	4.6	5.0	-0.2	0.0	Aug.
0.0	-0.1	0.0	8.0	0.8	6.2	-0.7	1.7	0.0	0.0	Sep.
0.0	-0.2	0.1	-1.9	5.8	-6.1	2.3	-3.5	-0.5	0.1	Oct.
0.0	0.1	0.4	-4.1	-10.4	3.2	-4.7	7.1	0.4	0.4	Nov.
0.0	0.1	0.7	-38.8	-11.2	4.5	-9.5	-23.9	0.6	0.7	Dec.
0.0	-0.1	-1.1	18.5	10.7	-5.2	3.3	11.5	-0.7	-1.1	2002 Jan.
0.0	-0.2	0.2	0.9	-5.5	0.3	-1.7	7.8	-0.2	0.2	Feb.
0.0	0.0	0.0	33.1	11.8	7.6	1.6	12.4	-0.3	0.0	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	
0.9	0.1	-0.6	46.4	10.6	13.2	5.6	15.3	2.2	-0.6	2001 Apr.
1.0	-0.4	-1.1	66.9	13.0	16.5	15.5	22.8	0.3	-1.1	May
1.9	6.5	-0.6	82.6	24.8	13.2	10.5	28.2	6.5	-0.6	June
-0.5	0.0	-0.4	49.4	23.2	23.0	4.1	-2.7	2.1	-0.4	July
-0.2	-0.1	-1.3	21.2	2.3	9.6	7.2	0.6	2.8	-1.3	Aug.
-1.8	0.0	0.2	20.0	6.8	5.2	-2.0	5.7	4.2	0.2	Sep.
-0.1	5.3	-0.6	46.9	17.2	16.9	-0.4	3.5	10.3	-0.6	Oct.
-0.4	0.4	2.7	52.0	6.3	19.8	21.2	-0.3	2.2	2.7	Nov.
0.6	0.0	-2.8	37.3	5.7	29.5	5.7	-2.0	1.2	-2.8	Dec.
-0.8	4.8	1.5	64.2	6.6	9.6	8.9	29.9	7.8	1.5	2002 Jan.
0.7	-0.2	-1.9	38.0	23.1	7.4	3.8	6.1	-0.5	-1.9	Feb.
0.1	0.0	-1.4	64.0	24.7	15.3	2.0	18.8	4.5	-1.4	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	
0.7	-0.1	-0.9	35.8	3.8	6.3	0.7	24.0	2.0	-0.9	2001 Apr.
1.0	-0.5	-1.1	61.9	3.2	16.1	21.6	21.7	0.5	-1.1	May
2.0	6.5	-0.5	90.2	32.6	19.5	11.4	21.0	6.2	-0.5	June
-0.5	0.0	-0.6	35.5	12.8	15.4	2.9	1.3	3.7	-0.6	July
-0.3	-0.2	-1.3	21.0	-5.1	7.3	11.8	5.6	2.6	-1.3	Aug.
-1.8	-0.1	0.2	28.0	7.5	11.4	-2.7	7.4	4.2	0.2	Sep.
-0.2	5.1	-0.5	45.0	23.1	10.7	1.9	0.0	9.8	-0.5	Oct.
-0.3	0.5	3.1	48.0	-4.1	23.0	16.5	6.9	2.6	3.1	Nov.
0.6	0.0	-2.2	-1.6	-5.5	34.0	-3.8	-25.9	1.8	-2.2	Dec.
-0.8	4.7	0.5	82.8	17.3	4.3	12.2	41.4	7.1	0.5	2002 Jan.
0.7	-0.3	-1.7	38.9	17.6	7.7	2.1	14.0	-0.7	-1.7	Feb.
0.1	-0.1	-1.4	97.1	36.5	22.8	3.7	31.2	4.3	-1.4	Mar.
.	.	.	.	.	.	.	.	.	.	Apr.

4 HICP and other prices in the euro area

Table 4.1

Harmonised Index of Consumer Prices

(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 (%) ¹⁾	100.0	100.0	61.1	61.1	38.9	38.9	100.0	100.0	61.1	38.9
	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	105.5	2.7	107.8	1.7	-	-	-	-
<i>Euro area enlargement</i>										
2001	108.9	2.5	108.1	2.5	110.4	2.5	-	-	-	-
2001 Q2	109.2	3.1	108.8	3.4	110.1	2.4	108.9	1.1	108.4	110.1
Q3	109.2	2.4	108.2	2.3	111.2	2.5	109.2	0.3	108.5	110.8
Q4	109.5	2.1	108.6	1.7	111.2	2.8	109.6	0.3	108.6	111.6
2002 Q1	110.4	2.6	109.1	2.2	112.6	3.1	110.5	0.8	109.3	112.6
2001 July	109.2	2.6	108.1	2.7	111.2	2.5	109.1	-0.1	108.4	110.5
Aug.	109.1	2.4	107.9	2.3	111.3	2.4	109.1	0.0	108.3	110.8
Sep.	109.4	2.2	108.6	2.0	111.0	2.6	109.5	0.4	108.8	111.0
Oct.	109.5	2.3	108.7	2.0	111.1	2.8	109.6	0.1	108.7	111.4
Nov.	109.5	2.1	108.5	1.5	111.1	2.7	109.6	0.0	108.5	111.6
Dec.	109.6	2.0	108.6	1.6	111.5	2.8	109.7	0.1	108.6	111.9
2002 Jan.	110.1	2.7	108.9	2.4	112.2	3.0	110.3	0.5	109.2	112.3
Feb.	110.2	2.5	108.8	2.1	112.7	3.0	110.4	0.1	109.2	112.6
Mar.	110.8	2.5	109.7	2.0	113.0	3.2	110.7	0.3	109.5	113.0
Apr.	111.4	2.4	110.4	2.0	113.2	3.0	111.0	0.3	110.0	113.1
May	111.5	2.0	110.5	1.3	113.6	3.3	111.2	0.2	109.9	113.7
June ²⁾	.	1.7	.	.	.	.	.	.	.	.

2. Breakdown of goods and services

	Goods						Services				
	Food ³⁾			Industrial goods			Housing	Transport	Communi- cation	Recreation and personal	Miscellan- eous
	Total	Processed food ³⁾	Unprocessed food	Total	Non-energy industrial goods	Energy					
Weight in the total (%) ¹⁾	20.4	12.3	8.1	40.7	32.0	8.7	9.7	6.3	2.5	14.3	6.1
	11	12	13	14	15	16	17	18	19	20	21
1998	1.6	1.4	2.0	0.2	0.9	-2.6	2.3	1.7	-1.0	2.2	1.8
1999	0.6	0.9	0.0	1.0	0.7	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
<i>Euro area enlargement</i>											
2001	4.5	2.8	7.0	1.5	1.1	2.7	1.9	3.5	-2.8	3.3	2.6
2001 Q2	4.9	2.7	8.3	2.7	1.4	7.2	1.8	3.5	-2.8	3.3	2.5
Q3	5.1	3.3	7.9	1.0	0.9	1.1	1.9	3.7	-2.5	3.2	2.7
Q4	4.7	3.5	6.7	0.2	1.6	-4.1	2.0	3.8	-1.8	3.6	2.9
2002 Q1	4.9	3.5	7.0	0.9	1.8	-2.0	2.3	3.6	-1.2	4.0	3.2
2001 July	5.3	3.2	8.5	1.4	1.0	2.9	1.8	3.8	-2.5	3.1	2.6
Aug.	5.0	3.4	7.6	1.0	0.7	2.0	1.9	3.7	-2.7	3.1	2.7
Sep.	5.0	3.4	7.6	0.6	1.2	-1.4	1.9	3.6	-2.2	3.4	2.8
Oct.	5.0	3.5	7.5	0.5	1.5	-2.7	2.0	3.8	-1.7	3.6	2.9
Nov.	4.5	3.4	6.2	0.0	1.6	-5.0	2.0	3.7	-2.0	3.5	2.9
Dec.	4.6	3.5	6.3	0.2	1.6	-4.6	2.0	4.0	-1.7	3.6	2.9
2002 Jan.	5.6	3.8	8.4	0.9	1.7	-1.8	2.2	3.6	-1.2	3.9	3.1
Feb.	4.8	3.3	7.1	0.8	1.9	-2.8	2.2	3.5	-1.2	4.0	3.2
Mar.	4.2	3.3	5.5	1.0	1.8	-1.5	2.3	3.7	-1.0	4.2	3.2
Apr.	3.6	3.2	4.1	1.2	1.8	-0.5	2.5	3.2	-0.9	3.8	3.3
May	2.7	3.1	2.1	0.6	1.7	-2.9	2.4	3.5	-0.7	4.4	3.4
June	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.

1) Referring to the index period 2002.

2) Estimate based on first releases by Germany and Italy (and, when available, by other Member States), as well as on early information on energy prices.

3) Including alcoholic beverages and tobacco.

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

	Industrial producer prices											World market prices of raw materials ¹⁾	Oil prices ²⁾ (EUR per barrel)	
	Industry excluding construction ³⁾								Energy	Construction ⁴⁾	Manufacturing			Total excluding energy
	Total		Industry excluding construction and energy					Total				Durable consumer goods	Non-durable consumer goods		Total
	Index 1995 = 100		Total	Intermediate goods	Capital goods	Consumer goods								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1996	100.3	0.3	0.3	-1.8	1.4	1.7	2.0	1.7	0.9	1.4	0.9	6.0	-7.5	16.0
1997	101.4	1.1	0.6	0.2	0.3	1.1	0.6	1.2	3.2	1.3	0.8	10.7	14.6	17.0
1998	100.6	-0.8	0.2	-0.4	0.6	0.5	0.7	0.5	-5.2	0.3	-0.6	-21.0	-12.5	12.0
1999	100.2	-0.4	-0.6	-1.5	0.2	-0.1	0.7	-0.2	0.5	1.2	0.2	15.8	-5.9	17.1
2000	105.7	5.5	2.6	5.0	0.6	1.5	1.4	1.6	19.0	2.4	5.2	50.8	16.7	31.0
<i>Euro area enlargement</i>														
2001	108.1	2.1	1.8	1.1	1.0	3.0	2.1	3.1	2.7	2.2	1.2	-8.8	-7.6	27.8
2001 Q2	108.9	3.6	2.3	1.9	1.0	3.4	2.2	3.5	8.8	2.7	2.5	4.6	-3.0	31.7
Q3	108.3	1.4	1.5	0.1	1.2	3.0	2.1	3.1	0.6	2.4	0.6	-11.3	-10.4	29.0
Q4	107.2	-1.0	0.7	-1.3	1.1	2.4	1.9	2.4	-8.1	1.3	-1.5	-28.8	-15.6	22.4
2002 Q1	107.3	-0.9	0.2	-1.8	1.2	1.6	1.8	1.6	-5.0	1.7	-0.7	-10.5	-3.6	24.6
Q2	.	.	.	.	.	.	.	.	.	.	.	-8.7	-5.5	27.8
2001 June	108.9	3.1	2.1	1.4	1.0	3.4	2.3	3.5	6.8	-	2.0	3.0	0.9	32.5
July	108.3	2.1	1.7	0.6	1.1	3.1	2.2	3.2	2.8	-	1.2	-1.3	-1.8	29.4
Aug.	108.2	1.6	1.5	0.2	1.2	3.1	2.2	3.2	1.4	-	0.8	-10.4	-10.7	28.7
Sep.	108.3	0.6	1.2	-0.4	1.2	2.8	2.0	2.9	-2.3	-	-0.2	-20.7	-18.1	28.8
Oct.	107.6	-0.6	0.9	-0.9	1.1	2.5	1.9	2.6	-7.3	-	-1.3	-30.2	-19.3	23.8
Nov.	107.1	-1.3	0.6	-1.4	1.0	2.4	1.9	2.5	-9.5	-	-1.8	-34.1	-15.1	21.7
Dec.	106.8	-1.0	0.4	-1.6	1.1	2.1	1.9	2.1	-7.6	-	-1.5	-20.6	-12.3	21.5
2002 Jan.	107.2	-0.8	0.4	-1.8	1.2	2.0	1.9	2.0	-5.5	-	-0.7	-14.4	-6.5	22.6
Feb.	107.2	-1.1	0.1	-1.9	1.2	1.6	1.7	1.5	-5.7	-	-0.9	-15.2	-4.0	23.5
Mar.	107.6	-0.8	0.1	-1.7	1.2	1.2	1.7	1.2	-3.9	-	-0.6	-1.6	-0.3	27.9
Apr.	107.9	-0.8	0.2	-1.3	1.0	1.1	1.5	1.0	-3.9	-	-0.3	-1.2	-1.4	29.3
May	107.9	-0.9	0.2	-1.1	1.1	0.9	1.5	0.8	-4.9	-	-0.6	-9.5	-6.8	28.1
June	.	.	.	.	.	.	.	.	.	-	.	-15.0	-8.4	25.8

2. Deflators of gross domestic product ⁵⁾
(annual percentage changes, unless otherwise indicated; seasonally adjusted)

	Total		Domestic demand	Private consumption	Government consumption	Gross fixed capital formation	Exports ⁶⁾	Imports ⁶⁾
	Index 1995 = 100							
	15	16	17	18	19	20	21	22
1996	102.0	2.0	2.1	2.4	2.2	0.9	0.8	0.8
1997	103.6	1.5	1.7	2.0	1.3	1.0	1.8	2.6
1998	105.3	1.7	1.3	1.4	1.4	0.9	-0.1	-1.5
1999	106.5	1.1	1.2	1.1	1.7	0.8	-0.5	-0.3
2000	107.8	1.3	2.4	2.1	2.4	2.6	4.7	8.3
2000 Q1	107.3	1.1	2.4	1.9	2.4	2.3	3.7	7.7
Q2	107.6	1.1	2.3	1.8	2.2	2.7	4.6	8.2
Q3	108.1	1.4	2.5	2.3	2.5	2.6	5.0	8.4
Q4	108.4	1.4	2.6	2.5	2.5	2.9	5.3	8.8
<i>Euro area enlargement</i>								
2001	110.6	2.3	2.1	2.4	2.1	1.9	1.5	1.0
2001 Q1	109.8	2.0	2.4	2.4	2.1	2.1	3.2	4.0
Q2	110.4	2.3	2.4	2.7	2.1	1.8	2.6	2.8
Q3	110.8	2.2	2.0	2.3	2.1	2.1	0.8	0.3
Q4	111.7	2.7	1.8	2.2	2.2	1.7	-0.5	-2.8

Sources: Eurostat, except columns 12 and 13 (HWWA - Hamburg Institute of International Economics), column 14 (Thomson Financial Datastream) and columns 15 to 22 (ECB calculations based on Eurostat data).

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

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

3) Breakdown in accordance with the harmonised definition of Main Industrial Groupings.

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

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

6) 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								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
1	2	3	4	5	6	7	8	9	
1997	5,649.0	5,500.5	3,201.3	1,150.7	1,138.2	10.3	148.6	1,827.2	1,678.7
1998	5,882.6	5,743.4	3,331.5	1,176.6	1,201.9	33.3	139.3	1,948.5	1,809.3
1999	6,144.9	6,043.3	3,499.7	1,229.8	1,291.4	22.3	101.6	2,052.7	1,951.1
2000	6,440.4	6,372.5	3,664.4	1,283.2	1,387.0	37.9	67.9	2,410.3	2,342.4
2000 Q4	1,632.9	1,621.6	928.0	326.3	352.5	14.9	11.3	637.2	625.9
<i>Euro area enlargement</i>									
2001	6,810.5	6,696.3	3,905.3	1,359.3	1,434.1	-2.4	114.2	2,538.1	2,423.9
2001 Q1	1,689.5	1,663.1	964.1	335.2	359.2	4.6	26.4	641.0	614.5
Q2	1,699.0	1,676.2	975.9	338.2	358.2	3.9	22.9	639.7	616.8
Q3	1,706.6	1,677.3	980.3	340.9	358.6	-2.5	29.3	633.2	603.9
Q4	1,715.3	1,679.7	985.0	344.9	358.1	-8.4	35.6	624.3	588.7
2002 Q1	.	.	.	.	.	.	.	.	.

2. Constant prices

(ECU billions at 1995 prices, seasonally adjusted)

	GDP								
	Total	Domestic demand					External balance ³⁾		
		Total	Private consumption	Government consumption	Gross fixed capital formation	Changes in inventories ²⁾	Total	Exports ³⁾	Imports ³⁾
10	11	12	13	14	15	16	17	18	
1997	5,509.1	5,354.1	3,093.4	1,126.1	1,131.9	2.7	155.0	1,806.3	1,651.2
1998	5,666.9	5,543.9	3,187.2	1,139.8	1,189.7	27.2	122.9	1,938.4	1,815.4
1999	5,819.7	5,730.5	3,292.3	1,164.2	1,260.4	13.6	89.2	2,040.7	1,951.4
2000	6,023.7	5,898.5	3,375.0	1,186.3	1,319.1	18.1	125.2	2,288.9	2,163.6
2000 Q4	1,519.9	1,487.8	846.6	299.2	332.3	9.7	32.1	594.5	562.4
<i>Euro area enlargement</i>									
2001	6,219.0	6,062.2	3,510.8	1,228.0	1,336.6	-13.2	156.8	2,372.8	2,215.9
2001 Q1	1,554.8	1,515.8	874.6	305.4	337.4	-1.5	39.0	600.0	561.0
Q2	1,555.2	1,519.3	878.2	306.7	335.0	-0.7	35.9	595.5	559.5
Q3	1,556.8	1,515.6	879.3	307.2	332.9	-3.9	41.2	592.6	551.4
Q4	1,552.2	1,511.5	878.6	308.7	331.3	-7.2	40.7	584.8	544.0
2002 Q1	1,555.6	1,503.7	877.0	309.5	329.1	-11.9	51.9	590.0	538.2
<i>(annual percentage changes)</i>									
1997	2.3	1.7	1.6	1.3	2.3	-	-	10.4	9.0
1998	2.9	3.5	3.0	1.2	5.1	-	-	7.3	9.9
1999	2.7	3.4	3.3	2.1	5.9	-	-	5.3	7.5
2000	3.5	2.9	2.5	1.9	4.7	-	-	12.2	10.9
2000 Q4	2.9	2.4	1.8	1.8	3.5	-	-	11.6	10.6
<i>Euro area enlargement</i>									
2001	1.5	0.8	1.7	2.2	-0.5	-	-	2.5	0.8
2001 Q1	2.5	1.8	1.9	2.3	1.6	-	-	7.7	6.1
Q2	1.6	1.1	1.7	2.4	0.2	-	-	4.5	3.2
Q3	1.3	0.7	1.8	2.3	-1.7	-	-	0.9	-1.0
Q4	0.3	-0.4	1.5	1.9	-2.2	-	-	-2.8	-4.8
2002 Q1	0.1	-0.8	0.3	1.3	-2.4	-	-	-1.7	-4.1

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
1997	5,269.5	138.6	1,227.8	291.7	1,086.1	1,381.4	1,144.0	202.7	582.2
1998	5,469.0	138.8	1,276.1	294.9	1,140.2	1,440.4	1,178.6	201.4	615.0
1999	5,682.6	135.6	1,298.0	310.9	1,186.3	1,524.9	1,226.9	200.2	662.5
2000	5,964.4	136.4	1,367.7	325.7	1,247.7	1,615.9	1,271.1	212.9	688.8
2000 Q4	1,512.9	34.6	347.6	82.0	317.9	410.0	320.7	53.9	174.0
<i>Euro area enlargement</i>									
2001	6,321.0	151.0	1,425.9	345.5	1,341.2	1,716.0	1,341.5	229.4	718.9
2001 Q1	1,567.0	36.8	359.7	85.5	331.1	422.6	331.2	56.4	179.0
Q2	1,576.4	37.4	357.6	85.8	334.7	427.4	333.5	57.3	179.9
Q3	1,586.0	38.4	357.5	86.6	337.2	429.3	337.0	57.8	178.4
Q4	1,591.6	38.4	351.1	87.5	338.1	436.6	339.9	57.9	181.6
2002 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
1997	5,167.0	140.2	1,217.5	290.1	1,071.2	1,338.3	1,109.7	213.8	556.0
1998	5,317.2	142.2	1,254.8	292.0	1,114.0	1,388.3	1,125.9	221.1	570.8
1999	5,454.0	145.4	1,269.9	298.9	1,161.7	1,438.0	1,140.1	229.5	595.3
2000	5,659.9	144.9	1,328.2	305.2	1,215.5	1,505.8	1,160.3	244.8	608.6
2000 Q4	1,429.6	36.3	335.7	76.2	308.7	381.3	291.5	62.4	152.7
<i>Euro area enlargement</i>									
2001	5,856.2	152.3	1,352.4	310.5	1,277.2	1,573.0	1,190.8	260.8	623.6
2001 Q1	1,463.3	37.9	342.8	78.2	318.4	389.5	296.5	64.2	155.7
Q2	1,463.4	37.9	339.1	77.6	319.2	392.3	297.3	64.8	156.6
Q3	1,466.4	38.3	338.3	77.4	319.6	394.6	298.2	65.6	156.0
Q4	1,463.0	38.2	332.2	77.3	320.0	396.6	298.8	66.2	155.4
2002 Q1	1,469.7	38.2	334.3	77.9	320.4	399.3	299.7	66.3	152.2
<i>(annual percentage changes)</i>									
1997	2.4	0.4	3.3	-1.8	3.1	3.3	1.0	3.7	2.4
1998	2.9	1.4	3.1	0.7	4.0	3.7	1.5	3.4	2.7
1999	2.6	2.2	1.2	2.3	4.3	3.6	1.3	3.8	4.3
2000	3.8	-0.4	4.6	2.1	4.6	4.7	1.8	6.7	2.2
2000 Q4	3.4	-1.3	4.3	1.0	4.5	4.2	1.5	6.6	-0.3
<i>Euro area enlargement</i>									
2001	1.7	-0.7	0.7	-0.5	2.6	3.0	1.1	4.9	0.5
2001 Q1	2.8	-0.6	3.4	-0.4	3.9	3.5	1.3	5.8	1.5
Q2	2.0	-0.7	1.2	-0.2	2.9	3.2	1.0	4.8	0.1
Q3	1.5	-0.8	0.4	-0.7	2.4	2.8	1.2	4.7	0.7
Q4	0.6	-0.6	-2.2	-0.7	1.1	2.6	1.0	4.5	-0.2
2002 Q1	0.4	0.8	-2.5	-0.4	0.6	2.5	1.1	3.3	-2.2

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		Industry excluding construction ²⁾							Construction	Manufacturing	
	Total		Industry excluding construction and energy					Energy				
	Index (s.a.) 1995 = 100		Total	Inter- mediate goods	Capital goods	Consumer goods						
						Total	Durable consumer goods		Non-durable consumer goods			
1	2	3	4	5	6	7	8	9	10	11	12	
1998	3.7	109.3	4.3	4.7	4.0	7.8	2.7	4.6	2.3	1.1	1.3	4.7
1999	2.1	111.4	2.0	2.1	1.9	2.5	1.6	1.3	1.7	1.4	4.2	2.0
2000	5.0	117.5	5.5	6.0	6.0	9.3	2.2	6.2	1.4	1.8	1.9	5.9
<i>Euro area enlargement</i>												
2001	0.0	117.8	0.2	0.0	-0.9	1.2	0.1	-2.7	0.7	0.9	-0.5	0.1
2001 Q1	3.3	119.5	4.4	5.1	3.7	8.8	2.9	2.8	3.0	-0.7	-1.6	5.1
Q2	0.4	118.3	0.8	0.8	0.3	1.9	0.4	-1.9	0.9	0.9	-0.9	0.8
Q3	-0.4	117.7	-0.4	-0.5	-1.4	0.1	0.2	-3.9	1.0	0.5	-0.4	-0.5
Q4	-3.1	115.7	-3.8	-4.8	-6.0	-4.9	-2.9	-7.5	-1.9	2.7	0.6	-4.7
2002 Q1	-2.7	116.4	-2.8	-3.5	-2.2	-7.1	-1.3	-7.5	0.0	1.6	1.0	-3.8
2001 July	-1.1	116.9	-1.4	-1.6	-1.8	-1.9	-0.7	-6.5	0.6	0.0	-0.2	-1.6
Aug.	0.7	118.5	1.1	1.1	-0.6	2.8	1.8	0.3	2.0	0.7	-0.8	1.1
Sep.	-0.7	117.8	-0.5	-0.8	-1.8	0.1	-0.2	-4.1	0.6	0.9	-0.4	-0.7
Oct.	-1.9	116.0	-2.6	-2.9	-3.5	-2.7	-2.2	-7.1	-1.2	-1.1	2.2	-2.9
Nov.	-3.3	115.3	-4.1	-5.0	-6.2	-5.1	-2.9	-7.4	-1.9	1.7	0.3	-4.9
Dec.	-4.3	115.7	-4.7	-6.6	-8.7	-6.7	-3.6	-8.1	-2.7	7.2	-0.9	-6.4
2002 Jan.	-2.5	116.0	-2.9	-3.7	-3.4	-6.6	-0.9	-7.4	0.4	2.5	2.0	-3.9
Feb.	-2.7	116.1	-3.3	-4.0	-2.8	-7.8	-1.4	-7.1	-0.2	1.3	1.8	-4.0
Mar.	-2.7	117.0	-2.3	-2.7	-0.5	-6.8	-1.7	-8.0	-0.3	1.0	-0.5	-3.3
Apr.	-1.6	116.2	-1.2	-1.7	-0.5	-3.3	-1.6	-6.5	-0.6	3.0	-3.6	-1.2
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 ³⁾ (s.a.)	
	Total		Index 1995 = 100	Total		Food, beverages, tobacco	Non-food				
	Index 1995 = 100			Index 1995 = 100				Textiles, clothing, footwear	Household equipment		
13	14	15	16	17	18	19	20	21	22		
1998	107.9	3.7	104.5	3.0	2.1	3.6	2.1	4.5	923	7.2	
1999	111.5	3.3	107.2	2.6	3.0	2.5	1.4	3.0	973	5.4	
2000	116.1	4.1	109.7	2.3	1.9	2.3	1.7	4.9	952	-2.1	
<i>Euro area enlargement</i>											
2001	121.3	4.1	111.4	1.6	1.3	1.6	1.6	0.0	970	-0.6	
2001 Q1	119.6	4.5	110.9	2.2	1.8	2.7	2.7	1.1	954	-4.9	
Q2	121.2	4.1	111.3	1.2	0.7	1.3	1.0	-0.3	1,008	1.9	
Q3	121.9	4.3	111.6	1.6	1.6	1.4	2.1	-0.5	953	-1.2	
Q4	122.4	3.4	111.7	1.2	1.1	1.2	0.4	-0.2	966	2.5	
2002 Q1	122.9	2.8	112.3	1.2	1.3	0.3	0.6	-1.5	913	-4.0	
2001 July	121.6	4.4	111.3	1.6	2.0	1.3	0.6	-1.7	940	-1.5	
Aug.	122.0	4.6	111.5	1.7	1.8	1.4	0.4	1.2	961	-0.5	
Sep.	122.1	3.8	111.8	1.6	1.0	1.6	5.5	-0.8	958	-1.3	
Oct.	121.3	2.6	110.8	0.1	0.6	0.5	-3.1	0.1	962	3.2	
Nov.	123.2	4.1	112.3	1.9	1.4	2.0	3.2	-0.4	970	3.3	
Dec.	122.6	3.5	112.0	1.5	1.3	1.1	1.1	-0.4	966	0.8	
2002 Jan.	122.2	1.8	111.7	0.2	0.3	-0.4	-1.1	-2.4	926	-2.4	
Feb.	123.2	3.4	112.5	1.6	1.4	0.7	1.0	-0.4	920	-3.2	
Mar.	123.4	3.1	112.6	1.8	2.2	0.6	2.0	-1.7	893	-6.1	
Apr.	123.2	1.9	112.0	0.4	0.7	-0.2	1.3	-2.7	892	-8.0	
May	.	.	.	.	.	.	.	.	913	-6.7

Sources: Eurostat, except columns 21 and 22 (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) Breakdown in accordance with the harmonised definition of Main Industrial Groupings.
3) Monthly averages.

Table 5.3
European Commission Business and Consumer Surveys
1. Economic sentiment indicator, manufacturing industry and consumer surveys
(percentage balances, seasonally adjusted, unless otherwise indicated)

	Economic sentiment indicator ¹⁾²⁾ (index 1995 = 100)	Manufacturing industry					Consumer confidence indicator ¹⁾				
		Industrial confidence indicator				Capacity utilisation ³⁾ (percentages)	Total	Financial situation over next 12 months	Economic situation over next 12 months	Unemployment situation over next 12 months	Savings over next 12 months
		Total	Order books	Stocks of finished products	Production expectations						
	1	2	3	4	5	6	7	8	9	10	11
1998	101.4	-1	-5	9	11	83.0	-5	2	-4	16	-2
1999	101.2	-7	-17	11	7	81.8	-4	3	-4	12	-1
2000	103.8	5	3	5	17	83.8	1	4	1	1	0
<i>Euro area enlargement</i>											
2001	101.0	-8	-13	13	3	83.2	-5	2	-9	13	0
2001 Q2	101.6	-5	-8	13	5	83.6	-2	3	-5	6	1
Q3	100.3	-10	-17	15	2	83.0	-8	1	-12	18	-2
Q4	98.9	-17	-27	17	-8	81.8	-11	1	-16	29	0
2002 Q1	99.3	-13	-26	14	0	80.8	-10	0	-11	26	-1
Q2	99.6	-10	-23	11	5	80.7	-9	0	-8	21	-5
2001 June	101.1	-7	-10	14	3	-	-3	2	-7	8	1
July	100.7	-9	-16	15	5	-	-6	2	-10	14	-1
Aug.	100.1	-10	-16	15	2	-	-8	1	-12	19	-3
Sep.	100.1	-11	-18	15	-1	-	-9	1	-13	21	-1
Oct.	99.2	-16	-25	16	-8	-	-10	2	-17	27	1
Nov.	98.6	-18	-28	18	-9	-	-12	1	-17	31	-1
Dec.	98.9	-17	-28	16	-7	-	-10	1	-14	28	0
2002 Jan.	99.1	-14	-28	14	-1	-	-11	0	-13	28	-1
Feb.	99.2	-14	-25	14	-2	-	-9	1	-10	26	-1
Mar.	99.5	-11	-24	13	4	-	-9	0	-9	25	-1
Apr.	99.4	-11	-25	12	5	-	-10	-1	-10	22	-5
May	99.9	-9	-22	10	5	-	-8	0	-7	21	-4
June	99.6	-10	-23	12	5	-	-9	0	-8	21	-5

2. Construction industry, retail trade and services surveys
(percentage balances, seasonally adjusted)

	Construction confidence indicator			Retail trade confidence indicator				Services confidence indicator ¹⁾			
	Total	Order books	Employment expectations	Total	Present business situation	Volume of stocks	Expected business situation	Total	Business climate	Demand in recent months	Demand in the months ahead
	12	13	14	15	16	17	18	19	20	21	22
1998	-19	-25	-12	-3	-3	13	8	32	33	30	32
1999	-7	-14	1	-5	-5	15	4	27	25	24	31
2000	1	-6	8	-1	4	16	9	30	36	22	33
<i>Euro area enlargement</i>											
2001	-5	-10	1	-6	-4	16	3	15	17	8	21
2001 Q2	-3	-9	4	-6	-5	16	3	24	24	16	31
Q3	-7	-10	-3	-6	-5	16	3	14	18	6	19
Q4	-9	-14	-4	-9	-11	15	-2	-4	-5	-8	0
2002 Q1	-11	-17	-4	-14	-19	18	-4	4	4	-13	22
Q2	-11	-17	-4	-15	-21	18	-7	7	3	2	15
2001 June	-5	-11	2	-7	-6	17	3	23	24	17	29
July	-7	-10	-3	-4	0	16	3	17	21	10	21
Aug.	-8	-10	-6	-8	-7	16	0	14	17	4	20
Sep.	-5	-9	0	-6	-8	15	6	12	17	5	15
Oct.	-8	-12	-4	-9	-11	14	-1	-2	-3	-6	3
Nov.	-10	-14	-5	-9	-10	14	-3	-6	-7	-7	-4
Dec.	-9	-16	-2	-10	-12	17	-1	-5	-5	-11	1
2002 Jan.	-12	-19	-4	-11	-15	15	-4	1	1	-15	18
Feb.	-10	-17	-3	-15	-24	17	-3	3	3	-14	21
Mar.	-11	-16	-6	-15	-19	21	-6	9	9	-10	27
Apr.	-12	-17	-6	-15	-22	19	-5	8	5	1	19
May	-9	-16	-2	-15	-21	19	-6	8	5	2	16
June	-11	-17	-5	-16	-20	16	-11	4	-1	3	11

Source: European Commission Business and Consumer Surveys.
1) Data for all periods refer to the Euro 12.
2) The economic sentiment indicator is composed of the industrial, consumer, construction and retail trade confidence indicators; the industrial confidence indicator has a weight of 40% and the three other indicators have a weight of 20% each.
3) Data on capacity utilisation are collected in January, April, July and October. Annual data are averages of the four quarterly surveys.

Table 5.4
Labour market indicators
1. Employment and unemployment in the whole economy ¹⁾
(annual percentage changes, seasonally adjusted, unless otherwise indicated)

	Employment						Unemployment			
	Total		By employment status		By selected sector		Total		Adult ²⁾	Youth ²⁾
	Index 1995 = 100		Employees	Self- employed	Industry excluding construction	Services	Millions	% of labour force	% of labour force	% of labour force
1	2	3	4	5	6	7	8	9	10	
1997	101.3	0.8	0.9	0.1	-0.2	1.4	13.946	10.9	9.4	21.9
1998	103.0	1.7	1.9	0.3	1.1	2.2	13.269	10.2	8.9	20.0
1999	104.7	1.7	2.2	-0.5	-0.1	2.6	12.253	9.3	8.2	18.0
2000	106.9	2.1	2.4	0.3	0.7	2.8	11.092	8.4	7.3	16.2
<i>Euro area enlargement</i>										
2001	108.3	1.4	1.6	0.1	0.5	1.9	11.061	8.0	7.0	15.7
2001 Q1	108.0	1.9	2.2	0.7	1.3	2.4	11.040	8.0	7.0	15.7
Q2	108.2	1.4	1.6	0.3	0.7	1.8	10.980	8.0	7.0	15.6
Q3	108.5	1.2	1.4	-0.1	0.3	1.8	11.042	8.0	7.0	15.7
Q4	108.7	1.0	1.2	-0.3	-0.3	1.7	11.183	8.1	7.1	15.9
2002 Q1	108.9	0.8	1.0	-0.3	-0.8	1.7	11.362	8.2	7.2	16.2
2001 May	-	-	-	-	-	-	10.975	8.0	7.0	15.6
June	-	-	-	-	-	-	11.011	8.0	7.0	15.7
July	-	-	-	-	-	-	11.029	8.0	7.0	15.7
Aug.	-	-	-	-	-	-	11.031	8.0	7.0	15.7
Sep.	-	-	-	-	-	-	11.066	8.0	7.0	15.7
Oct.	-	-	-	-	-	-	11.140	8.1	7.0	15.8
Nov.	-	-	-	-	-	-	11.183	8.1	7.1	15.9
Dec.	-	-	-	-	-	-	11.225	8.1	7.1	16.0
2002 Jan.	-	-	-	-	-	-	11.302	8.2	7.1	16.1
Feb.	-	-	-	-	-	-	11.367	8.2	7.2	16.2
Mar.	-	-	-	-	-	-	11.416	8.2	7.2	16.3
Apr.	-	-	-	-	-	-	11.466	8.3	7.2	16.3
May	-	-	-	-	-	-	11.567	8.3	7.3	16.5

2. Labour costs and productivity
(annual percentage changes)

	Unit labour cost in the whole economy, and components (s.a.)			Labour cost indices ³⁾					Earnings per employee in manufacturing	
	Unit labour cost	Compensation per employee	Labour productivity	Total	By component		By selected sector			
					Wages and salaries	Employers' social contributions and other costs	Industry excluding construction	Services		
11	12	13	14	15	16	17	18	19		
1997	0.7	2.2	1.6	2.6	2.6	2.7	2.2	2.7	2.2	
1998	0.1	1.3	1.2	1.6	1.9	0.8	1.6	1.4	2.2	
1999	1.3	2.3	0.9	2.3	2.6	1.4	2.4	1.9	2.4	
2000	1.0	2.6	1.5	3.2	3.4	2.5	3.2	2.9	2.7	
2000 Q1	0.3	2.5	2.2	3.5	3.7	2.8	3.6	3.3	2.9	
Q2	0.3	2.1	1.8	3.3	3.4	2.6	3.2	2.8	2.8	
Q3	1.3	2.4	1.1	3.2	3.4	2.5	3.1	2.6	2.5	
Q4	1.7	2.3	0.7	3.0	3.2	2.1	2.8	2.9	2.5	
<i>Euro area enlargement</i>										
2001	2.6	2.7	0.1	3.4	3.6	2.6	3.2	3.2	3.1	
2001 Q1	2.0	2.5	0.5	3.4	3.8	2.3	3.2	3.3	3.4	
Q2	2.5	2.7	0.2	3.0	3.2	2.3	3.1	2.1	3.1	
Q3	2.5	2.7	0.2	3.7	3.9	3.1	3.6	3.7	3.2	
Q4	3.4	2.9	-0.5	3.3	3.5	2.7	2.9	3.6	2.8	
2002 Q1	.	.	-1.0	3.7	3.9	3.0	3.3	3.9	.	

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; end of period)

Amounts outstanding

1. Main financial assets ²⁾

	Currency and deposits									Memo: deposits of 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
1998 Q1	4,642.4	311.8	4,050.9	1,133.2	1,457.0	1,342.7	118.0	139.4	140.2	247.2
Q2	4,699.1	315.5	4,100.3	1,204.9	1,452.7	1,341.9	100.8	147.4	135.8	239.7
Q3	4,677.5	311.8	4,074.2	1,184.2	1,451.1	1,341.4	97.4	156.4	135.1	237.6
Q4	4,826.0	323.4	4,211.2	1,282.9	1,463.3	1,386.3	78.6	149.8	141.6	215.3
1999 Q1	4,676.2	318.6	4,075.8	1,239.1	1,464.6	1,306.2	66.0	133.4	148.4	243.9
Q2	4,702.5	324.8	4,114.2	1,321.8	1,418.3	1,315.7	58.4	125.0	138.4	242.7
Q3	4,713.8	328.3	4,112.8	1,324.6	1,416.5	1,313.1	58.7	133.3	139.4	238.6
Q4	4,860.0	350.8	4,215.1	1,370.9	1,457.7	1,323.5	63.0	142.0	152.1	229.7
2000 Q1	4,837.9	335.5	4,222.3	1,379.6	1,462.5	1,303.3	76.8	130.2	150.0	260.6
Q2	4,895.0	342.0	4,256.9	1,409.7	1,485.7	1,282.6	78.9	146.0	150.1	247.2
Q3	4,915.2	339.8	4,266.5	1,396.9	1,524.0	1,263.7	81.9	159.2	149.7	254.1
Q4	5,030.4	348.4	4,361.6	1,464.4	1,542.4	1,269.1	85.6	164.5	156.0	230.3
<i>Euro area enlargement</i>										
2001 Q1	5,146.2	336.3	4,502.3	1,446.1	1,625.7	1,314.6	115.9	150.3	157.2	259.8
Q2	5,243.2	333.0	4,586.7	1,526.1	1,621.2	1,321.1	118.3	165.5	158.0	269.9
Q3	5,233.6	309.6	4,615.9	1,547.9	1,609.5	1,333.7	124.7	147.8	160.3	266.4
Q4	5,364.6	239.7	4,819.5	1,689.7	1,616.3	1,396.3	117.2	139.0	166.3	297.7
2002 Q1	.	254.4	4,780.9	1,638.3	1,609.8	1,411.1	121.7	157.5	.	.

	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
	11	12	13	14	15	16	17	18	19	20
1998 Q1	1,598.7	192.7	1,406.0	3,303.0	1,978.8	1,324.3	186.5	2,482.4	2,217.2	265.1
Q2	1,555.5	167.6	1,387.9	3,529.6	2,099.6	1,429.9	186.7	2,532.1	2,264.8	267.3
Q3	1,546.3	156.5	1,389.9	3,165.5	1,725.1	1,440.4	187.9	2,527.5	2,257.5	270.1
Q4	1,542.8	155.5	1,387.3	3,527.9	2,006.8	1,521.1	172.7	2,625.8	2,355.8	270.0
1999 Q1	1,587.4	137.1	1,450.4	3,746.7	2,116.4	1,630.3	194.8	2,690.6	2,411.0	279.6
Q2	1,508.0	127.6	1,380.5	4,005.9	2,273.8	1,732.2	211.6	2,760.8	2,479.2	281.6
Q3	1,514.5	116.9	1,397.6	4,055.4	2,315.3	1,740.1	210.8	2,803.4	2,519.1	284.3
Q4	1,556.3	143.2	1,413.1	4,646.0	2,811.8	1,834.1	203.9	2,950.1	2,662.4	287.7
2000 Q1	1,558.3	149.1	1,409.1	4,899.5	2,966.8	1,932.7	218.3	3,074.5	2,773.3	301.2
Q2	1,589.5	149.9	1,439.5	4,793.7	2,887.2	1,906.5	208.9	3,118.0	2,814.0	303.9
Q3	1,656.4	164.4	1,491.9	4,918.4	2,996.6	1,921.8	207.3	3,168.4	2,861.2	307.2
Q4	1,730.6	180.1	1,550.5	4,939.8	3,065.8	1,874.0	203.4	3,198.0	2,888.3	309.7
<i>Euro area enlargement</i>										
2001 Q1	1,827.5	239.1	1,588.4	4,662.5	2,818.5	1,844.0	228.5	3,248.1	2,925.1	323.0
Q2	1,838.4	219.4	1,619.0	4,725.3	2,861.7	1,863.6	235.3	3,301.7	2,976.4	325.3
Q3	1,867.7	224.7	1,643.0	4,084.2	2,336.2	1,747.9	256.0	3,275.7	2,947.2	328.5
Q4	1,885.4	221.3	1,664.1	4,461.7	2,618.9	1,842.8	263.5	3,372.7	3,038.7	333.9
2002 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.
- 4) Covering deposits with euro area central government (S.1311), 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; end of period)
Amounts outstanding
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 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	
1998 Q1	5,897.6	5,357.3	906.9	35.6	871.3	2,452.4	855.4	1,597.1	2,538.2	223.4	2,314.8	146.9	
Q2	6,006.2	5,453.0	901.1	31.9	869.2	2,505.1	878.9	1,626.2	2,599.9	232.5	2,367.4	151.3	
Q3	6,081.8	5,524.1	903.5	33.3	870.2	2,528.7	866.2	1,662.5	2,649.6	233.8	2,415.9	147.4	
Q4	6,227.4	5,663.4	911.3	36.0	875.2	2,600.6	902.9	1,697.7	2,715.5	240.8	2,474.8	151.3	
1999 Q1	6,267.5	5,682.7	903.5	36.3	867.2	2,597.4	921.4	1,676.1	2,766.5	251.8	2,514.8	156.8	
Q2	6,432.3	5,817.5	900.8	39.0	861.8	2,689.5	964.2	1,725.3	2,842.0	255.6	2,586.4	183.3	
Q3	6,498.4	5,886.6	885.9	37.9	848.0	2,704.7	943.7	1,761.0	2,907.8	255.4	2,652.4	191.4	
Q4	6,669.0	6,039.5	900.8	42.1	858.7	2,795.7	979.8	1,815.9	2,972.5	264.1	2,708.4	201.4	
2000 Q1	6,814.1	6,156.4	891.4	41.1	850.3	2,894.7	1,037.7	1,857.0	3,028.0	265.6	2,762.4	221.1	
Q2	6,962.3	6,262.2	885.6	42.0	843.7	2,996.9	1,090.8	1,906.2	3,079.7	274.4	2,805.3	219.7	
Q3	7,099.3	6,379.6	865.8	39.9	825.9	3,099.2	1,145.7	1,953.5	3,134.3	275.9	2,858.4	252.3	
Q4	7,269.6	6,500.6	883.0	42.0	841.0	3,197.8	1,160.5	2,037.3	3,188.8	280.9	2,907.9	245.2	
					<i>Euro area enlargement</i>								
2001 Q1	7,452.1	6,672.1	897.2	41.7	855.5	3,318.7	1,237.3	2,081.4	3,236.2	279.2	2,957.0	257.3	
Q2	7,552.7	6,762.5	880.4	42.3	838.1	3,388.7	1,259.8	2,129.0	3,283.5	285.0	2,998.5	296.2	
Q3	7,622.3	6,806.4	873.6	45.3	828.4	3,427.8	1,238.5	2,189.3	3,320.9	280.5	3,040.3	265.5	
Q4	7,725.8	6,898.8	890.7	50.1	840.6	3,469.2	1,219.4	2,249.8	3,365.9	282.5	3,083.4	284.1	
2002 Q1		6,957.9											

	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		
1998 Q1	3,767.7	3,448.7	498.0	2,950.7	319.0	55.7	263.3	2,535.8	136.3	218.5		
Q2	3,833.5	3,511.5	496.6	3,014.9	322.0	53.9	268.1	2,762.9	134.2	221.2		
Q3	3,924.3	3,592.3	498.6	3,093.8	332.0	55.3	276.7	2,362.0	133.8	224.1		
Q4	3,926.8	3,593.2	468.2	3,125.1	333.6	55.1	278.5	2,659.1	140.3	227.0		
1999 Q1	3,971.5	3,636.0	466.9	3,169.2	335.5	66.0	269.5	2,734.3	146.9	229.7		
Q2	3,954.5	3,613.2	459.3	3,153.9	341.2	66.6	274.6	2,955.3	136.6	232.6		
Q3	3,933.5	3,579.1	449.7	3,129.5	354.4	74.9	279.5	2,948.2	137.6	235.5		
Q4	3,893.8	3,530.1	421.1	3,109.0	363.7	78.2	285.5	3,959.9	149.8	238.7		
2000 Q1	3,964.4	3,597.4	425.3	3,172.1	367.1	79.1	287.9	4,428.2	147.6	241.0		
Q2	3,997.9	3,618.5	425.8	3,192.7	379.4	88.9	290.5	4,179.9	147.6	243.4		
Q3	4,035.0	3,634.7	421.8	3,212.9	400.4	95.7	304.6	4,058.7	147.2	245.3		
Q4	4,078.9	3,661.4	400.8	3,260.6	417.5	100.8	316.7	3,838.4	153.7	247.1		
					<i>Euro area enlargement</i>							
2001 Q1	4,252.9	3,796.7	429.5	3,367.2	456.1	113.0	343.1	3,568.9	154.7	249.3		
Q2	4,310.7	3,829.8	440.9	3,388.9	480.9	124.2	356.7	3,577.4	155.2	251.5		
Q3	4,387.7	3,891.2	450.1	3,441.1	496.5	138.2	358.3	2,826.5	155.4	253.7		
Q4	4,396.3	3,881.0	434.5	3,446.4	515.4	137.0	378.3	3,281.0	164.3	253.1		
2002 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.
- 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 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					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
1998 Q1	-45.9	-8.8	-24.3	-25.9	-11.2	20.1	-7.4	-14.5	1.6	29.5
Q2	52.2	3.6	45.0	68.1	-5.9	-0.5	-16.7	8.0	-4.4	-4.9
Q3	-14.6	-3.7	-19.1	-17.8	2.3	-0.4	-3.3	9.0	-0.7	2.8
Q4	148.6	11.6	137.1	98.1	13.0	44.9	-18.8	-6.6	6.5	-24.5
1999 Q1	-39.6	-5.2	-37.0	-19.4	-15.1	10.3	-12.7	-4.2	6.8	23.4
Q2	22.1	6.3	34.2	81.3	-48.9	9.4	-7.6	-8.4	-9.9	-4.3
Q3	12.9	3.4	0.2	3.5	-1.1	-2.6	0.3	8.3	1.0	-2.8
Q4	138.7	22.3	95.1	44.2	36.4	10.3	4.2	8.7	12.7	-14.2
2000 Q1	-28.9	-15.3	0.4	6.1	0.9	-20.4	13.7	-11.9	-2.1	26.3
Q2	52.6	6.7	30.0	31.9	17.8	-21.8	2.1	15.8	0.1	-12.8
Q3	6.4	-2.2	-4.2	-17.3	28.8	-18.5	2.9	13.3	-0.4	-1.7
Q4	128.4	8.6	108.3	71.4	27.3	5.7	3.8	5.3	6.3	-16.7
<i>Euro area enlargement</i>										
2001 Q1	-19.3	-19.8	14.8	-34.4	41.9	-6.1	13.4	-15.6	1.2	13.6
Q2	93.6	-3.3	81.0	77.1	-4.8	6.3	2.3	15.1	0.8	5.8
Q3	9.1	-23.4	47.8	25.4	3.0	13.0	6.5	-17.7	2.3	3.1
Q4	133.3	-69.9	206.0	141.7	9.3	62.5	-7.5	-8.8	6.0	11.5
2002 Q1	.	14.7	-36.9	-51.9	-4.2	14.8	4.4	19.1	.	.

	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
1998 Q1	-25.4	-10.3	-15.1	93.8	-5.3	99.1	7.3	68.0	55.6	12.4
Q2	-66.2	-24.9	-41.3	118.4	24.4	94.0	0.0	46.5	44.5	2.0
Q3	-12.7	-11.2	-1.5	100.1	14.3	85.8	1.0	42.9	40.2	2.6
Q4	-13.6	-2.2	-11.4	82.6	63.2	19.4	-16.1	49.5	47.5	2.0
1999 Q1	18.4	-12.8	31.2	103.8	2.3	101.6	2.9	64.2	58.1	6.0
Q2	-46.1	-11.1	-35.0	148.6	64.0	84.7	16.8	54.1	49.6	4.5
Q3	-7.3	-13.1	5.9	94.1	53.4	40.7	-0.4	56.9	52.2	4.7
Q4	53.4	21.4	32.0	-8.3	24.1	-32.4	-6.8	71.0	68.9	2.1
2000 Q1	-9.5	12.4	-21.9	-14.0	-61.0	47.0	12.9	76.6	70.6	6.0
Q2	41.6	0.3	41.3	71.7	52.6	19.0	-9.7	56.6	52.2	4.3
Q3	74.5	15.2	59.3	151.2	142.8	8.4	-1.8	56.4	51.9	4.5
Q4	16.0	5.3	10.6	222.1	184.0	38.1	-3.9	58.3	59.3	-0.9
<i>Euro area enlargement</i>										
2001 Q1	103.5	63.1	40.4	51.2	14.4	36.8	24.8	58.7	52.0	6.7
Q2	9.7	-21.3	31.1	45.6	41.2	4.4	6.3	55.8	51.6	4.2
Q3	35.7	2.3	33.4	46.5	22.5	24.0	20.0	52.0	46.0	6.0
Q4	3.0	-7.1	10.1	15.7	-14.0	29.7	7.1	70.7	65.2	5.4
2002 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.
- 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).
- Covering deposits with euro area central government (S.1311), 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 and other financial corporations by											Memo: loans taken from banks outside the euro area by 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	
1998 Q1	70.9	43.7	-16.1	-18.6	2.5	57.6	28.6	28.9	29.4	-0.2	29.6	3.9
Q2	117.7	110.8	-6.0	-3.7	-2.4	56.2	22.3	33.9	67.5	9.1	58.5	6.4
Q3	80.1	81.3	2.5	1.4	1.2	26.9	-15.3	42.3	50.6	1.2	49.4	-0.7
Q4	160.4	151.2	8.5	2.8	5.8	75.9	37.3	38.5	76.0	7.1	68.9	3.5
1999 Q1	90.1	76.6	-7.5	0.3	-7.8	22.2	23.6	-1.4	75.4	9.2	66.2	1.9
Q2	164.5	133.1	-4.1	2.7	-6.8	89.7	41.2	48.5	78.9	3.9	75.0	23.9
Q3	68.8	71.5	-14.7	-1.1	-13.6	17.7	-16.7	34.4	65.8	-0.3	66.1	8.4
Q4	170.8	146.6	15.1	4.2	10.9	85.6	34.0	51.7	70.1	8.8	61.3	-7.0
2000 Q1	143.7	108.8	-7.9	-1.0	-7.0	93.5	54.9	38.7	58.1	1.6	56.5	15.1
Q2	162.5	118.4	-6.0	0.9	-6.9	113.8	61.2	52.6	54.7	8.8	46.0	-0.8
Q3	131.1	91.6	-16.3	-2.1	-14.2	97.0	53.3	43.7	50.4	-0.1	50.5	23.2
Q4	182.4	139.9	16.5	2.1	14.4	115.8	19.2	96.7	50.0	5.3	44.7	1.9
<i>Euro area enlargement</i>												
2001 Q1	92.8	77.7	-3.8	-0.5	-3.3	62.1	39.0	23.0	34.5	-5.2	39.7	9.2
Q2	102.9	87.4	-17.1	0.6	-17.7	64.3	20.8	43.5	55.7	5.8	49.9	33.5
Q3	83.3	58.7	-6.0	2.9	-8.9	50.6	-15.7	66.4	38.6	-4.2	42.8	-22.1
Q4	101.3	94.4	15.7	4.8	10.9	37.0	-18.8	55.8	48.6	2.1	46.5	4.4
2002 Q1	.	59.0	.	.	.	.	.	.	.	.	.	.

	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	
1998 Q1	69.6	58.7	-6.1	64.8	10.9	10.0	0.9	10.4	1.1	2.2
Q2	53.3	50.6	-1.3	51.9	2.7	-1.8	4.4	36.8	-2.1	2.2
Q3	61.3	54.0	2.1	52.0	7.3	1.6	5.7	10.1	-0.4	2.2
Q4	-10.5	-15.4	-31.0	15.6	4.8	0.5	4.4	40.1	6.4	1.9
1999 Q1	73.8	60.4	1.0	59.4	13.4	10.4	3.0	10.8	6.6	2.3
Q2	37.7	29.2	-7.5	36.7	8.5	0.6	7.9	34.4	-10.3	2.3
Q3	56.1	38.0	-10.7	48.7	18.2	8.3	9.8	35.4	1.0	2.3
Q4	-11.8	-19.5	-27.6	8.1	7.6	3.3	4.3	43.0	12.1	2.3
2000 Q1	61.4	59.5	10.0	49.5	1.9	0.6	1.3	18.0	-2.2	1.9
Q2	37.9	23.6	-1.0	24.6	14.3	10.3	4.0	28.3	0.0	1.9
Q3	50.0	26.0	-2.7	28.8	23.9	7.3	16.7	70.8	-0.4	1.9
Q4	-0.8	-17.6	-27.0	9.4	16.8	5.2	11.6	50.2	6.4	1.8
<i>Euro area enlargement</i>										
2001 Q1	76.6	39.1	32.4	6.8	37.5	10.9	26.5	53.7	1.1	2.2
Q2	86.0	60.2	10.7	49.6	25.7	11.1	14.7	45.1	0.4	2.2
Q3	49.1	30.4	8.8	21.7	18.7	14.0	4.7	16.3	0.2	2.2
Q4	8.2	-9.5	-22.1	12.5	17.7	-1.2	18.9	5.2	8.9	-0.5
2002 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.

4) Including non-profit institutions serving households.

5) 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)

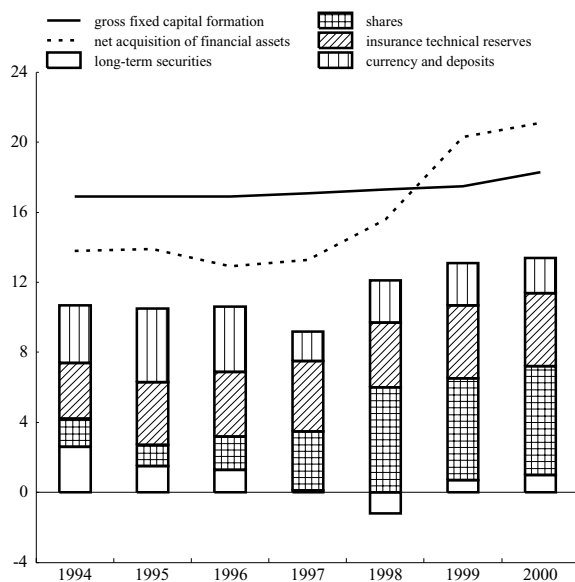
	Euro area saving and investment ¹⁾			Investment of private non-financial sectors ¹⁾²⁾								
	Gross saving	Gross fixed capital formation	Net lending to the rest of the world	Gross fixed capital formation	Non-financial corporations	Net acquisition of financial assets	Currency and deposits	Securities other than shares	Long-term securities	Shares	Insurance technical reserves	
												1	2	3	4	5	6	7	8	9	10	11
1993	20.2	20.3	0.5	16.8	10.6	13.0	5.5	0.4	0.9	0.5	3.0	
1994	20.6	20.1	0.2	16.9	10.3	13.8	3.3	2.4	2.6	1.6	3.2	
1995	21.1	20.1	0.5	16.9	10.3	13.9	4.2	1.8	1.5	1.2	3.6	
1996	20.9	20.0	1.0	16.9	10.3	12.9	3.7	0.2	1.3	1.9	3.7	
1997	21.8	20.2	1.6	17.1	10.5	13.3	1.7	-0.5	0.1	3.4	4.0	
1998	21.8	20.4	0.9	17.3	10.8	15.6	2.4	-2.0	-1.2	6.0	3.7	
1999	21.8	20.6	0.0	17.5	10.9	20.3	2.4	0.9	0.7	5.8	4.2	
2000	22.0	21.1	-0.3	18.3	11.7	21.1	2.0	1.7	1.0	6.2	4.2	

	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
1993	20.8	12.8	7.7	1.2	1.4	1.4	3.7	4.5	5.3	43.6	27.0	
1994	20.7	11.8	9.6	1.0	1.1	1.6	3.7	3.8	4.2	45.0	31.7	
1995	21.4	11.8	7.4	-1.8	-1.7	1.5	4.8	3.6	6.5	45.1	25.7	
1996	21.1	11.6	8.8	0.2	0.0	1.7	5.7	4.8	4.1	43.3	29.4	
1997	20.6	11.3	9.5	0.1	0.1	1.4	5.9	4.7	3.8	43.8	31.6	
1998	20.3	10.5	12.4	0.4	0.3	2.5	7.6	5.8	3.2	47.4	37.9	
1999	19.3	9.9	17.6	0.9	0.4	3.3	9.9	7.6	2.7	53.7	47.7	
2000	18.9	9.5	21.2	1.3	0.8	4.0	10.8	7.0	-0.1	53.6	52.9	

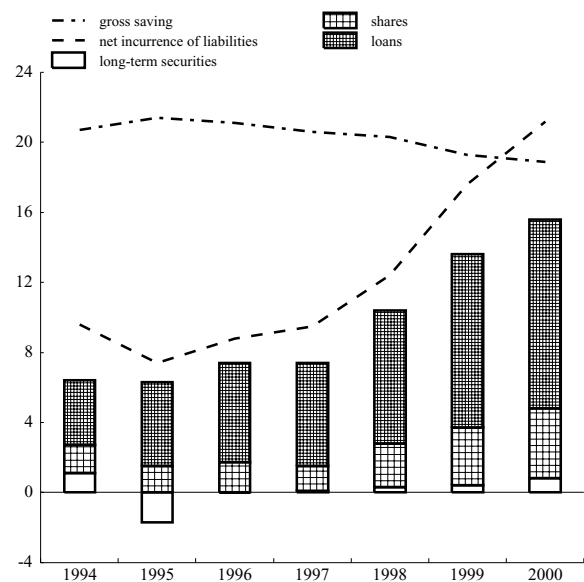
Investment and financing of private non-financial sectors ¹⁾²⁾

(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					Indirect taxes			Social contributions		Sales	Capital revenue	Capital taxes	Memo: fiscal burden ²⁾
	1	2	Direct taxes	Households	Corporations	6	Received by EU institutions	8	Employers	Employees	11	12	13	14	
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	47.6	47.1	11.6	9.5	2.0	13.5	0.8	17.5	8.5	5.4	2.5	0.5	0.2	42.7	
1995	47.2	46.6	11.6	9.5	2.0	13.3	0.9	17.3	8.4	5.6	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	5.6	2.5	0.5	0.3	43.3	
1997	48.3	47.6	12.2	9.6	2.6	13.6	0.7	17.6	8.8	5.5	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	4.9	2.5	0.5	0.3	43.3	
1999	48.3	47.7	12.8	10.1	2.6	14.3	0.6	16.4	8.5	4.9	2.4	0.6	0.3	43.9	
2000	47.9	47.4	13.0	10.1	2.7	14.2	0.6	16.2	8.5	4.9	2.4	0.5	0.3	43.7	
<i>Euro area enlargement</i>															
2001	47.4	46.8	12.7	9.9	2.5	14.0	0.6	16.1	8.4	4.8	2.3	0.6	0.3	43.0	

2. Euro area – expenditure

	Total	Current expenditure							Capital expenditure			Memo: primary expenditure ⁴⁾			
	1	Total	Compensation of employees	Intermediate consumption	Interest	Current transfers	Social payments ³⁾	Subsidies	Paid by EU institutions	Investment	Capital transfers		Paid by EU institutions	14	
1992	52.3	47.6	11.4	5.0	5.7	25.6	21.9	2.3	0.5	4.7	3.2	1.5	0.0	46.6	
1993	53.7	49.2	11.6	5.2	5.9	26.6	22.8	2.4	0.6	4.6	3.1	1.5	0.0	47.9	
1994	52.7	48.3	11.3	5.0	5.5	26.5	22.9	2.3	0.6	4.3	2.9	1.4	0.0	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	50.9	47.1	11.0	4.8	5.1	26.2	23.1	2.1	0.6	3.7	2.4	1.3	0.1	45.8	
1998	50.0	46.1	10.7	4.7	4.7	25.9	22.6	2.0	0.5	3.9	2.4	1.5	0.1	45.2	
1999	49.6	45.5	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	48.8	44.8	10.5	4.7	4.0	25.5	22.3	1.9	0.5	4.0	2.5	1.5	0.0	44.7	
<i>Euro area enlargement</i>															
2001	48.7	44.5	10.5	4.7	3.9	25.4	22.3	1.9	0.5	4.1	2.5	1.6	0.0	44.7	

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	
1992	-4.9	-4.3	-0.3	-0.2	0.0	0.8	20.8	11.4	5.0	4.9	1.8	-2.4	8.7	12.0	
1993	-5.7	-5.0	-0.4	-0.2	-0.1	0.1	21.2	11.6	5.2	5.0	1.9	-2.5	8.9	12.2	
1994	-5.1	-4.4	-0.5	-0.2	0.0	0.4	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	8.4	12.1	
1996	-4.3	-3.6	-0.4	-0.1	-0.2	1.4	20.6	11.2	4.8	5.1	1.8	-2.5	8.5	12.1	
1997	-2.6	-2.3	-0.4	0.1	0.0	2.5	20.4	11.0	4.8	5.1	1.8	-2.5	8.4	12.0	
1998	-2.2	-2.2	-0.2	0.1	0.1	2.5	20.0	10.7	4.7	5.1	1.7	-2.5	8.1	11.9	
1999	-1.3	-1.6	-0.1	0.0	0.4	2.9	20.0	10.7	4.7	5.1	1.7	-2.4	8.2	11.9	
2000	-0.8	-1.3	-0.1	0.1	0.4	3.2	19.9	10.5	4.7	5.1	1.7	-2.4	8.1	11.8	
<i>Euro area enlargement</i>															
2001	-1.3	-1.5	-0.4	0.1	0.4	2.6	19.9	10.5	4.7	5.1	1.7	-2.3	8.1	11.9	

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

	BE	DE	GR	ES	FR	IE	IT	LU	NL	AT	PT	FI
	1	2	3	4	5	6	7	8	9	10	11	12
1998	-0.8	-2.2	-2.4	-2.6	-2.7	2.3	-2.8	3.2	-0.8	-2.4	-2.3	1.3
1999	-0.6	-1.6	-1.7	-1.1	-1.6	2.3	-1.8	3.8	0.4	-2.2	-2.2	1.9
2000	0.1	1.2	-0.8	-0.3	-1.3	4.5	-0.5	5.8	2.2	-1.5	-1.5	7.0
2001	0.2	-2.7	0.1	0.0	-1.4	1.7	-2.2	5.0	0.2	0.1	.	4.9

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 0.2). 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's	Other financial corporations	Other sectors	
1	2	3	4	5	6	7	8	9	10	
1992	61.0	2.6	16.2	10.1	32.0	50.3	26.4	7.6	16.3	10.7
1993	67.3	2.7	17.0	10.0	37.6	52.6	27.6	8.7	16.3	14.8
1994	70.0	2.9	16.1	10.3	40.6	55.8	29.8	9.9	16.1	14.2
1995	74.2	2.9	17.7	9.9	43.8	58.3	30.5	11.0	16.9	15.9
1996	75.5	2.9	17.2	9.9	45.5	58.9	30.3	13.2	15.5	16.5
1997	74.9	2.8	16.3	8.9	46.8	56.9	29.0	14.4	13.5	17.9
1998	73.1	2.8	15.2	7.9	47.3	53.3	27.0	16.2	10.2	19.8
1999	72.0	2.9	14.2	6.9	48.1	49.7	25.3	14.8	9.6	22.3
2000	69.5	2.7	13.0	6.2	47.6	46.0	22.9	13.4	9.7	23.6
<i>Euro area enlargement</i>										
2001	69.1	2.6	12.5	6.3	47.7	45.0	22.3	12.2	10.5	24.1

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
1992	61.0	49.8	4.7	6.1	0.4	12.3	48.7	6.4	17.8	21.1	22.1	59.7	2.2	1.3
1993	67.3	55.3	5.2	6.3	0.6	12.0	55.3	6.7	18.5	24.4	24.4	65.6	2.9	1.7
1994	70.0	57.9	5.4	6.1	0.5	11.2	58.8	7.4	16.6	26.7	26.7	68.1	3.0	1.9
1995	74.2	61.7	5.7	6.0	0.8	10.6	63.6	6.9	17.6	26.4	30.2	72.4	2.9	1.9
1996	75.5	63.0	6.1	5.9	0.5	10.2	65.2	6.3	19.3	25.5	30.8	73.5	2.7	1.9
1997	74.9	62.4	6.3	5.6	0.6	8.8	66.1	6.0	18.6	25.4	30.8	72.9	2.8	2.0
1998	73.1	61.1	6.3	5.4	0.4	7.7	65.5	5.5	16.4	26.1	30.7	71.4	3.2	1.7
1999	72.0	60.1	6.2	5.3	0.3	6.3	65.7	5.1	14.5	26.8	30.6	70.1	-	1.8
2000	69.5	58.0	6.1	5.1	0.3	5.5	64.0	4.5	14.5	27.5	27.6	67.7	-	1.8
<i>Euro area enlargement</i>														
2001	69.1	57.6	6.2	5.0	0.3	5.7	63.4	3.3	.	.	.	67.4	-	1.7

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
1998	119.3	60.9	105.0	64.6	59.5	55.1	116.4	6.3	66.8	63.9	54.8	48.8
1999	115.0	61.3	103.8	63.1	58.5	49.6	114.5	6.0	63.1	64.9	54.2	46.8
2000	109.3	60.3	103.9	60.4	57.4	39.0	110.6	5.6	56.0	63.6	53.4	44.0
2001	107.5	59.8	102.6	57.2	57.2	36.3	109.8	5.5	52.9	62.9	55.4	43.6

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⁾	MFIs	Other financial corporations	Other creditors ⁷⁾
	1	2	3	4	5	6	7	8	9	10	11	12	13
1992	6.7	5.6	0.4	0.7	0.1	0.1	1.1	1.0	4.5	4.8	3.1	0.7	1.9
1993	8.0	7.5	0.3	0.1	0.1	0.2	1.2	0.1	6.5	3.6	2.0	1.3	4.4
1994	6.0	5.2	0.2	0.7	0.0	0.4	-0.1	0.9	4.9	5.9	3.6	1.7	0.2
1995	7.8	5.5	0.2	2.2	-0.2	0.2	2.3	0.0	5.2	5.3	2.2	1.5	2.4
1996	3.8	4.2	-0.2	0.1	-0.3	0.1	0.1	0.4	3.2	2.6	0.8	2.6	1.2
1997	2.3	2.4	0.2	-0.2	0.0	0.0	-0.2	-0.6	3.1	0.2	-0.1	1.8	2.0
1998	1.6	1.9	-0.2	0.0	0.0	0.1	-0.4	-0.6	2.6	-1.0	-0.8	2.4	2.7
1999	1.6	1.3	0.3	0.0	0.0	0.2	-0.4	-0.7	2.5	-1.7	-0.7	-0.7	3.2
2000	0.8	0.8	0.1	-0.1	0.0	0.0	-0.5	-0.3	1.7	-1.5	-1.2	-0.8	2.3
<i>Euro area enlargement</i>													
2001	1.5	1.5	0.0	0.0	0.0	0.0	-0.2	0.4	1.3	0.5	0.0	-0.4	1.0

2. Euro area – deficit-debt adjustment

	Change in debt	Deficit (-) / surplus (+) ⁸⁾	Deficit-debt adjustment ⁹⁾											Other ¹¹⁾
			Total	Transactions in main financial assets held by general government							Valuation effects	Exchange rate effects	Other changes in volume	
				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
1992	6.7	-4.9	1.8	0.7	0.1	0.1	0.3	0.2	-0.1	0.2	0.4	0.3	0.7	0.0
1993	8.0	-5.7	2.3	1.5	1.3	0.2	0.3	-0.2	-0.3	0.1	0.3	0.3	0.1	0.3
1994	6.0	-5.1	0.9	0.0	-0.2	0.1	0.3	-0.1	-0.4	0.2	0.2	0.0	0.7	0.1
1995	7.8	-5.0	2.7	0.6	0.1	-0.1	0.5	0.1	-0.4	0.2	0.2	0.0	2.2	-0.3
1996	3.8	-4.3	-0.5	-0.1	-0.1	0.0	0.0	-0.1	-0.3	0.2	-0.2	-0.2	0.1	-0.2
1997	2.3	-2.6	-0.3	-0.5	0.2	-0.1	-0.1	-0.5	-0.8	0.3	0.2	0.2	-0.2	0.3
1998	1.6	-2.2	-0.6	-0.5	0.2	0.0	0.0	-0.7	-0.8	0.3	-0.2	0.0	0.0	0.1
1999	1.6	-1.3	0.3	-0.2	0.3	0.1	0.1	-0.7	-0.9	0.2	0.3	0.2	0.0	0.1
2000	0.8	0.2	1.1	1.0	0.7	0.2	0.1	-0.1	-0.4	0.2	0.1	0.0	-0.1	0.0
<i>Euro area enlargement</i>														
2001	1.5	-1.3	0.3	-0.3	-0.6	0.1	0.1	0.0	-0.3	0.2	0.0	0.0	0.0	0.6

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

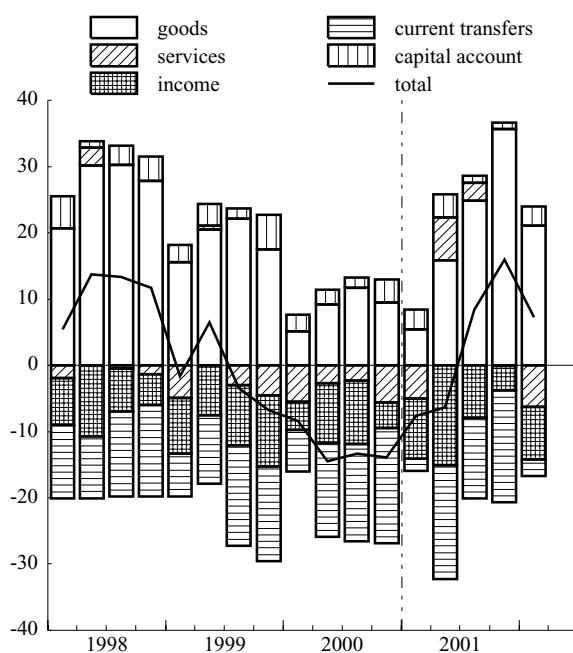
Summary balance of payments ^{1) 2)}

(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	62.1	116.4	3.1	-15.2	-42.2	13.0	.	-44.5	-24.3	.	.	.	.
1998	31.9	109.0	-1.1	-28.8	-47.2	12.4	-68.4	-81.3	-110.0	-8.2	123.0	8.2	24.1
1999	-18.3	75.6	-11.9	-35.7	-46.3	12.9	10.9	-118.1	-45.7	4.5	160.1	10.1	-5.5
2000	-59.9	35.6	-16.1	-26.7	-52.6	9.7	93.4	17.6	-111.5	-1.7	171.5	17.6	-43.2
<i>Euro area enlargement</i>													
2001	2.0	81.8	4.1	-35.8	-48.2	8.5	-69.9	-104.6	36.5	-20.7	1.1	17.8	59.5
2001 Q1	-10.5	5.5	-5.0	-9.1	-1.9	2.9	30.6	-40.6	-38.5	-2.0	102.2	9.5	-23.0
Q2	-9.9	15.9	6.5	-15.1	-17.2	3.5	-12.0	-51.7	25.7	0.7	10.8	2.5	18.4
Q3	7.4	24.8	2.7	-7.9	-12.2	1.0	-55.2	-22.4	49.6	-12.0	-72.8	2.5	46.7
Q4	15.0	35.6	-0.1	-3.7	-16.9	1.0	-33.3	10.1	-0.3	-7.3	-39.1	3.3	17.4
2002 Q1	4.3	21.1	-6.3	-7.9	-2.6	2.9	-12.3	-11.5	-43.0	-3.4	48.7	-3.0	5.0
2001 Feb.	1.2	3.3	-1.1	-0.6	-0.5	1.5	7.7	2.4	-2.3	-0.7	3.8	4.5	-10.4
Mar.	-0.6	6.0	-1.5	-1.0	-4.0	0.1	20.6	-33.2	6.6	3.3	41.2	2.7	-20.1
Apr.	-6.7	3.1	1.6	-7.0	-4.5	2.2	11.7	0.8	-19.2	1.7	21.4	7.0	-7.1
May	-2.2	4.4	2.8	-3.9	-5.4	0.5	-9.6	-41.5	15.1	3.6	16.8	-3.6	11.3
June	-1.0	8.4	2.1	-4.2	-7.3	0.8	-14.0	-11.0	29.8	-4.6	-27.4	-0.8	14.2
July	-0.2	10.9	1.5	-7.1	-5.4	0.4	-20.3	-1.5	3.2	-7.4	-14.5	0.0	20.0
Aug.	6.0	7.8	0.9	0.3	-3.0	0.6	-11.3	-7.0	2.4	-3.6	-7.2	4.1	4.7
Sep.	1.6	6.1	0.4	-1.1	-3.8	0.1	-23.6	-13.9	44.0	-1.0	-51.1	-1.6	22.0
Oct.	5.4	12.5	0.6	-2.4	-5.4	0.3	-24.8	1.9	-2.0	-2.7	-19.3	-2.6	19.2
Nov.	5.2	11.1	-0.8	0.2	-5.3	0.1	-12.5	6.3	17.1	-3.0	-32.9	0.0	7.2
Dec.	4.4	12.0	0.1	-1.5	-6.2	0.6	4.0	2.0	-15.4	-1.6	13.1	5.9	-9.0
2002 Jan.	-1.5	2.1	-2.7	-6.7	5.8	2.5	-37.6	4.3	-41.3	0.6	4.0	-5.3	36.5
Feb.	2.1	8.2	-2.4	-0.1	-3.6	0.2	5.8	-9.9	8.1	1.3	21.7	2.5	-8.1
Mar.	3.7	10.8	-1.2	-1.1	-4.8	0.2	19.6	-5.9	8.1	-5.4	22.9	-0.2	-23.5
Apr.	-5.8	8.2	-0.1	-7.9	-6.0	1.3	-1.1	7.7	11.5	2.1	-30.8	8.3	5.6

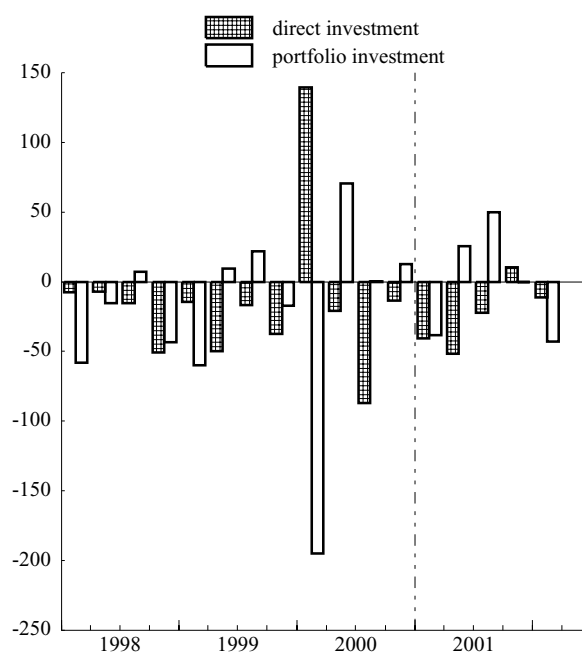
Current and capital accounts

(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))***1. Main items**

	Current account											Capital account	
	Total			Goods		Services		Income		Current transfers		Credit 12	Debit 13
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11		
1997	1,218.5	1,156.3	62.1	754.6	638.3	214.2	211.0	189.5	204.7	60.1	102.3	18.9	5.9
1998	1,277.7	1,245.8	31.9	784.4	675.4	231.9	233.0	198.5	227.3	63.0	110.1	17.7	5.3
1999	1,334.5	1,352.7	-18.3	818.1	742.5	244.5	256.4	207.0	242.7	64.8	111.1	19.1	6.3
2000	1,597.6	1,657.5	-59.9	986.8	951.3	279.5	295.7	264.0	290.7	67.2	119.9	18.3	8.7
<i>Euro area enlargement</i>													
2001	1,718.1	1,716.2	2.0	1,039.8	957.9	317.8	313.7	286.0	321.8	74.6	122.7	16.4	7.9
2001 Q1	423.3	433.9	-10.5	254.5	249.0	68.7	73.7	70.6	79.6	29.6	31.5	4.4	1.5
Q2	435.1	444.9	-9.9	262.7	246.8	83.0	76.5	74.4	89.5	15.0	32.2	5.3	1.8
Q3	424.7	417.3	7.4	255.1	230.3	86.0	83.2	69.0	76.9	14.7	26.9	2.7	1.7
Q4	435.0	420.1	15.0	267.5	231.9	80.2	80.3	72.0	75.7	15.3	32.2	4.0	3.0
2002 Q1	403.4	399.0	4.3	246.0	224.9	69.2	75.5	58.2	66.1	29.9	32.5	4.4	1.5
2001 Feb.	135.1	133.9	1.2	82.3	78.9	22.4	23.5	22.5	23.1	7.9	8.4	1.9	0.4
Mar.	147.8	148.5	-0.6	92.4	86.4	23.9	25.4	25.4	26.4	6.1	10.2	0.7	0.5
Apr.	138.7	145.4	-6.7	83.6	80.5	26.3	24.6	23.0	30.0	5.8	10.3	2.6	0.4
May	148.3	150.5	-2.2	89.0	84.7	28.3	25.6	26.0	29.9	4.9	10.3	1.4	1.0
June	148.1	149.1	-1.0	90.0	81.6	28.4	26.3	25.4	29.6	4.3	11.6	1.3	0.4
July	153.2	153.4	-0.2	91.7	80.8	30.8	29.3	25.7	32.8	5.1	10.5	1.0	0.6
Aug.	136.8	130.8	6.0	82.1	74.3	29.1	28.2	21.3	21.0	4.4	7.4	1.1	0.5
Sep.	134.7	133.1	1.6	81.3	75.2	26.1	25.8	22.0	23.1	5.2	9.0	0.6	0.5
Oct.	149.9	144.5	5.4	95.6	83.1	27.7	27.1	22.0	24.4	4.6	10.0	0.9	0.7
Nov.	139.5	134.3	5.2	89.9	78.8	24.5	25.3	20.3	20.1	4.8	10.1	0.8	0.6
Dec.	145.6	141.3	4.4	82.0	70.0	28.0	27.9	29.7	31.3	5.9	12.1	2.2	1.6
2002 Jan.	137.7	139.2	-1.5	76.3	74.2	23.6	26.3	20.5	27.2	17.3	11.5	3.0	0.5
Feb.	128.3	126.2	2.1	80.6	72.4	21.6	24.0	19.2	19.3	6.9	10.5	0.8	0.5
Mar.	137.3	133.6	3.7	89.1	78.3	24.0	25.3	18.5	19.6	5.7	10.5	0.6	0.5
Apr.	136.1	141.9	-5.8	86.1	77.9	25.8	25.9	19.6	27.5	4.7	10.7	1.9	0.6

2. Main current account items (seasonally adjusted)

	Current account												
	Total			Goods		Services		Income		Current transfers			
	Credit 1	Debit 2	Net 3	Credit 4	Debit 5	Credit 6	Debit 7	Credit 8	Debit 9	Credit 10	Debit 11		
2000 Q1	371.1	378.7	-7.6	229.3	217.2	65.6	68.7	59.8	65.4	16.4	27.4		
Q2	387.3	407.2	-19.8	241.5	231.8	67.3	72.6	60.9	70.0	17.7	32.7		
Q3	410.5	426.4	-16.0	252.9	245.0	71.6	74.2	70.2	79.0	15.8	28.2		
Q4	431.7	449.5	-17.8	264.8	259.8	75.5	80.9	73.8	76.8	17.5	32.1		
<i>Euro area enlargement</i>													
2001 Q1	429.5	434.6	-5.1	260.8	245.4	76.4	77.0	73.0	82.4	19.2	29.7		
Q2	431.0	439.5	-8.4	263.5	246.4	80.7	78.1	69.0	81.9	17.9	33.1		
Q3	432.2	427.2	5.0	260.0	239.2	80.4	80.1	73.1	79.6	18.8	28.3		
Q4	423.8	411.9	11.9	254.9	225.9	79.6	78.2	71.1	76.4	18.2	31.4		
2002 Q1	415.9	406.9	9.0	258.9	228.1	77.7	79.5	60.6	68.1	18.8	31.2		
2001 Feb.	144.3	142.4	1.9	87.2	81.5	26.0	25.8	24.7	26.4	6.5	8.7		
Mar.	141.0	145.9	-4.8	86.1	81.7	25.0	25.8	23.6	27.2	6.3	11.2		
Apr.	143.8	147.8	-4.0	86.9	82.6	27.3	25.9	22.9	28.4	6.7	10.9		
May	145.6	145.6	0.0	88.4	81.7	27.1	25.8	24.5	27.2	5.6	10.8		
June	141.7	146.1	-4.4	88.2	82.0	26.4	26.3	21.5	26.3	5.6	11.5		
July	146.3	148.8	-2.6	86.7	81.5	27.3	27.2	26.1	29.5	6.1	10.7		
Aug.	146.5	140.7	5.8	89.1	79.9	27.0	27.1	24.3	25.9	6.1	7.8		
Sep.	139.4	137.6	1.8	84.1	77.8	26.1	25.8	22.6	24.2	6.6	9.8		
Oct.	141.8	137.9	3.9	85.7	76.5	26.3	25.7	23.4	25.4	6.4	10.4		
Nov.	138.7	134.8	3.8	84.8	75.0	25.6	26.1	22.4	23.4	6.0	10.4		
Dec.	143.3	139.2	4.1	84.4	74.4	27.7	26.4	25.3	27.7	5.8	10.6		
2002 Jan.	139.9	134.8	5.2	83.7	73.0	26.8	26.9	22.3	25.7	7.1	9.0		
Feb.	137.2	134.5	2.7	85.3	74.7	25.1	26.4	21.2	22.4	5.7	11.0		
Mar.	138.8	137.7	1.1	89.9	80.3	25.8	26.2	17.2	20.0	5.9	11.2		
Apr.	133.7	138.0	-4.3	82.8	74.1	26.1	26.7	19.5	25.8	5.4	11.4		

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	207.0	242.7	12.6	5.0	194.4	237.7	42.7	50.3	64.1	101.5	87.7	85.9
2000	264.0	290.7	13.2	5.4	250.8	285.2	57.4	59.3	74.6	106.9	118.7	119.0
2000 Q4	72.7	76.6	3.4	1.3	69.3	75.3	16.7	17.0	18.9	24.2	33.7	34.1
<i>Euro area enlargement</i>												
2001	286.0	321.8	13.7	5.8	272.3	316.0	68.8	66.3	83.8	118.0	119.8	131.7
2001 Q1	70.6	79.6	3.3	1.1	67.2	78.5	15.6	15.4	17.8	26.3	33.8	36.8
Q2	74.4	89.5	3.4	1.5	71.0	88.0	18.8	15.4	21.5	39.4	30.7	33.3
Q3	69.0	76.9	3.3	1.7	65.6	75.2	15.1	15.1	22.4	29.1	28.1	31.0
Q4	72.0	75.7	3.6	1.5	68.4	74.2	19.3	20.3	22.0	23.2	27.2	30.6

	Income on direct investment				Income on portfolio investment			
	Equity		Debt		Equity		Debt	
	Credit 13	Debit 14	Credit 15	Debit 16	Credit 17	Debit 18	Credit 19	Debit 20
1999	36.2	46.1	6.4	4.2	9.5	34.0	54.6	67.5
2000	47.4	52.2	10.0	7.1	14.2	30.6	60.5	76.3
2000 Q4	13.3	14.8	3.3	2.3	3.0	5.5	16.0	18.7
<i>Euro area enlargement</i>								
2001	58.6	58.0	10.2	8.2	16.3	38.6	67.5	79.5
2001 Q1	13.1	13.0	2.5	2.4	2.4	7.0	15.4	19.4
Q2	16.2	13.0	2.6	2.4	5.3	17.1	16.2	22.3
Q3	12.9	13.5	2.2	1.7	3.9	8.6	18.5	20.5
Q4	16.3	18.5	3.0	1.8	4.7	5.9	17.3	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 inter-company loans 3	Total 4	Equity capital and reinvested earnings 5	Other capital, mostly inter-company loans 6
1997	-93.1	.	.	48.6	.	.
1998	-172.8	.	.	91.5	.	.
1999	-315.6	-234.7	-81.0	197.5	144.2	53.3
2000	-382.4	-283.6	-98.7	400.0	296.4	103.6
<i>Euro area enlargement</i>						
2001	-227.8	-142.3	-85.5	123.1	77.4	45.7
2001 Q1	-65.4	-26.5	-38.9	24.7	28.7	-4.0
Q2	-80.6	-59.2	-21.4	28.9	16.4	12.4
Q3	-46.6	-28.0	-18.5	24.1	15.7	8.5
Q4	-35.2	-28.6	-6.7	45.4	16.5	28.9
2002 Q1	-38.0	-26.1	-11.9	26.5	16.4	10.1
2001 Feb.	-15.0	-1.9	-13.1	17.4	15.3	2.1
Mar.	-33.0	-13.0	-20.0	-0.2	8.4	-8.5
Apr.	-6.8	-9.4	2.6	7.6	2.8	4.9
May	-51.8	-41.3	-10.5	10.3	10.2	0.1
June	-21.9	-8.5	-13.4	10.9	3.4	7.5
July	-15.8	-16.3	0.5	14.2	10.7	3.6
Aug.	-10.7	-5.9	-4.8	3.7	-1.9	5.6
Sep.	-20.1	-5.8	-14.2	6.2	6.9	-0.8
Oct.	4.4	-11.8	16.2	-2.5	-8.7	6.1
Nov.	-17.6	-6.8	-10.8	23.9	10.6	13.3
Dec.	-22.0	-10.0	-12.1	24.0	14.6	9.4
2002 Jan.	-4.8	-6.3	1.5	9.2	6.5	2.6
Feb.	-20.0	-4.9	-15.1	10.1	3.1	6.9
Mar.	-13.2	-14.9	1.7	7.3	6.7	0.5
Apr.	-6.6	-3.0	-3.6	14.3	6.7	7.6

Source: ECB.

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

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

	Total		Equity		Debt instruments					
	Assets	Liabilities	Assets	Liabilities	Assets			Liabilities		
					Total	Bonds and notes	Money market instruments	Total	Bonds and notes	Money market instruments
1	2	3	4	5	6	7	8	9	10	
1998	-363.3	253.3	-116.2	104.0	-247.1	-238.9	-8.2	149.3	121.6	27.7
1999	-311.4	265.7	-156.3	92.4	-155.1	-154.4	-0.7	173.4	117.4	55.9
2000	-412.8	301.2	-288.5	44.9	-124.3	-102.7	-21.6	256.3	229.6	26.7
<i>Euro area enlargement</i>										
2001	-266.7	303.3	-95.4	238.3	-171.3	-152.8	-18.5	65.0	78.0	-13.0
2001 Q1	-82.9	44.4	-29.1	18.7	-53.8	-37.2	-16.6	25.7	24.5	1.2
Q2	-75.5	101.3	-42.5	108.7	-33.0	-46.6	13.6	-7.5	-1.6	-5.9
Q3	-24.0	73.7	-1.0	53.4	-23.0	-18.2	-4.8	20.2	29.8	-9.5
Q4	-84.3	84.0	-22.8	57.4	-61.5	-50.8	-10.7	26.5	25.3	1.2
2002 Q1	-62.3	19.3	-28.4	28.1	-33.9	-15.9	-18.0	-8.9	8.3	-17.1
2001 Feb.	-29.2	26.9	-12.6	12.5	-16.6	-16.4	-0.2	14.4	16.2	-1.8
Mar.	-16.7	23.3	4.3	6.5	-21.0	-13.9	-7.1	16.8	17.4	-0.6
Apr.	-20.7	1.5	-16.4	11.0	-4.3	-11.8	7.5	-9.5	-3.1	-6.4
May	-28.1	43.2	-14.5	58.8	-13.6	-17.0	3.5	-15.7	-12.8	-2.8
June	-26.8	56.6	-11.6	38.9	-15.2	-17.8	2.6	17.7	14.3	3.3
July	-14.9	18.2	-10.2	15.4	-4.7	-9.1	4.4	2.8	2.4	0.4
Aug.	-23.0	25.4	-4.7	13.6	-18.3	-16.9	-1.5	11.8	18.7	-6.9
Sep.	13.9	30.1	13.9	24.4	0.1	7.7	-7.6	5.6	8.6	-2.9
Oct.	-35.2	33.2	-7.9	22.5	-27.2	-19.3	-7.9	10.7	8.1	2.6
Nov.	-38.4	55.5	-8.6	22.4	-29.8	-17.1	-12.7	33.1	36.6	-3.6
Dec.	-10.7	-4.7	-6.3	12.5	-4.4	-14.3	9.9	-17.2	-19.4	2.2
2002 Jan.	-29.0	-12.3	-14.0	8.9	-15.0	-5.7	-9.2	-21.2	-7.8	-13.4
Feb.	-11.3	1.4	-6.1	6.8	-5.1	0.3	-5.5	-5.4	-1.3	-4.1
Mar.	-22.1	30.2	-8.3	12.5	-13.8	-10.4	-3.3	17.7	17.4	0.3
Apr.	-8.5	20.0	-3.0	2.3	-5.6	-8.6	3.0	17.8	10.0	7.8

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	-1.5	-152.8	0.1	-1.7	-15.4	-137.4	0.9	-0.1	-8.1	6.7
2000	0.0	-2.5	-4.4	-281.6	-1.7	-1.2	-72.7	-27.2	2.2	-0.7	-11.5	-11.5
2000 Q4	0.0	-0.6	-5.0	-54.3	0.9	0.0	2.7	-19.2	0.6	0.9	0.8	-5.1
<i>Euro area enlargement</i>												
2001	-0.4	-2.1	3.3	-96.3	1.9	-0.9	-68.6	-85.2	-2.3	0.1	-33.0	16.8
2001 Q1	-0.1	-0.4	-11.0	-17.6	1.0	-0.6	-16.3	-21.4	-1.3	-1.2	-18.0	4.0
Q2	0.0	-0.7	6.3	-48.0	0.7	0.0	-22.3	-25.0	-0.7	-0.1	2.1	12.3
Q3	-0.1	-0.4	3.3	-3.9	1.0	-0.1	4.2	-23.3	0.1	-0.5	-13.4	9.1
Q4	-0.2	-0.5	4.7	-26.8	-0.7	-0.3	-34.3	-15.6	-0.3	1.9	-3.7	-8.7

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

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

	Total		Eurosystem		General government		MFIs (excluding the Eurosystem)						Other sectors	
	Assets 1	Liabilities 2	Assets 3	Liabilities 4	Assets 5	Liabilities 6	Total		Long-term		Short-term		Assets 13	Liabilities 14
							Assets 7	Liabilities 8	Assets 9	Liabilities 10	Assets 11	Liabilities 12		
1998	-81.9	204.9	-0.7	3.5	-1.0	-6.1	-22.6	192.4	-37.6	40.4	15.0	152.0	-57.6	15.2
1999	-32.5	192.6	-2.0	6.6	3.3	-13.0	18.1	161.1	-47.2	53.8	65.3	107.3	-51.8	37.8
2000	-178.9	350.5	-1.1	0.9	-2.5	1.0	-131.3	289.6	-49.3	53.0	-82.0	236.6	-44.0	58.9
<i>Euro area enlargement</i>														
2001	-239.1	240.2	0.6	4.4	3.8	-1.2	-219.4	229.2	-41.2	20.3	-178.2	208.9	-24.1	7.8
2001 Q1	-136.1	238.3	0.8	-2.6	2.4	-8.2	-135.0	261.7	-7.4	1.8	-127.6	259.9	-4.3	-12.6
Q2	8.1	2.6	-0.8	4.3	-0.3	2.8	12.0	-9.1	-10.2	17.0	22.2	-26.1	-2.7	4.7
Q3	-55.1	-17.7	1.0	-0.9	-0.1	0.0	-53.0	-30.1	-7.8	11.2	-45.2	-41.3	-3.0	13.3
Q4	-56.0	16.9	-0.4	3.7	1.8	4.2	-43.4	6.6	-15.7	-9.8	-27.7	16.4	-14.1	2.4
2002 Q1	26.1	22.6	-0.4	1.2	0.1	-7.4	20.8	24.6	0.5	9.6	20.3	14.9	5.5	4.3
2001 Feb.	-6.6	10.4	0.3	-2.1	0.1	-3.8	-4.8	16.8	-2.8	4.7	-2.0	12.1	-2.2	-0.5
Mar.	-84.3	125.5	0.0	-1.8	-1.3	2.0	-78.7	136.7	-0.7	-1.0	-78.0	137.7	-4.3	-11.3
Apr.	7.1	14.3	-0.3	-1.6	-0.2	-0.8	14.4	16.2	-0.4	5.4	14.8	10.8	-6.9	0.5
May	2.3	14.5	-0.3	1.6	1.2	2.4	4.7	4.9	-7.3	4.2	12.0	0.7	-3.4	5.6
June	-1.2	-26.2	-0.3	4.2	-1.3	1.2	-7.2	-30.2	-2.6	7.4	-4.6	-37.6	7.5	-1.4
July	46.3	-60.9	0.7	-0.4	-1.6	0.8	46.0	-67.3	-2.0	1.9	48.0	-69.2	1.2	6.0
Aug.	-30.7	23.5	0.1	-2.4	1.7	-2.6	-31.6	24.9	-5.9	3.7	-25.7	21.2	-0.9	3.6
Sep.	-70.8	19.7	0.1	1.9	-0.1	1.7	-67.4	12.4	0.1	5.6	-67.5	6.7	-3.4	3.8
Oct.	-33.3	14.0	-0.5	4.5	-0.4	2.1	-22.1	5.6	-3.4	1.6	-18.7	4.1	-10.3	1.7
Nov.	-59.4	26.4	0.0	2.0	2.0	2.5	-52.3	22.6	-9.2	-13.9	-43.1	36.5	-9.1	-0.6
Dec.	36.6	-23.5	0.1	-2.8	0.3	-0.4	31.0	-21.6	-3.2	2.6	34.1	-24.2	5.3	1.3
2002 Jan.	9.6	-5.5	-0.7	2.6	-1.2	-8.4	15.9	0.4	-0.5	5.7	16.4	-5.3	-4.4	-0.1
Feb.	25.4	-3.7	-0.1	-3.8	1.2	-1.4	5.3	12.1	-6.0	1.4	11.3	10.7	19.0	-10.6
Mar.	-8.9	31.8	0.4	2.4	0.1	2.3	-0.4	12.0	7.0	2.5	-7.4	9.6	-9.0	15.0
Apr.	-51.4	20.6	-0.4	-4.3	0.5	-0.5	-29.6	21.1	-4.3	7.7	-25.3	13.4	-22.0	4.4

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

	Loans/currency and deposits			Other assets/liabilities		
	Assets 1	Liabilities 2	Balance 3	Assets 4	Liabilities 5	Balance 6
1999	-1.2	6.7	5.5	-0.8	-0.1	-0.9
2000	-1.1	0.9	-0.2	0.0	0.0	0.0
2000 Q4	-0.9	2.9	2.0	0.0	0.0	0.0
<i>Euro area enlargement</i>						
2001	0.6	4.8	5.4	0.0	-0.3	-0.3
2001 Q1	0.8	-2.7	-1.9	0.0	0.0	0.0
Q2	-0.8	4.3	3.5	0.0	0.0	0.0
Q3	1.0	-0.9	0.0	0.0	0.0	0.0
Q4	-0.4	4.1	3.7	0.0	-0.4	-0.4

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	4.4	-13.1	-8.7	-1.2	0.2	-1.0
2000	0.1	0.0	0.1	-1.8	1.0	-0.8	-0.8	0.0	-0.8
2000 Q4	0.1	0.0	0.1	5.3	3.2	8.6	0.3	0.2	0.4
<i>Euro area enlargement</i>									
2001	-0.1	0.0	-0.1	5.2	-1.2	4.0	-1.3	0.0	-1.3
2001 Q1	0.0	0.0	0.0	2.9	-8.0	-5.1	-0.5	-0.2	-0.7
Q2	0.0	0.0	0.0	0.1	2.7	2.8	-0.4	0.1	-0.3
Q3	0.0	0.0	0.0	0.2	0.0	0.2	-0.3	0.0	-0.3
Q4	0.0	0.0	0.0	2.0	4.1	6.1	-0.2	0.1	-0.1

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	17.3	160.4	177.7	0.8	0.7	1.5
2000	-127.3	284.3	157.0	-4.1	5.3	1.3
2000 Q4	-62.4	55.1	-7.4	-1.4	4.4	2.9
<i>Euro area enlargement</i>						
2001	-205.6	219.4	13.7	-13.8	9.8	-4.0
2001 Q1	-130.5	257.8	127.3	-4.5	3.9	-0.6
Q2	15.4	-11.9	3.5	-3.4	2.8	-0.6
Q3	-51.9	-31.9	-83.8	-1.1	1.8	0.7
Q4	-38.7	5.3	-33.3	-4.7	1.3	-3.5

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	-7.5	4.8	-2.7	-21.3	20.4	-1.0	-23.0	12.7	-10.3
2000	-14.9	10.4	-4.5	-23.8	53.6	29.8	-5.4	-5.0	-10.4
2000 Q4	-4.3	1.3	-2.9	17.7	4.5	22.3	-3.9	2.4	-1.5
<i>Euro area enlargement</i>									
2001	-8.3	6.3	-2.0	-9.7	1.2	-8.5	-6.2	0.3	-5.8
2001 Q1	-4.8	4.2	-0.6	3.0	-16.3	-13.3	-2.5	-0.4	-3.0
Q2	-3.7	1.8	-1.9	2.1	3.9	6.0	-1.2	-1.0	-2.1
Q3	-1.7	-1.5	-3.2	0.3	13.6	13.9	-1.7	1.3	-0.4
Q4	1.8	1.8	3.6	-15.1	0.1	-15.0	-0.8	0.4	-0.4

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	10.1	0.3	1.0	2.0	6.9	12.5	-11.3	0.2	3.5	2.0	-0.1	0.0
2000	17.6	1.0	0.3	2.9	13.3	4.3	4.7	0.0	-5.6	10.1	-0.1	0.0
2000 Q4	10.7	0.0	0.3	-0.6	11.0	1.1	4.3	0.0	0.8	4.7	0.0	0.0
<i>Euro area enlargement</i>												
2001	17.8	0.6	-1.1	-4.2	22.5	10.0	-5.3	-1.1	20.4	-1.6	0.0	0.0
2001 Q1	9.5	0.3	-0.4	0.2	9.5	7.8	-8.2	-1.1	5.2	5.7	0.0	0.0
Q2	2.5	-0.1	-0.6	-0.7	4.0	0.2	-1.8	0.0	5.5	0.0	0.0	0.0
Q3	2.5	0.2	0.0	-4.5	6.7	-0.9	3.1	0.0	4.9	-0.4	0.0	0.0
Q4	3.3	0.1	-0.1	0.9	2.4	2.7	1.7	0.0	4.8	-6.9	0.0	0.0

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	-147.9	152.2	124.2	28.0	-713.5	-462.0	-251.5	-229.0	-22.5	2.3	81.7	100.0	-107.1	88.8	329.4
1999	-75.0	402.4	318.9	83.5	-752.8	-591.3	-161.4	-108.4	-53.0	10.1	-107.3	111.9	-338.2	119.0	372.6
2000	-101.4	466.6	395.0	71.6	-666.8	-366.9	-299.9	-263.1	-36.7	7.0	-286.2	115.7	-530.4	128.5	378.0
<i>Euro area enlargement</i>															
2001 1 Jan.	-152.1	459.3	388.5	70.8	-721.5	-375.8	-345.7	-308.6	-37.1	7.0	-288.2	114.9	-531.6	128.5	391.2

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⁾	329.4	99.6	404.131	5.2	23.4	201.2	12.6	19.6	169.0	0.0	116.6	52.4	0.0	0.0	7.6
1999 Dec.	372.6	116.4	402.762	4.5	24.3	227.5	12.8	23.8	191.1	0.0	134.3	56.7	-0.2	0.0	14.6
2000 Dec.	378.0	117.8	399.537	4.3	20.8	235.0	9.2	20.9	204.2	0.0	153.9	50.3	0.7	0.0	15.8
<i>Euro area enlargement</i>															
2001 1 Jan.	391.2	119.2	404.119	4.3	21.2	246.5	9.2	28.3	208.2	0.0	157.9	50.3	0.7	0.0	16.3
2001 Jan.	385.7	115.0	404.119	4.5	22.3	244.0	11.8	20.8	210.7	-	-	-	0.7	0.0	20.9
Feb.	383.9	116.5	404.119	4.8	21.3	241.3	10.4	22.3	207.8	-	-	-	0.8	0.0	21.2
Mar. ⁴⁾	392.9	117.6	403.153	4.9	21.4	249.0	9.7	29.4	209.5	-	-	-	0.5	0.0	20.2
Apr.	386.3	119.5	403.153	4.9	21.1	240.8	11.5	24.3	204.6	-	-	-	0.4	0.0	23.4
May	408.5	127.2	403.153	5.6	22.3	253.4	10.6	27.6	215.0	-	-	-	0.2	0.0	22.9
June ⁴⁾	410.0	128.6	403.089	5.7	22.9	252.8	9.8	31.6	211.2	-	-	-	0.2	0.0	22.7
July ⁴⁾	397.1	122.3	402.639	5.5	22.7	246.6	8.5	36.5	201.2	-	-	-	0.4	0.0	23.8
Aug. ⁴⁾	381.8	120.0	402.430	5.5	21.9	234.4	8.3	28.3	197.3	-	-	-	0.5	0.0	23.7
Sep. ⁴⁾	393.4	129.0	401.904	5.4	25.8	233.2	10.2	25.9	196.7	-	-	-	0.4	0.0	21.9
Oct. ⁴⁾	393.6	123.9	401.902	5.4	24.9	239.5	8.6	33.3	197.1	-	-	-	0.5	0.0	21.9
Nov. ⁴⁾	396.5	124.4	401.903	5.4	24.7	241.9	7.9	33.7	199.9	-	-	-	0.4	0.0	22.2
Dec. ⁴⁾	392.4	126.1	401.876	5.5	25.3	235.6	8.0	25.9	201.2	-	-	-	0.4	0.0	24.9
2002 Jan. ⁴⁾	407.8	131.4	401.877	5.5	25.7	245.2	8.3	38.2	198.4	-	-	-	0.3	0.0	22.3
Feb. ⁴⁾	411.4	137.9	401.798	5.6	26.0	242.0	9.0	35.6	197.2	-	-	-	0.2	0.0	22.6
Mar. ⁴⁾	409.0	138.7	401.527	5.5	25.8	238.9	9.6	39.0	190.1	-	-	-	0.2	0.0	21.8
Apr. ⁴⁾	394.2	137.0	400.564	5.3	24.2	227.7	10.3	34.2	182.9	-	-	-	0.3	0.0	23.8
May ⁴⁾	386.7	139.3	400.324	5.2	23.4	218.9	11.5	33.9	173.0	-	-	-	0.4	0.0	22.9
European Central Bank ⁵⁾															
1999 Dec.	49.3	7.0	24.030	0.0	0.0	42.3	0.3	7.8	34.3	0.0	27.7	6.5	0.0	0.0	2.6
2000 Dec.	44.7	7.0	24.030	0.0	0.0	37.7	0.6	6.8	30.0	0.0	19.8	10.2	0.3	0.0	3.8
<i>Euro area enlargement</i>															
2001 Jan.	45.6	7.0	24.656	0.0	0.0	38.6	0.7	3.4	34.3	-	-	-	0.3	0.0	3.5
Feb.	46.3	7.1	24.656	0.0	0.0	39.2	0.6	4.5	33.9	-	-	-	0.3	0.0	3.0
Mar.	46.3	7.2	24.656	0.0	0.0	39.1	0.6	7.3	31.1	-	-	-	0.0	0.0	3.9
Apr.	44.8	7.3	24.656	0.0	0.0	37.5	0.8	5.7	31.0	-	-	-	0.0	0.0	3.6
May	49.6	7.8	24.656	0.0	0.0	41.9	0.8	7.1	34.0	-	-	-	0.0	0.0	2.7
June	50.7	7.9	24.656	0.1	0.0	42.8	0.9	9.6	32.3	-	-	-	0.0	0.0	3.1
July	49.8	7.5	24.656	0.1	0.0	42.3	1.0	11.7	29.6	-	-	-	0.0	0.0	2.9
Aug.	45.5	7.3	24.656	0.1	0.0	38.1	1.1	6.1	30.8	-	-	-	0.0	0.0	3.5
Sep.	44.5	7.9	24.656	0.1	0.0	36.5	1.4	4.4	30.6	-	-	-	0.0	0.0	3.9
Oct.	47.9	7.6	24.656	0.1	0.0	40.2	0.9	7.2	32.1	-	-	-	0.0	0.0	2.8
Nov.	48.3	7.6	24.656	0.1	0.0	40.6	0.9	6.1	33.6	-	-	-	0.0	0.0	3.2
Dec.	49.0	7.7	24.656	0.1	0.0	41.2	0.8	7.0	33.3	-	-	-	0.0	0.0	3.6
2002 Jan.	51.8	8.1	24.656	0.1	0.0	43.6	1.1	9.0	33.5	-	-	-	0.0	0.0	3.5
Feb.	51.1	8.5	24.656	0.1	0.0	42.6	1.1	9.5	32.0	-	-	-	0.0	0.0	3.7
Mar.	50.9	8.5	24.656	0.1	0.0	42.3	1.2	9.0	32.1	-	-	-	0.0	0.0	3.6
Apr.	48.7	8.4	24.656	0.1	0.0	40.2	1.8	7.8	30.6	-	-	-	0.0	0.0	3.7
May	46.8	8.6	24.656	0.1	0.0	38.2	1.4	7.9	28.9	-	-	-	0.0	0.0	4.0

Source: ECB.

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

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

3) Position as at 1 January 1999.

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

5) Part of the Eurosystem's reserves.

9 External trade in goods of the euro area

Table 9

1. Values, volumes and unit values by commodity ^{1) 2)}

(not seasonally adjusted, unless otherwise indicated)

	Exports of goods (f.o.b.)					Imports of goods (c.i.f.)						Total (s.a.) (1995=100)	
	Total				Memo: Manufac- tures 5	Total				Memo:		Exports 12	Imports 13
	1	Inter- mediate 2	Capital 3	Consump- tion 4		6	Inter- mediate 7	Capital 8	Consump- tion 9	Manufac- tures 10	Oil 11		
Values (EUR billions (ECU billions to end-1998); 1995=100 for columns 12 and 13)													
1998	797.1	369.9	179.9	214.0	697.8	711.4	393.5	123.0	175.9	540.3	41.6	128.1	126.4
1999	832.8	386.5	183.2	224.2	725.0	781.2	423.2	143.6	192.1	590.6	61.5	133.8	138.8
2000	1,013.7	482.6	221.7	265.4	883.2	1,008.4	579.8	179.4	218.1	730.2	118.9	162.9	179.2
<i>Euro area enlargement</i>													
2001	1,049.6	480.5	232.4	280.3	918.8	1,000.4	562.0	174.0	220.2	724.6	106.1	170.7	176.6
2001 Q1	258.9	121.8	56.3	68.0	227.1	260.8	149.1	47.3	54.4	190.3	27.3	173.4	183.2
Q2	266.0	122.0	58.6	68.4	233.1	258.2	145.7	44.3	54.1	186.7	28.0	173.0	182.7
Q3	255.7	117.3	55.1	70.5	223.8	237.3	133.4	38.5	55.7	170.3	27.8	171.9	176.7
Q4	269.1	119.5	62.4	73.3	234.8	244.0	133.8	44.0	56.0	177.3	23.0	168.3	168.1
2002 Q1	254.7	.	.	.	220.8	234.8	.	.	.	170.0	21.4	172.9	168.4
2001 Nov.	90.4	40.5	20.3	25.0	78.6	83.4	45.8	15.3	19.1	61.0	7.4	167.2	167.5
Dec.	81.7	35.5	20.2	21.4	71.3	73.3	39.7	13.5	16.7	52.5	7.3	167.4	166.0
2002 Jan.	80.6	31.6	16.3	21.5	70.4	78.8	39.3	12.5	17.8	57.3	7.3	172.9	166.8
Feb.	82.7	32.3	16.7	22.8	72.3	76.6	37.4	12.0	17.5	55.9	7.1	171.7	169.5
Mar.	91.5	.	.	.	78.1	79.4	.	.	.	56.8	7.0	174.2	168.8
Apr.	87.5	.	.	.	76.3	84.4	.	.	.	61.1	5.8	171.6	173.4
Volumes (annual percentage changes; 1995=100 for columns 12 and 13) ³⁾													
1998	3.6	4.2	6.0	3.8	4.0	11.4	8.2	21.8	7.7	13.4	-4.5	120.1	123.1
1999	2.2	2.8	-0.8	3.3	1.4	6.1	3.5	12.9	7.7	7.1	6.0	122.7	130.6
2000	12.4	12.5	12.7	12.7	13.6	5.9	6.8	11.7	4.5	8.9	4.7	138.1	138.3
<i>Euro area enlargement</i>													
2001	1.0	-2.7	3.4	2.1	1.4	-2.4	-3.9	-7.4	-4.7	-4.5	-2.3	139.3	134.9
2001 Q1	6.0	4.1	11.4	5.5	7.1	1.2	0.7	4.5	-4.7	0.3	-1.8	143.0	138.7
Q2	2.6	-1.6	4.1	2.1	3.3	-2.0	-4.3	-6.0	-5.5	-3.0	-3.2	140.3	136.6
Q3	-0.4	-3.4	1.6	2.2	0.3	-5.1	-6.2	-12.4	-4.1	-7.4	-3.1	139.8	135.7
Q4	-3.7	-9.1	-1.9	-0.8	-4.2	-3.7	-5.6	-14.5	-4.5	-7.8	-0.6	137.7	134.3
2002 Q1	.	.	.	.	.	.	.	.	.	.	.	.	.
2001 Nov.	-6.1	-11.1	-5.3	-3.6	-7.2	-4.1	-6.5	-13.3	-3.7	-7.6	-5.2	136.4	133.7
Dec.	-5.6	-12.2	-4.3	-1.7	-6.2	-8.3	-9.5	-20.5	-9.1	-13.3	1.1	136.4	131.7
2002 Jan.	.	.	.	.	.	.	.	.	.	.	.	.	.
Feb.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	.	.	.	.	.	.	.	.	.	.	.	.	.
Apr.	.	.	.	.	.	.	.	.	.	.	.	.	.
Unit values (annual percentage changes; 1995=100 for columns 12 and 13) ³⁾													
1998	0.9	-0.7	0.8	2.0	1.5	-5.4	-6.5	-3.6	1.2	-1.1	-30.4	106.6	102.8
1999	2.3	1.7	2.7	1.4	2.4	3.5	3.9	3.4	1.4	2.0	39.4	108.9	106.2
2000	8.3	11.0	7.4	5.1	7.2	21.9	28.3	11.8	8.7	13.5	84.8	117.8	129.4
<i>Euro area enlargement</i>													
2001	3.7	3.0	3.0	5.2	3.9	0.5	-0.3	3.1	5.0	2.8	-11.5	122.4	130.2
2001 Q1	6.6	6.4	5.6	5.5	6.5	8.8	9.2	8.6	8.0	9.3	3.2	121.2	131.6
Q2	5.8	5.1	4.2	7.0	5.7	6.0	6.3	5.3	7.5	6.1	4.3	122.8	133.3
Q3	3.1	0.8	2.3	6.6	3.0	-0.4	-2.3	2.4	5.3	2.2	-12.7	122.9	130.3
Q4	0.2	0.2	0.5	2.0	1.1	-10.5	-12.6	-2.9	-0.2	-5.2	-34.0	122.6	125.7
2002 Q1	.	.	.	.	.	.	.	.	.	.	.	.	.
2001 Nov.	0.5	0.8	1.8	1.3	1.5	-11.2	-13.2	-2.4	-1.2	-5.6	-36.8	122.9	125.9
Dec.	0.2	0.5	0.0	1.9	1.0	-9.9	-12.1	-2.7	0.3	-4.2	-32.6	122.7	126.2
2002 Jan.	.	.	.	.	.	.	.	.	.	.	.	.	.
Feb.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mar.	.	.	.	.	.	.	.	.	.	.	.	.	.
Apr.	.	.	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations based on Eurostat data (volume calculations and seasonal adjustment of unit values).

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) The commodity breakdown in columns 2 to 4 and 7 to 9 is in accordance with the Classification by Broad Economic Categories. Manufactured goods (columns 5 and 10) and oil (column 11) are in accordance with the SITC Rev.3.

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

2. Geographical breakdown ¹⁾

(EUR billions (ECU billions to end-1998); not seasonally adjusted, unless otherwise indicated)

	Total 1	Total (s.a.) 2	United Kingdom 3	Sweden 4	Denmark 5	Candidate countries 6	Switzer- land 7	United States 8	Japan 9	Asia excl. Japan 10	Africa 11	Latin America 12	Other countries 13
Exports (f.o.b.)													
1998	797.1	-	150.5	31.6	20.6	101.5	51.1	120.3	23.9	114.9	49.7	42.4	90.5
1999	832.8	-	161.4	33.1	21.1	102.9	56.1	135.1	26.8	119.2	48.4	39.1	89.6
2000	1,013.7	-	189.7	38.8	23.2	131.0	63.4	171.4	34.2	151.6	56.1	46.7	107.8
<i>Euro area enlargement</i>													
2001	1,049.6	-	199.1	36.2	25.2	135.6	65.8	178.1	34.3	162.8	59.6	49.3	103.5
2001 Q1	258.9	265.9	49.5	9.7	6.1	33.4	17.1	45.1	9.1	39.8	14.4	12.1	22.8
Q2	266.0	265.2	50.8	9.1	7.2	34.0	16.6	45.1	8.3	40.4	15.3	12.7	26.5
Q3	255.7	263.6	48.8	8.0	5.9	32.7	16.1	43.6	8.2	40.0	14.4	12.1	26.0
Q4	269.1	258.1	50.1	9.5	6.1	35.4	16.1	44.3	8.7	42.6	15.6	12.4	28.2
2002 Q1	254.7	265.1	50.6	9.0	6.0	32.9	15.5	43.7	7.8	38.5	13.7	10.0	.
2001 Nov.	90.4	85.5	17.1	3.5	2.1	12.3	5.6	14.3	2.8	14.0	5.1	3.9	9.7
Dec.	81.7	85.6	14.8	2.8	2.0	10.3	4.8	13.1	2.7	13.8	4.8	4.0	8.7
2002 Jan.	80.6	88.4	16.1	2.9	2.1	10.1	4.7	14.1	2.5	12.1	4.2	3.1	8.7
Feb.	82.7	87.8	16.4	2.9	1.9	11.1	5.2	14.0	2.5	12.2	4.4	3.2	.
Mar.	91.5	89.0	18.1	3.1	2.1	11.8	5.6	15.6	2.8	14.2	5.0	3.7	.
Apr.	87.5	87.7	.	.	.	.	.	.	.	.	.	.	.
%													
change versus previous year													
2002 Apr.	4.9	-	.	.	.	.	.	.	.	.	.	.	.
Imports (c.i.f.)													
1998	711.4	-	122.6	30.9	17.4	71.6	40.9	104.8	48.5	132.0	45.8	29.3	67.6
1999	781.2	-	131.0	33.2	18.6	80.4	43.2	113.2	53.9	151.8	49.0	30.4	76.5
2000	1,008.4	-	156.6	38.0	21.8	101.2	49.8	140.7	65.5	211.6	72.2	39.7	111.5
<i>Euro area enlargement</i>													
2001	1,000.4	-	151.5	33.6	20.9	116.3	52.5	136.3	57.7	205.8	73.3	40.4	112.1
2001 Q1	260.8	258.4	38.7	8.9	5.2	29.0	13.5	37.5	16.1	53.8	19.9	9.8	28.4
Q2	258.2	257.7	39.2	8.6	5.0	29.3	13.1	36.0	15.7	51.9	18.9	11.1	29.5
Q3	237.3	249.3	35.2	7.6	5.1	28.2	12.0	30.9	12.8	50.7	17.8	10.1	26.9
Q4	244.0	237.2	38.4	8.5	5.6	29.8	13.8	32.0	13.1	49.4	16.7	9.3	27.2
2002 Q1	234.8	237.5	35.2	8.0	5.0	28.7	12.5	31.6	12.2	45.5	17.4	8.7	.
2001 Nov.	83.4	78.8	12.9	2.9	1.8	10.5	5.0	10.8	4.5	17.0	5.3	3.2	9.4
Dec.	73.3	78.1	12.1	2.5	1.9	8.6	3.8	9.6	3.7	14.8	5.3	2.6	8.5
2002 Jan.	78.8	78.4	11.7	2.6	1.6	9.0	3.9	10.5	4.2	16.2	6.1	3.0	10.1
Feb.	76.6	79.7	11.2	2.5	1.6	9.6	4.4	10.3	3.8	14.4	5.7	2.7	.
Mar.	79.4	79.4	12.4	2.9	1.7	10.1	4.2	10.9	4.2	14.9	5.6	3.0	.
Apr.	84.4	81.5	.	.	.	.	.	.	.	.	.	.	.
%													
change versus previous year													
2002 Apr.	0.7	-	.	.	.	.	.	.	.	.	.	.	.
Balance													
1998	85.7	-	28.0	0.7	3.2	29.9	10.2	15.5	-24.6	-17.1	3.9	13.1	22.9
1999	51.6	-	30.4	-0.1	2.6	22.5	12.9	21.9	-27.1	-32.6	-0.6	8.7	13.1
2000	5.3	-	33.1	0.8	1.4	29.8	13.6	30.7	-31.3	-60.0	-16.1	7.0	-3.7
<i>Euro area enlargement</i>													
2001	49.2	-	47.6	2.6	4.3	19.3	13.4	41.8	-23.4	-43.0	-13.7	8.9	-8.6
2001 Q1	-2.0	7.4	10.8	0.7	0.9	4.4	3.5	7.6	-7.0	-14.0	-5.5	2.3	-5.6
Q2	7.8	7.5	11.6	0.5	2.1	4.8	3.5	9.2	-7.3	-11.5	-3.6	1.6	-3.0
Q3	18.3	14.3	13.6	0.3	0.7	4.5	4.1	12.8	-4.6	-10.7	-3.4	2.0	-0.9
Q4	25.1	20.9	11.7	1.0	0.5	5.6	2.4	12.3	-4.5	-6.8	-1.1	3.1	1.0
2002 Q1	19.9	27.6	15.3	1.0	1.0	4.2	3.1	12.1	-4.4	-7.1	-3.6	1.4	.
2001 Nov.	7.0	6.7	4.1	0.5	0.3	1.8	0.6	3.5	-1.7	-3.0	-0.3	0.7	0.3
Dec.	8.4	7.5	2.7	0.3	0.0	1.7	1.0	3.6	-1.0	-1.0	-0.5	1.4	0.2
2002 Jan.	1.7	10.0	4.4	0.3	0.4	1.1	0.8	3.6	-1.7	-4.1	-1.9	0.2	-1.4
Feb.	6.1	8.0	5.3	0.4	0.2	1.5	0.9	3.8	-1.3	-2.3	-1.2	0.6	.
Mar.	12.1	9.6	5.7	0.3	0.4	1.7	1.4	4.7	-1.5	-0.7	-0.5	0.7	.
Apr.	3.1	6.1	.	.	.	.	.	.	.	.	.	.	.

Sources: Eurostat and ECB calculations based on Eurostat data (balance and other countries).

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 (Tables 8.1 and 8.2).

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	
1997	99.1	99.4	99.3	100.3	90.4	96.6	1.134	137.1	1.644	0.692
1998	101.5	101.3	101.6	99.9	96.6	99.1	1.121	146.4	1.622	0.676
1999	95.7	95.7	95.7	96.0	96.6	95.8	1.066	121.3	1.600	0.659
2000	85.7	86.5	87.0	86.1	88.2	86.3	0.924	99.5	1.558	0.609
2000 Q1	89.0	89.6	89.8	89.1	91.1	89.5	0.986	105.5	1.607	0.614
Q2	86.0	86.6	87.0	86.7	88.4	86.6	0.933	99.6	1.563	0.610
Q3	84.7	85.7	86.3	85.5	87.3	85.3	0.905	97.4	1.544	0.612
Q4	83.0	84.0	84.9	83.1	85.9	83.6	0.868	95.3	1.516	0.600
2000 Jan.	90.2	90.8	90.9	-	92.4	90.7	1.014	106.5	1.610	0.618
Feb.	89.2	89.8	90.0	-	91.2	89.6	0.983	107.6	1.607	0.615
Mar.	87.7	88.3	88.5	-	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	86.1	-	87.0	85.1	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	82.4	83.4	-	84.4	82.2	0.855	92.7	1.513	0.589
Nov.	82.3	83.3	84.1	-	85.1	82.9	0.856	93.3	1.522	0.600
Dec.	85.4	86.4	87.1	-	88.1	85.8	0.897	100.6	1.514	0.613
<i>Euro area enlargement</i>										
2001	87.3	88.9	89.2	86.8	91.0	88.0	0.896	108.7	1.511	0.622
2001 Q1	88.6	89.8	90.5	87.6	91.4	88.7	0.923	109.1	1.533	0.633
Q2	86.0	87.7	87.8	85.6	89.5	86.8	0.873	106.9	1.528	0.614
Q3	87.0	88.7	88.8	86.0	91.2	88.0	0.890	108.3	1.507	0.619
Q4	87.5	89.6	89.7	87.8	92.0	88.6	0.896	110.5	1.473	0.621
2002 Q1	87.1	89.8	89.6	87.3	91.3	88.0	0.877	116.1	1.473	0.615
Q2	88.8	91.8	91.7	-	93.9	90.4	0.919	116.5	1.465	0.629
2001 Jan.	89.2	90.2	90.8	-	91.7	89.0	0.938	109.6	1.529	0.635
Feb.	88.3	89.4	90.2	-	91.0	88.3	0.922	107.1	1.536	0.634
Mar.	88.4	89.8	90.4	-	91.4	88.9	0.910	110.3	1.535	0.629
Apr.	87.6	89.1	89.4	-	91.0	88.4	0.892	110.4	1.529	0.622
May	85.9	87.5	87.6	-	89.3	86.7	0.874	106.5	1.533	0.613
June	84.7	86.3	86.3	-	88.1	85.3	0.853	104.3	1.522	0.609
July	85.4	87.1	87.1	-	89.1	86.2	0.861	107.2	1.514	0.609
Aug.	87.7	89.3	89.5	-	91.8	88.6	0.900	109.3	1.514	0.627
Sep.	88.0	89.7	89.8	-	92.6	89.3	0.911	108.2	1.491	0.623
Oct.	88.0	90.0	90.0	-	92.8	89.5	0.906	109.9	1.479	0.624
Nov.	86.8	88.8	89.0	-	91.3	87.9	0.888	108.7	1.466	0.618
Dec.	87.7	89.9	90.1	-	91.9	88.5	0.892	113.4	1.475	0.620
2002 Jan.	87.6	90.3	90.2	-	91.6	88.3	0.883	117.1	1.475	0.617
Feb.	86.8	89.4	89.2	-	91.1	87.7	0.870	116.2	1.477	0.612
Mar.	86.8	89.6	89.3	-	91.2	88.1	0.876	114.7	1.468	0.616
Apr.	87.2	90.2	89.8	-	91.7	88.4	0.886	115.8	1.466	0.614
May	88.6	91.6	91.5	-	93.7	90.2	0.917	115.9	1.457	0.628
June	90.6	93.7	93.7	-	96.4	92.6	0.955	117.8	1.472	0.644
% ch. vs. ⁴⁾ prev. month										
2002 June	2.3	2.3	2.4	-	2.9	2.6	4.2	1.7	1.0	2.5
% ch. vs. ⁴⁾ prev. year										
2002 June	7.0	8.6	8.6	-	9.4	8.5	12.0	12.9	-3.3	5.8

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.

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	
8.65	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
8.50	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
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>								
9.26	7.45	8.05	1.386	1.732	6.99	1,154.8	1.604	2001
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
9.41	7.44	8.01	1.374	1.734	6.94	1,150.1	1.582	Q3
9.48	7.44	7.97	1.416	1.751	6.99	1,155.2	1.634	Q4
9.16	7.43	7.81	1.398	1.692	6.84	1,155.3	1.607	2002 Q1
9.16	7.43	7.52	1.428	1.666	7.17	1,157.8	1.657	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
9.26	7.44	7.97	1.315	1.689	6.71	1,120.3	1.569	July
9.31	7.45	8.06	1.386	1.717	7.02	1,154.0	1.586	Aug.
9.67	7.44	8.00	1.426	1.804	7.11	1,178.3	1.593	Sep.
9.58	7.44	8.00	1.422	1.796	7.07	1,178.6	1.640	Oct.
9.42	7.45	7.92	1.415	1.717	6.93	1,137.5	1.625	Nov.
9.44	7.44	7.99	1.408	1.735	6.96	1,147.0	1.639	Dec.
9.23	7.43	7.92	1.413	1.709	6.89	1,160.8	1.625	2002 Jan.
9.18	7.43	7.79	1.388	1.696	6.79	1,147.2	1.594	Feb.
9.06	7.43	7.72	1.390	1.669	6.83	1,157.3	1.602	Mar.
9.14	7.43	7.62	1.401	1.654	6.91	1,163.2	1.619	Apr.
9.22	7.44	7.52	1.421	1.666	7.15	1,150.1	1.651	May
9.11	7.43	7.40	1.463	1.679	7.45	1,160.6	1.703	June
-1.2	0.0	-1.5	2.9	0.8	4.2	0.9	3.2	% ch. vs. ⁴⁾ prev. month 2002 June
-1.1	-0.3	-6.7	12.4	2.0	12.0	5.1	9.9	% ch. vs. ⁴⁾ prev. year 2002 June

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.

II Economic and financial developments in the other EU Member States

Table 11

Economic and financial developments

(annual percentage changes, unless otherwise indicated)

	HICP 1	General government deficit (-)/surplus (+) as a % of GDP 2	General government gross debt as a % of GDP 3	Long-term government bond yield ¹⁾ as a % per annum 4	Exchange rate ²⁾ as national currency per ECU or euro 5	Current and new capital account as a % of GDP 6	Unit labour costs ³⁾ 7	Real GDP 8	Industrial production index ⁴⁾ 9	Standardised unemployment rate as a % of labour force (s.a.) ⁵⁾ 10	Broad money ⁵⁾ 11	3-month interest rate ¹⁾ as a % per annum 12
Denmark												
1998	1.3	1.1	56.2	4.94	7.50	-0.9	3.0	2.5	2.2	4.9	5.4	4.27
1999	2.1	3.1	52.7	4.91	7.44	1.7	2.2	2.3	1.8	4.8	-0.2	3.44
2000	2.7	2.5	46.8	5.64	7.45	1.6	1.5	3.0	6.2	4.4	1.2	5.00
2001	2.3	2.5	44.5	5.08	7.45	2.5	3.7	1.0	1.6	4.3	5.6	4.70
2001 Q1	2.3	-	-	5.03	7.46	4.7	3.0	1.6	5.4	4.4	1.9	5.26
Q2	2.5	-	-	5.27	7.46	1.8	3.9	0.8	0.8	4.4	3.3	5.06
Q3	2.3	-	-	5.18	7.44	3.7	4.1	1.1	2.0	4.3	7.9	4.73
Q4	2.0	-	-	4.83	7.44	0.2	3.7	0.4	-1.4	4.2	9.5	3.77
2002 Q1	2.5	-	-	5.21	7.43	2.6	2.6	1.0	-3.1	4.2	2.5	3.63
Q2	.	-	-	5.36	7.43	.	.	.	.	.	.	3.71
2002 Jan.	2.5	-	-	5.08	7.43	-	-	-	-0.1	4.2	4.0	3.63
Feb.	2.4	-	-	5.14	7.43	-	-	-	-0.8	4.2	2.2	3.60
Mar.	2.5	-	-	5.40	7.43	-	-	-	-7.7	4.2	1.3	3.64
Apr.	2.3	-	-	5.40	7.43	-	-	-	7.1	4.2	3.1	3.67
May	1.9	-	-	5.42	7.44	-	-	-	.	4.2	3.3	3.73
June	.	-	-	5.27	7.43	-	-	-	.	.	.	3.73
Sweden												
1998	1.0	1.9	70.5	4.99	8.92	3.7	0.9	3.6	3.8	8.3	3.5	4.36
1999	0.6	1.5	65.0	4.98	8.81	2.7	-1.0	4.5	1.9	7.2	6.8	3.32
2000	1.3	3.7	55.3	5.37	8.45	3.5	5.8	3.6	7.9	5.9	6.2	4.07
2001	2.7	4.7	56.0	5.11	9.26	3.4	4.4	1.2	-0.8	5.1	.	4.11
2001 Q1	1.6	-	-	4.83	9.00	3.4	2.9	2.7	5.6	5.2	0.2	4.10
Q2	3.0	-	-	5.20	9.13	2.2	5.5	1.0	-2.5	5.0	1.1	4.15
Q3	3.1	-	-	5.28	9.41	4.2	4.9	0.4	-2.5	4.9	2.6	4.34
Q4	3.0	-	-	5.12	9.48	3.9	4.5	0.7	-3.3	5.1	.	3.85
2002 Q1	2.9	-	-	5.42	9.16	4.4	3.5	0.4	-2.0	5.2	.	4.00
Q2	.	-	-	5.64	9.16	.	.	.	.	.	.	4.43
2002 Jan.	2.9	-	-	5.27	9.23	-	-	-	-5.0	5.2	.	3.87
Feb.	2.7	-	-	5.37	9.18	-	-	-	-2.4	5.2	.	3.94
Mar.	3.0	-	-	5.63	9.06	-	-	-	1.1	5.2	.	4.20
Apr.	2.2	-	-	5.69	9.14	-	-	-	0.7	5.2	.	4.38
May	1.7	-	-	5.69	9.22	-	-	-	.	5.1	.	4.46
June	.	-	-	5.53	9.11	-	-	-	.	.	.	4.45
United Kingdom												
1998	1.6	0.4	47.6	5.60	0.676	-0.5	2.8	2.9	0.9	6.1	9.7	7.42
1999	1.3	1.1	45.2	5.01	0.659	-2.0	3.8	2.4	0.8	5.8	5.5	5.54
2000	0.8	4.1	42.4	5.33	0.609	-1.6	1.9	3.1	1.6	5.3	6.6	6.19
2001	1.2	0.9	39.0	5.01	0.622	-1.6	3.4	1.9	-2.1	5.0	8.0	5.04
2001 Q1	0.9	6.3	39.8	4.90	0.633	-1.3	3.0	2.3	1.3	5.0	9.0	5.72
Q2	1.5	-1.9	39.8	5.18	0.614	-1.3	3.9	2.1	-1.5	4.9	7.5	5.30
Q3	1.5	1.6	38.8	5.13	0.619	-1.1	3.6	1.9	-2.7	5.0	7.7	5.00
Q4	1.0	-1.9	38.8	4.82	0.621	-2.8	3.3	1.5	-5.5	5.1	7.7	4.16
2002 Q1	1.5	1.4	37.8	5.14	0.615	.	.	1.1	-5.2	5.1	5.9	4.08
Q2	.	.	.	5.29	0.629	.	.	.	.	.	.	4.17
2002 Jan.	1.6	9.1	38.3	5.02	0.617	-	-	-	-5.7	5.0	6.0	4.05
Feb.	1.5	0.2	37.8	5.06	0.612	-	-	-	-4.5	5.1	6.4	4.05
Mar.	1.5	-5.0	37.8	5.34	0.616	-	-	-	-5.3	5.1	5.5	4.13
Apr.	1.3	-0.4	37.6	5.33	0.614	-	-	-	-4.1	.	.	4.17
May	0.8	-3.3	38.0	5.35	0.628	-	-	-	.	.	.	4.15
June	.	.	.	5.19	0.644	-	-	-	.	.	.	4.18

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

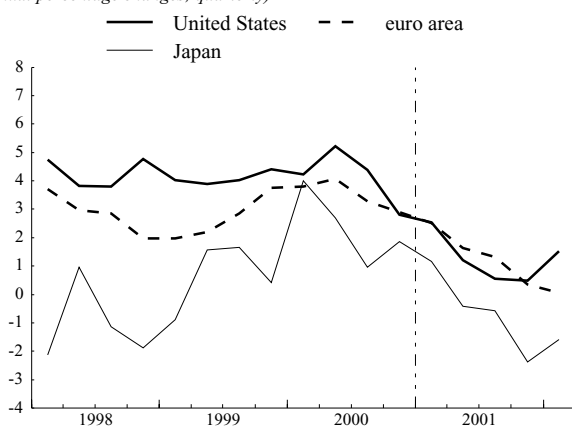
Economic and financial developments

(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											
1998	1.6	0.1	4.3	5.9	4.5	7.3	5.57	5.33	1.121	0.3	53.4
1999	2.2	-0.5	4.1	4.2	4.2	7.6	5.42	5.64	1.066	0.8	50.5
2000	3.4	0.8	4.1	4.7	4.0	6.1	6.53	6.03	0.924	1.7	45.0
2001	2.8	6.1	1.2	-4.2	4.8	8.7	3.78	5.01	0.896	0.5	44.8
2001 Q1	3.4	6.7	2.5	-1.0	4.2	7.2	5.35	5.04	0.923	1.5	45.0
Q2	3.4	8.0	1.2	-4.2	4.5	8.1	4.19	5.25	0.873	1.1	43.4
Q3	2.7	6.4	0.5	-5.6	4.8	9.4	3.46	4.98	0.890	-0.9	44.0
Q4	1.9	3.5	0.5	-6.1	5.6	10.3	2.15	4.74	0.896	0.1	44.8
2002 Q1	1.3	-0.3	1.5	-3.6	5.6	9.2	1.90	5.06	0.877	-1.6	.
Q2	.	.	.	.	.	.	1.92	5.08	0.919	.	.
2002 Jan.	1.1	.	.	-4.2	5.6	9.7	1.82	5.00	0.883	.	.
Feb.	1.1	.	.	-3.7	5.5	9.5	1.90	4.90	0.870	.	.
Mar.	1.5	.	.	-3.0	5.7	8.5	1.99	5.28	0.876	.	.
Apr.	1.6	.	.	-2.0	6.0	7.2	1.97	5.21	0.886	.	.
May	1.2	.	.	-1.6	5.8	8.0	1.91	5.15	0.917	.	.
June	.	.	.	.	.	.	1.88	4.90	0.955	.	.
Japan											
1998	0.7	6.3	-1.1	-7.1	4.1	4.4	0.66	1.30	146.4	-10.7	.
1999	-0.3	-2.5	0.7	0.8	4.7	3.7	0.22	1.75	121.3	-7.1	.
2000	-0.7	-6.5	2.4	5.9	4.7	2.1	0.28	1.76	99.5	-7.4	.
2001	-0.7	5.9	-0.6	-7.8	5.0	2.8	0.15	1.34	108.7	.	.
2001 Q1	-0.4	-0.2	1.2	-1.0	4.7	2.4	0.37	1.38	109.1	.	.
Q2	-0.7	3.7	-0.4	-5.6	4.9	2.7	0.08	1.28	106.9	.	.
Q3	-0.8	9.4	-0.6	-10.8	5.1	3.1	0.07	1.36	108.3	.	.
Q4	-1.0	11.0	-2.4	-13.5	5.4	3.2	0.08	1.35	110.5	.	.
2002 Q1	-1.4	.	-1.6	-10.9	5.3	3.6	0.10	1.46	116.1	.	.
Q2	.	.	.	.	.	.	0.08	1.37	116.5	.	.
2002 Jan.	-1.4	.	.	-11.4	5.3	3.5	0.09	1.42	117.1	.	.
Feb.	-1.6	.	.	-11.5	5.3	3.6	0.10	1.52	116.2	.	.
Mar.	-1.2	.	.	-9.9	5.2	3.7	0.10	1.45	114.7	.	.
Apr.	-1.1	.	.	-6.1	5.2	3.6	0.08	1.39	115.8	.	.
May	-0.9	.	.	-2.2	.	3.5	0.08	1.38	115.9	.	.
June	.	.	.	.	.	.	0.07	1.36	117.8	.	.

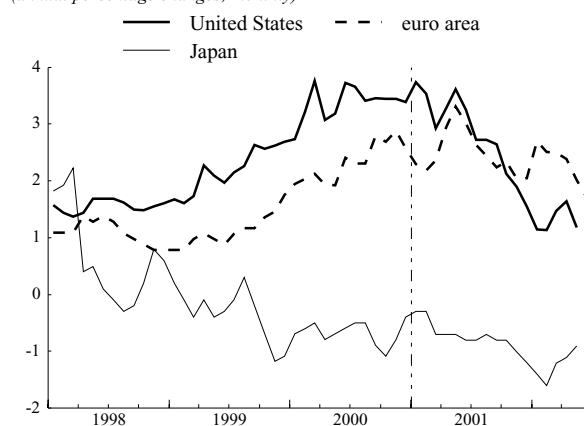
Real gross domestic product

(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.

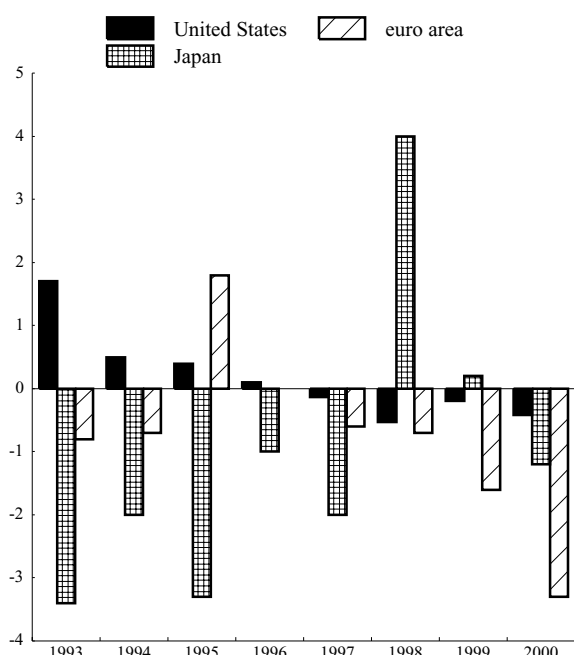
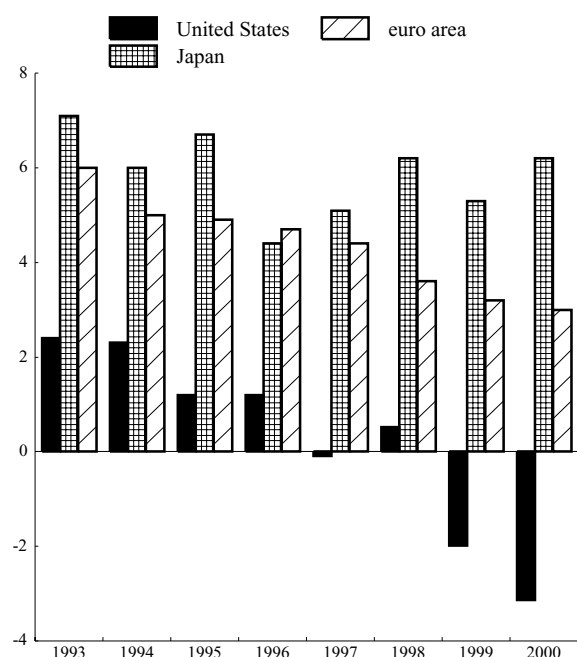
4) For more information, see Table 10.

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													
1998	18.8	20.7	-2.3	9.4	8.6	6.5	8.2	7.0	1.4	12.3	6.0	12.8	5.5
1999	18.4	20.9	-3.3	9.6	9.0	10.5	8.1	10.7	2.8	12.5	4.3	11.1	6.3
2000	18.1	21.1	-4.4	9.7	9.2	7.7	8.1	8.1	2.5	12.6	2.5	10.3	5.7
2001	17.1	19.3	-3.8	8.1	8.6	3.1	7.7	3.4	1.7	12.7	3.8	11.0	5.7
2000 Q2	18.3	21.4	-4.2	9.8	9.1	9.0	8.2	9.4	2.7	12.6	2.7	10.4	5.6
Q3	18.2	21.2	-4.5	9.9	9.4	7.5	8.2	8.0	1.9	12.5	2.8	10.1	6.0
Q4	18.0	21.0	-4.5	9.6	9.2	5.1	8.0	5.5	0.0	12.4	0.4	10.2	3.5
2001 Q1	17.3	20.2	-4.1	8.9	9.1	4.3	7.5	5.1	1.6	12.6	2.7	10.3	3.6
Q2	17.2	19.7	-4.0	8.4	8.8	2.7	7.5	3.0	2.1	12.6	4.0	10.5	6.6
Q3	17.1	19.1	-3.5	7.9	8.5	3.0	7.7	3.6	1.0	12.6	8.7	12.5	8.9
Q4	16.6	18.3	-3.5	7.1	8.1	2.6	8.2	1.9	2.0	13.1	-0.4	10.5	3.8
2002 Q1	16.5	18.8	-4.1	7.7	7.9	0.5	7.9	0.6	0.3	12.7	5.6	11.9	6.3
Japan													
1998	29.1	26.9	2.6	15.6	15.6	-6.0	13.3	-8.3	-0.3	5.3	6.1	11.7	-1.0
1999	27.6	25.8	2.2	14.4	14.8	3.3	13.5	-2.1	1.8	5.2	5.9	11.1	-0.3
2000	27.7	25.9	2.3	15.2	15.5	2.6	13.8	1.0	1.0	5.2	4.3	10.9	-0.4
2001	.	27.5	.	.	.	-2.7	.	-6.2	1.4	.	4.0	.	-0.3
2000 Q2	23.5	23.7	2.6	.	.	-25.1	.	-17.2	2.5	.	8.8	.	-7.5
Q3	27.9	26.1	2.6	.	.	13.5	.	1.9	-0.3	.	0.6	.	1.4
Q4	27.2	26.9	1.8	.	.	6.9	.	13.8	2.8	.	8.0	.	-0.5
2001 Q1	33.2	27.1	2.3	.	.	8.9	.	-3.3	0.2	.	-4.8	.	2.7
Q2	.	23.5	.	.	.	-30.8	.	-18.5	4.4	.	14.0	.	-5.3
Q3	.	26.1	.	.	.	5.1	.	-8.6	-1.1	.	-3.2	.	3.5
Q4	.	25.1	.	.	.	4.7	.	4.5	2.1	.	9.8	.	-1.9
2002 Q1	.	27.3	.	.	.	11.6	.	0.1	-0.8	.	-6.3	.	4.1

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.

Technical notes

Relating to Table 2.4¹

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 required.

Calculation of growth rates

Growth rates may be calculated from flows or the index of adjusted stocks.

If F_t^M represents the flow in month t , L_t the level outstanding at the end of the month t , X_t^M the rate of change in month t (augmented by one) defined as

$$(a) \quad X_t^M = \left(\frac{F_t^M}{L_{t-1}} + 1 \right)$$

and I_t the index of adjusted stocks in month t , defined as

$$I_t = I_{t-1} \times \left(1 + \frac{F_t}{L_{t-1}} \right)$$

where the base $I_{\text{DEC}1998} = 100$ is used, the annual percentage change a_t for month t – i.e. the change in the 12 months ending in month t – may be calculated as follows:

$$(b) \quad a_t = \left(\prod_{i=0}^{11} X_{t-i}^M - 1 \right) \times 100$$

$$(c) \quad a_t = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100$$

Similarly, the monthly change, as shown in Table 2.4.4, may be calculated as $(I_t/I_{t-1} - 1) \times 100$. Finally, the three-month moving average for M3 is obtained as $(a_t + a_{t-1} + a_{t-2})/3$.

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 the "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 have been harmonised and are comparable. Nevertheless, as a result of the implementation of a new reporting scheme in January 1999, outstanding levels for Tables 2.5 to 2.8 prior to the first quarter of 1999 are not directly comparable with those referring to later periods, although they are sufficiently comparable for structural analysis. A detailed analysis of the growth rates can be performed for Tables 2.5 to 2.7 where quarterly flows are shown.

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.

Calculation of growth rates

Growth rates may be calculated from flows or the index of adjusted stocks.

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.

If F_t^Q represents the flow in the quarter ending in month t , X_t^Q the rate of change (augmented by one) in the quarter ending in month t defined as

$$(d) \quad X_t^Q = \left(\frac{F_t^Q}{L_{t-3}} + 1 \right)$$

and I_t and L_t are defined as above, the annual percentage change a_t referring to the quarter ending in month t may be calculated as follows:

$$(e) \quad a_t = \left(\prod_{i=0}^3 X_{t-3i}^Q - 1 \right) \times 100$$

$$(f) \quad a_t = \left(\frac{I_t}{I_{t-12}} - 1 \right) \times 100.$$

Similarly, the quarterly change may be calculated as $(I_t/I_{t-3} - 1) \times 100$.

Roundings may give rise to differences from the annual percentage changes shown in Tables 2.5 to 2.7. The index of adjusted stocks is available with a higher level of precision on the ECB's website (www.ecb.int) on the "Euro area statistics – download" page (in csv file format), from which the exact percentage changes in Tables 2.5 to 2.7 may be calculated.

Relating to Table 4.1

Seasonal adjustment of the HICP¹

The approach used relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2) (see footnote 2 on the previous page). The seasonal adjustment of the total HICP for the euro area is carried out indirectly by aggregating the seasonally adjusted euro area series for processed food, unprocessed food, industrial goods excluding energy and services. Energy is added without adjustment since there is no statistical evidence of seasonality. Seasonal factors are revised at annual intervals or as required.

Relating to Table 8.2

Seasonal adjustment of the balance of payments current account

The approach relies on multiplicative decomposition through X-12-ARIMA (version 0.2.2) (see footnote 2 on the previous page). The seasonal adjustment for goods includes a working day and an Easter adjustment, whereas that for services includes only a working day adjustment. The seasonal adjustment of the total current account is carried out by aggregating the seasonally adjusted euro area series for goods, services, income and current transfers. Seasonal factors are revised at annual intervals or as required.

¹ See footnote 1 on the previous page.

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. New data will appear in the ECB's Monthly Bulletin as they become available. More detailed and longer runs of data, with further explanatory notes, are available in the "Statistics" section of the ECB's website (www.ecb.int). The services available within "Statistics on-line" include a browser interface with search facilities, subscription to different datasets and direct download in compressed comma separated value (csv) files.

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's Monthly Bulletin is the day preceding the first meeting in the month of the Governing Council of the ECB. For this issue, it was 3 July 2002.

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 i) shares/units issued by money market funds located in the euro area, and ii) money market paper and debt securities issued with

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).

a maturity up to two years by MFIs located in the euro area. Accordingly, these holdings are included in the item external liabilities shown in Table 2.3, and as a result 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. Tables 2.5 to 2.7 show flows adjusted for reclassifications, other revaluations, exchange rate variations and any other changes which do not arise from transactions, and annual percentage changes. 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, as replaced from January 2003 by ECB/2001/13).

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.

² The code numbers in the ESA 95 for the sectors shown in tables in the Monthly Bulletin are: MFIs (including the Eurosystem), which 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, which 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); and other general government, which comprises state government (S.1312), local government (S.1313) and social security funds (S.1314).

Prices and real economy indicators

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

The Harmonised Index of Consumer Prices (HICP) for the euro area (Table 4.1) is available from 1995 onwards. The index is based on national HICPs that follow the same methodology in all euro area countries. The breakdown by goods and services components is derived from the Classification of individual consumption by purpose (Coicop) used for the HICP. The HICP covers monetary expenditure on final consumption by households on the economic territory of the euro area. 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. The breakdown by end-use of the products applied in Tables 4.2.1 and 5.2.1 represents the harmonised sub-division of industry excluding construction (NACE sections C to E) into Main Industrial Groupings as defined in Commission Regulation (EC) No. 586/2001 of 26 March 2001.

Opinion survey data (Table 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 are 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 presented separately. 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 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 shows data on euro area external trade in goods. The main source for the data is Eurostat. The ECB derives volume indices

from Eurostat value and unit value indices, and performs seasonal adjustment of unit value indices, while value data are seasonally and working day adjusted by Eurostat.

The commodity breakdown is in accordance with the classification by Broad Economic Categories (based on the SITC Rev. 3 definition) for intermediate, capital and consumption goods, and with the SITC Rev. 3 for manufactured goods and oil. The geographical breakdown shows main trading partners, individually or in regional groups. The 13 EU candidate countries are Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia and Turkey.

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). 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 (ECB estimates).

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



Chronology of monetary policy measures of the Eurosystem¹

4 January 2000

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

5 January 2000

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

15 January 2000

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

20 January 2000

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

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

3 February 2000

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

17 February, 2 March 2000

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

16 March 2000

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

30 March, 13 April 2000

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

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

27 April 2000

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

11 May 2000

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

25 May 2000

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

8 June 2000

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

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

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

19 June 2000

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

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

21 June 2000

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

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

6 July, 20 July, 3 August 2000

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

31 August 2000

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

14 September 2000

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

5 October 2000

The Governing Council of the ECB decides to raise the minimum bid rate on the main refinancing operations of the Eurosystem by 0.25 percentage point to 4.75%, with effect from the operation to be settled on 11 October 2000. In addition, it decides to increase the interest rates on both the marginal lending facility and the deposit facility by 0.25 percentage point, to 5.75% and 3.75% respectively, both with effect from 6 October.

19 October, 2 November, 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 operations 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, 19 July, 2 August 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.

30 August 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.25 percentage point to 4.25%, with effect from the operation to be settled on 5 September 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 5.25% and 3.25% respectively, both with effect from 31 August 2001.

13 September 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 4.25%, 5.25% and 3.25% respectively.

17 September 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 3.75%, with effect from the operation to be settled on 19 September 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 4.75% and 2.75% respectively, both with effect from 18 September 2001.

27 September, 11 October, 25 October 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 3.75%, 4.75% and 2.75% respectively.

8 November 2001

The Governing Council of the ECB decides to lower the minimum bid rate on the main refinancing operations by 0.50 percentage point to 3.25%, starting from the operation to be settled on 14 November 2001. In addition, it decides to lower the interest rates on both the marginal lending facility and the deposit facility by 0.50 percentage point, to 4.25% and 2.25% respectively, both with effect from 9 November 2001.

6 December 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 3.25%, 4.25% and 2.25% respectively.

In addition, it decides that the reference value for the annual growth rate of the broad monetary aggregate M3 will remain at 4½%.

3 January 2002

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 3.25%, 4.25% and 2.25% respectively.

The Governing Council also decides on an allotment amount of €20 billion per operation for the longer-term refinancing operations to be conducted in 2002. This amount takes into consideration the expected liquidity needs of the euro area banking system in 2002 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.

**7 February, 7 March, 4 April,
2 May, 6 June, 4 July 2002**

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 3.25%, 4.25% and 2.25% respectively.

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